

## BUTLER UNIVERSITY



# 2OI5-2OI7 BULLETIN VOL. XCV 

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AUGUST 2015<br>INDIANAPOLIS, INDIANA

## ACADEMIC CALENDAR

## Fall 2015

Aug. 26
Sept. 7
Oct. 15-16
Nov. 23-27
Dec. 12
Dec. 14-18
Dec. 19
Dec. 22

## Spring 2016

Jan. 11

Jan. 18
Mar. ${ }^{\text {7-1 }} 11$
Apr. 25
Apr. 26
Apr. 27-May 3
May 5
May ${ }^{7}$
Fall 2016

Aug. 24
Sept. 5
Oct. 13-14
Nov. 21-25
Dec. 10
Dec. 12-16
Dec. 17

W
M
R-F
M-F
S
M-F
S
T

First day of instruction
Labor Day Holiday (no classes)
Fall Break (no classes)
Thanksgiving Holiday (no classes)
Reading Day
Final examinations
Commencement
Grades due in R\&R by 3 PM

First day of instruction
Martin Luther King holiday (no classes)
Spring break (no classes)
Last meeting of classes
Reading day
Final examinations
Grades due in $R \& R$ by 10 AM
Commencement

First day of instruction
Labor Day Holiday (no classes)
Fall Break (no classes)
Thanksgiving Holiday (no classes)
Reading day
Final examinations
Commencement

First day of instruction
Martin Luther King holiday (no classes)
Spring break (no classes)
Last meeting of classes
Reading day
Final examinations
Commencement
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University strives to ensure the accuracy of the information in this Bulletin at the time of the publication, however certain statements contained in the catalog may change or need correction. This Bulletin is not intended to confer contractual rights on any individual. The University has the right to modify programs, course numbers and titles, and instructor/faculty designations.

Butler University has been accredited since 1915 by what is now the Higher Learning Commission of the North Central Association of Colleges and Schools.

Programs in the College of Business are accredited by AACSB International, the Association to Advance Collegiate Schools of Business.

Programs in the College of Education are accredited by these associations:

- National Council for Accreditation of Teacher Education (NCATE)
- Office of Educator Licensing and Development (OELD)

Programs in the College of Pharmacy and Health
Sciences are accredited by these associations:

- American Council on Pharmaceutical Education (ACPE)
- Accreditation Review Commission on Education for the Physician Assistant (ARC-PA)

Programs in the Jordan College of the Arts are accredited by these associations:

- National Association of Schools of Dance (NASD)
- National Association of Schools of Theatre (NAST)
- National Association of Schools of Music (NASM)

Some programs in the Department of Chemistry are accredited by the American Chemical Society (ACS).

## ABOUT BUTLER UNIVERSITY

A nationally recognized independent university known for its exceptional student learning experiences, Butler University comprises a College of Liberal Arts and Sciences and five professional colleges: College of Education, College of Business, College of Pharmacy and Health Sciences, Jordan College of the Arts, and College of Communication.

Butler is committed to its mission of providing the highest quality of liberal and professional education and integrating the liberal arts with professional education, by creating and fostering a stimulating intellectual community built upon interactive dialogue and inquiry among students, faculty, and staff.

In the 2015 "Best Colleges" edition of U.S. News \& World Report, Butler was listed as one of the nation's best in five categories: the firstyear student experience, internships, study abroad, service learning, and undergraduate research. Butler was one of only three schools in the United States recognized in five or more categories, and was recognized in more categories than all other Indiana schools combined.

Such recognition reflects Butler's dedication to providing students with a broad, liberal arts foundation with nationally recognized programs, coupled with countless experiential learning opportunities in Indianapolis and beyond. Through this comprehensive approach, Butler students are prepared to step directly into a career or graduate school with confidence, as is evident in our current graduate success rate of 95 percent.

## Student Learning

In furtherance of its teaching and learning goals, Butler has established learning outcomes for all students. The outcomes are assessed in students' coursework and elsewhere throughout their undergraduate years, yielding continued refinements and improvement in teaching. The University learning outcomes are that students will:

- Explore various ways of knowing in the humanities, social and natural sciences, creative arts, and quantitative and analytic reasoning
- Articulate and apply required content knowledge within their area(s) of study
- Know how to find, understand, analyze, synthesize, evaluate, and use information, employing technology as appropriate
- Explore a variety of cultures
- Recognize the relationship between the natural world and broader societal issues
- Communicate clearly and effectively
- Demonstrate collaborative behavior with others
- Practice ways and means of physical wellbeing
- Make informed, rational, and ethical choices
- Appreciate diverse cultures, ethnicities, religions, and sexual orientations
- Share their talents with Butler and the greater community at large
- Be exposed to the value of lifelong learning

Students are afforded ample opportunities to achieve these learning outcomes through a combination of courses-both in the major and in the Core Curriculum-and through co-curricular experiences.

## A History of Inclusiveness, Diversity, and Equality

From the beginning, Butler has been ahead of its time among institutions of higher education for its commitment to racial and gender equality. The University was chartered as North Western Christian University by abolitionist Disciples of Christ members, who wanted a university away from the "pernicious influences of slavery." Upon establishment in 1855, the University immediately began setting educational precedents:

- Butler admitted students representing all minorities, and has continued to do so throughout its history. Butler's first documented African American graduate was Gertrude Amelia Mahorney, who graduated in 1887 and subsequently taught in the Indianapolis Public Schools.
- Women were admitted on an equal basis with men-a first for Indiana-and Butler was only the second university in the nation to do so. The first woman to graduate from the full four-year program, in 1862, was Demia Butler, daughter of founder Ovid Butler.
- Butler was also the first university in the state to allow its students, with parental consent, to choose subjects suited to their needs under a new "elective" system.
- In $18 \%$, Butler became the first university in the nation to establish an endowed chair specifically for a female professor (Catharine Merrill, English literature), and only the second university to appoint a woman to the faculty. Professor Merrill also was the first to use the lecture method for any subject other than science.
- The country's first chapter of Sigma Gamma Rho, a sorority for African American women, was founded on the Butler campus in 1922.

When Butler University opened its doors in 1855,20 students were enrolled, taught by two faculty members. Today, Butler is an independent university with a total full-time enrollment of nearly 4,600 students (more than 4,200 undergraduates and approximately 360 graduate students) and 417 faculty members. True to the vision of its founders, the University emphasizes the warmth and sense of community characteristic of a small liberal arts institution while offering the educational and cultural advantages of an urban center. The University maintains a favorable student-to-faculty ratio of 11:1. Because of its size, Butler can offer its students opportunities to work closely with the faculty. Classes are small, and students are encouraged to seek out faculty in their offices, studios, or laboratories. Undergraduate research and independent study are encouraged. Although Butler professors are teaching faculty, they understand that first-rate teaching must be complemented with scholarly activity that extends the boundaries of knowledge.

Butler students currently represent 46 states and 56 countries, reflecting diverse cultures, interests, aspirations, personalities, and experiences. Students can join one of approximately 140 student organizations, 14 Greek organizations, and 19 varsity athletic teams. More than 94 percent of Butler students are involved in campus activities; 69 percent participate in community service. As it has since its founding, Butler continues to both value tradition and embrace innovation.

## The Campus

Butler's 295-acre campus, within a historic north-side Indianapolis neighborhood, comprises nearly 30 buildings, playing fields, and a nature preserve. Located five miles from the heart of the city, the campus offers easy access to downtown. Its urban location allows Butler to offer students a wide range of internship opportunities that are excellent preparation for careers and graduate schools. In addition, full-time faculty in several disciplines, such as
accounting, journalism, and instrumental music, are supplemented with adjunct instructors, drawing on the resources of professionals in the surrounding community.

Campus facilities include:

- Jordan Hall, built in 1927 and now listed on the National Register of Historic Places. In addition to housing several departments of the College of Liberal Arts and Sciences and the College of Education, the building incorporates computer labs, an electronic language laboratory, administrative and faculty offices, alumni and parent programs, student accounts, registration, and classrooms.
- Fairbanks Center for Communication and Technology, home to Computer Sciences and the College of Communication, which includes the Eugene S. Pulliam School of Journalism.
- Gallahue Hall, which houses the departments of Biological Sciences, Chemistry, and Physics and Astronomy, and provides extensive facilities and equipment for faculty and student research.
- The Holcomb Building, home to the College of Business as well as the Ruth Lilly Science Library and the Butler Business Accelerator.
- The Pharmacy and Health Sciences

Building, a facility that includes state-of-the-art laboratories, classrooms, and technology in support of student and faculty collaboration.

- Butler Arts Complex, which incorporates

Lilly Hall, housing the programs of the Jordan College of the Arts; Clowes
Memorial Hall, a 2,220-seat multipurpose hall for the performing arts; and the
Howard L. Schrott Center for the Arts, a 450 -seat theatre that provides performance and exhibition space for the theatre, dance, music, and visual arts programs.

- Irwin Library, which provides basic research tools and holds the majority of the University's more than 350,000 volumes of books, bound periodicals, and manuscripts. Butler Libraries also offer approximately 100,000 e-books, access to 200 online databases, and 35,000 online journals and magazines.
- Atherton Union, which incorporates the University bookstore, food service operations, a 24 -hour computer lab, meeting rooms, and student lounges. Additional facilities include the Efroymson Diversity Center, Internship and Career Services, the Division of Student Affairs,
the Office of International Student Services, and offices for residence life, Greek life, and student leadership and service.
- Campus housing, including Residential College, Ross Hall, Schwitzer Hall, University Terrace, the Apartment Village (for juniors and seniors), and fraternity and sorority houses. A new student residence was under construction at time of the Bulletin's publication and was expected to open in fall 2016.
- Holcomb Observatory and Planetarium. The observatory's 38-inch telescope is one of the largest in the state.
- Robertson Hall, which houses the offices of Admission, Financial Aid, Marketing and Communications, and the Eidson-Duckwall Recital Hall.
- Hinkle Fieldhouse. The historic 9,100-seat fieldhouse, listed on the National Register of Historic Places, is the home of Butler basketball and volleyball teams, the human movement and health science education program, and spring commencement ceremonies.
- The Butler Bowl, the site of Butler football and soccer.
- A Health and Recreation Complex, which houses an aquatic and fitness center, in addition to counseling services, health education, and health services.
- Holcomb Gardens, a 20-acre scenic area that abuts Indianapolis' Central Canal and towpath, a favorite walking, jogging, and bicycling route for students.
- Athletic fields, CUE Farm, and the Butler Prairie nature preserve, linked to the main campus by two pedestrian bridges across the Central Canal.
- A multi-use parking facility, with 1,033 parking spaces and 17,000 square feet of retail space, opening in fall 2015.


## Indianapolis

Butler University remains deeply committed to serving its community. Clowes Memorial Hall and Jordan College of the Arts fulfill a cultural responsibility by presenting a vast array of performing arts and spoken-word programs open to the public; many of these programs offer enrichment to area elementary and secondary students. Indianapolis schools, corporations, and cultural organizations benefit from the University's cooperation, and student interns serve in a wide variety of Central Indiana businesses, governmental offices, nonprofit agencies, schools, hospitals, and pharmacies. Butler seeks to continue to strengthen its partnership with a vital, growing city and region.

Indianapolis is the 12th-largest city in the United States, with a metropolitan-area population of more than 1.9 million. In recent years, the city has emerged as a leader in science, medicine, research, technology, and sports. Pharmaceutical giant Eli Lilly and Company is located in the city, as are top-ranked regional hospitals. Many performing arts companies call Indianapolis home. Museum offerings include the world's largest children's museum, the Eiteljorg Museum of American Indians and Western Art, Conner Prairie, and the nearby Indianapolis Museum of Art. Widely known for the annual 500-mile race at the Indianapolis Motor Speedway, the city has two major league professional sports teams, and it also has hosted hundreds of national and international amateur sporting events.


## UNDERGRADUATE and GRADUATE ACADEMIC PROGRAMS

## The Core Curriculum

Butler University is home to six colleges, all of which believe that the University's first responsibility is the liberal education of its students. At the heart of Butler's undergraduate education is the University's Core Curriculum, a set of academic requirements embodying our definition of what it means to be a liberally educated person. Created in 1945, the Core Curriculum is one of Butler's oldest academic entities. Like all good ideas, the core has not remained static but has expanded to meet the needs of a changing society. Today's Core Curriculum, implemented in fall 2010, emphasizes the development of key skills that transfer directly into careers after graduation. Employers are seeking flexible, creative, and critical thinkers who can demonstrate competencies in strong written and oral communication, information fluency, intercultural awareness, and analytical and ethical reasoning skills. Through direct experience working in the Indianapolis community, study-abroad opportunities, and rich co-cultural experiences in the Core Curriculum, Butler students also engage central issues of our increasingly globalized world, including diversity, personal and social responsibility, and social justice. In these varied ways, the Core Curriculum provides Butler students with transformative learning experiences that prepare graduates to make a meaningful impact on the world.

The Core Curriculum is required for all baccalaureate and associate degrees. All Butler undergraduates, no matter their major field of study, complete the Core Curriculum. Core Curriculum courses are not open to graduate students. Students are expected to consult with their academic advisor prior to registration each semester to plan their experiences in the Core Curriculum. For more information, visit www. butler.edu/core.

## Core Curriculum Structure

The Core Curriculum consists of several key components, all of which must be fulfilled prior to graduation:

- The First Year Seminar (6 credit hours)
- Global and Historical Studies (6 credit hours)
- Areas of Inquiry: Students are required to successfully complete one course in each Area of Inquiry. Students select courses each semester to fulfill each Area of Inquiry from approved course lists in the online Course Search utility using the appropriate course attribute.

The six Areas of Inquiry are:

- AR: Analytic Reasoning (3 credit hours)
- NW: The Natural World (5 credit hours, lecture plus lab)
- PCA: Perspectives in the Creative Arts (3 credit hours)
- PWB: Physical Well-Being (1 credit hour)
- SW: The Social World (3 credit hours)
- TI: Texts and Ideas (3 credit hours)

To ensure academic quality and integrity, some Core Curriculum requirements may be satisfied by taking courses only at Butler University. Other Core Curriculum requirements have provisions that allow for completion via transfer credit, AP, IB, or other exemptions. For details, see www. butler.edu/registrar.

## First Year Seminar (FYS)

The First Year Seminar (FYS101 and FYS102) is a topics-based, two-semester sequenced course that serves as an introduction to the vitality of the liberal arts. FYS101 is taken in the fall semester; FYS102 is taken in the spring semester. Students will develop, practice, and advance their abilities with critical reading and thinking, effective oral communication and academic writing, and information literacy.

Students assigned to EN101, Writing Tutorial, must enroll in EN101 during their first semester at Butler concurrently with FYS101. Some students also may be required to take EN101 concurrently with FYS102, contingent upon student performance in EN101 or FYS101. The English Department administers EN101, including placement tests.

Transfer students who have completed two semesters of 100-level English, or other critical reading, thinking, and writing coursework at another institution, may be allowed to satisfy the FYS requirement with a total of not fewer than six transferred semester hours.

All students are expected to complete the First Year Seminar during their first year at Butler.

Course Structure: A two-semester sequence taken in the first year. FYS course titles and descriptions can be found through the online Course Search utility using the FYS course attribute.

Exemptions: None.

## Learning Objectives

- Students will learn to listen and read critically-texts, speech, media, and other cultural productions-in order to examine, challenge, and reshape themselves and the world in which they live.
- Students will learn to express themselves clearly and persuasively in exposition and in argument, in both written and oral forms.
- Students will carry out research for the purpose of supplying evidence and support for claims made in exposition and argument.


## Global and Historical Studies (GHS)

Global and Historical Studies (GHS201-209) is an array of interdisciplinary courses that allow students to engage in investigation of and reflection about a culturally diverse and increasingly globalized world. Students will learn to employ a conceptual framework that appreciates cultures as dynamic, heterogeneous, and constantly in conversation with one another. In doing so, students will draw on a variety of sources and disciplines, including the arts, the humanities, and social and natural sciences, and they will continue to develop the skills of expository writing introduced in the First Year Seminar.

Course Structure: All students are required to complete two semesters of GHS201-209 (six credit hours), ideally during their sophomore year. Students may not take both GHS203 and GHS209 to complete the GHS requirement, but any other combination of courses is allowed. Course titles and descriptions can be found through the online Course Search utility using the GHS course attribute.

Exemptions: One semester of GHS is automatically waived for international students. If a student studies abroad in a Butler-approved program and successfully completes nine or more credit hours of coursework while abroad, the student automatically receives a one-semester/three-credit-hour waiver from GHS. However, students are not allowed to receive two waivers for GHS; they must take at least one GHS course at Butler University. Exceptions require the approval of the faculty director of Global and Historical Studies.

## Learning Objectives

- Employ a conceptual framework for global and historical studies that appreciates cultures as dynamic, heterogeneous, and constantly in conversation with one another
- Draw on a variety of sources and disciplines-including the arts, the humanities, and the social and natural sciences
- Recognize both the benefits and challenges of living in a culturally diverse and increasingly globalized world
- Continue development of skills of expository writing


## Areas of Inquiry

Course titles and descriptions for all Areas of Inquiry courses can be found at the beginning of each departmental course listing and in the online Course Search utility, identified by the relevant course attribute.

## Analytic Reasoning (AR)

Course Structure: A menu of three-credit-hour courses to be taken from the first year onward.

Exemptions: Exempt for students who have completed at least five credit hours of mathematics or computer science courses above algebra and pre-calculus, and for students in professional colleges (COPHS or COB) with college mathematics requirements. For AP/IB equivalencies, see www.butler.edu/registrar.

## Learning Objectives

- Develop capacities for quantitative and analytic reasoning
- Understand the centrality of these capacities to the natural and social sciences
- Recognize the applications of such capacities to matters of personal and public life


## The Natural World (NW)

Course Structure: A menu of five-credit-hour lecture/lab courses to be taken from the first year onward. Courses not required of science majors.

Exemptions: Exempt for students who have completed at least eight credit hours of laboratory science. For AP/IB equivalencies, see www.butler.edu/registrar.

## Learning Objectives

- Gain awareness of some significant scientific theories and achievements, and recognize how they are related both to other areas of science and to our understanding of broader societal issues
- Develop an understanding of the methods of natural science and a capacity to reason scientifically
- Experience first-hand the scientific process method through discovery-based learning


## Perspectives in the Creative Arts (PCA)

Course Structure: A menu of three-credit-hour courses to be taken from the first year onward.

Exemptions: Exempt for students taking at least nine credit hours in art, dance, theater, music, digital media production, recording industry studies, or creative writing.

## Learning Objectives

- Develop cognitive and affective appreciation for the process and products of artistic creation
- Participate actively in the creation of an artistic product
- Reflect on the nature and sources of aesthetic value
- Develop habits of participation in artistic and cultural events that will lead to lifelong engagement with the creative arts


## Physical Well-Being (PWB)

Course Structure: A one-credit-hour, two-contact-hour, pass/fail course selected from a menu of courses devoted to physical and health education and activities taken from the first year onward.

Exemptions: None.

## Learning Objectives

- Develop lifelong habits of good health and physical activity
- Increase awareness of the centrality of health and wellness for the pursuit of a good life


## The Social World (SW)

Course Structure: A menu of three-credit-hour courses to be taken from the first year onward.

Exemptions: Exempt for students taking at least nine credit hours in the social sciences, including anthropology; communication sciences and disorders; critical communication and media studies; economics; human communication and organizational leadership; international studies; journalism; political science; psychology; science, technology, and society; sociology; strategic communication; or majors in the College of Education. For AP/IB equivalencies, see www.butler.edu/registrar.

## Learning Objectives

- Study selected questions about human beings and the social, cultural, economic, and political world in which they are embedded
- Develop an understanding of the variety of quantitative and qualitative research methods social scientists use to study the social world
- Develop the ability to discern the social, scientific, and ethical dimensions of issues in the social world, and to understand the interaction between a society's values and its definition of social problems


## Texts and Ideas (TI)

Course Structure: A menu of three-credit-hour courses to be taken from the first year onward.

Exemptions: Exempt for students taking at least nine credit hours in humanities courses, including most English, history, philosophy, and religion courses, as well as literature courses taught in classical and modern languages. For AP/IB equivalencies, see www.butler.edu/ registrar.

## Learning Objectives

- Engage in reading, writing, and discussion about important ideas drawn from the study of important texts in a variety of areas, including, among others, literary texts, dramatic texts, sacred texts, historical texts, philosophical texts, and scientific texts
- Develop capacities for argument, interpretation, and aesthetic appreciation through engagement with these texts and ideas


## Additional Graduation Requirements

Students also must fulfill these four graduation requirements, also identified in the online Course Search utility by their respective course attributes:

## Writing across the Curriculum Requirement

Requirement Structure: Students must take one course at or above the 300 level in any part of the University that provides opportunities for formal and informal writing, with opportunities for revision. The course must be taken after the student has attained junior standing at the University. Courses meeting the Writing across the Curriculum requirement can be found in the online Course Search utility each semester using the course attribute.

## Exemptions: None.

## Learning Objectives

- Refine habits conducive to good writing developed at earlier stages in core education and education in the major
- Use writing both as a tool for learning and as a means for communicating about ideas within a discipline or profession


## Speaking across the Curriculum Requirement

Requirement Structure: Students must take one course at or above the 300 level in any part of the University that provides opportunities for formal oral communications assignments. Courses meeting the Speaking across the Curriculum requirement can be found in the online Course Search utility each semester using the course attribute.

Exemptions: None.

## Learning Objectives

- Develop oral communications skills in the context of course- and discipline-specific materials
- Use oral communications assignments to aid students in mastery of course- and discipline-specific content

Students who matriculated at Butler in fall 2012 and after must fulfill Speaking across the Curriculum as a graduation requirement.

## Indianapolis Community Requirement (ICR)

The Indianapolis Community Requirement is a civic-learning component of the Core Curriculum that immerses students in environments wherein they learn about civicmindedness, diversity, social justice, and personal and social responsibility, and thereby enhances their academic learning while they become better citizens of their communities and of the world. ICR involves students in a wide range of innovative learning experiences that extend Butler classrooms into the Indianapolis community-to the benefit of students, the University, and the community alike. ICR courses can accelerate the process whereby students master the skills of their respective disciplines, enhance their understanding of personal and social responsibility, and develop intercultural competencies. Where volunteers may donate time to a project, the ICR is based on connecting experience outside of the Butler classroom to academic learning goals within the classroom. Courses meeting the ICR can be found in the online Course Search utility each semester using the course attribute.

Requirement Structure: Students must take one course in any part of the University that involves active engagement with the Indianapolis community.

Exemptions: None

## Learning Objectives

- Have an active learning experience that integrates classroom knowledge with activities in the Indianapolis community
- Use an experience in Indianapolis to further the student's understanding of the nature of community and the relationship between the student and community
- Further students' commitment to service and ongoing involvement as community actors

The ICR program is coordinated by the Center for Citizenship and Community.

## Center for Citizenship and Community

Butler University's Center for Citizenship and Community (CCC) facilitates civic engagement for Butler students, faculty, and staff. The CCC serves to create innovative academic learning experiences that extend Butler classrooms into the Indianapolis community-to the benefit of students, the University, and the community alike.

The Center's activities include:

- Bringing together community members and leaders with University faculty, students, and staff to address pressing community issues
- Coordinating the ICR and service-learning opportunities as they relate to University curricula
- Building courses and learning experiences that will help students develop the civic-mindedness that is foundational to becoming responsible citizens prepared to address future challenges

For more information, contact Donald Braid, CCC Director, 317-940-8353, dbraid@butler.edu, or visit www.butler.edu/centerforcc.

## Butler Cultural Requirement (BCR)

Butler University has a rich set of cultural activities in the form of artistic performances, seminars, and public lectures that collectively comprise one of our most remarkable educational resources. The aim of the Butler Cultural Requirement is to engage students in these most valuable and exciting learning opportunities, and to encourage students to develop habits of participation in artistic and cultural events that will lead to lifelong engagement with the creative arts and public intellectual life.

Requirement Structure: Students must attend a total of eight cultural events on the Butler campus, such as lectures, performances, recitals, or exhibitions. Events eligible for BCR credit carry the BCR symbol. Ideally, attendance will be spread out over students' time at Butler, but this is not required. Transfer students must complete at least one BCR credit for each semester enrolled at Butler University.

Exemptions: None

## Learning Objectives

- Discover that some of the most valuable and exciting learning opportunities at Butler take place outside of the classroom
- Develop habits of participation in artistic and cultural events that will lead to lifelong engagement with the creative arts and public intellectual life


## Academic Programs

Butler University's challenging learning environment includes a wide range of academic programs steeped in the liberal arts, which provide excellent career and graduate school preparation. Butler offers more than 60 major academic fields of study in six colleges: the Colleges of Liberal Arts and Science, Business, Communication, Pharmacy and Health Sciences, Education, and the Jordan College of the Arts. Graduate programs are available within five of the six colleges.

Continued partnerships include the Engineering Dual Degree Program with Purdue University at Indianapolis, enabling students to obtain two degrees in five years-a bachelor of science degree from Butler as well as a bachelor of science in engineering from Purdue University.

Butler also offers pre-professional programs in dentistry, law, medicine, physical therapy, seminary, and veterinary medicine. Butler is fully accredited by the North Central Association of Colleges and Schools. The University is licensed for teacher training by the Indiana Office of Educator Licensing and Development. University colleges and departments are accredited by their respective professional associations.

## Majors, Degrees, Concentrations

Butler University's six colleges offer the following undergraduate and graduate degrees:

| College |  |
| :--- | :---: |
| Accelerated Alternative Program in Initial |  |
| $\quad$ Licensure in Mild Interventions | COE |
| Accounting, BS, MPAcc | COB |
| Actuarial Science, BA, BS | LAS |
| Anthropology, BA | LAS |
| Anthropology and Psychology, BA | LAS |
| Art + Design, BA | JCA |
| Arts Administration | JCA |

BS in Arts Administration
BS in Dance-Arts Administration
BS in Arts Administration-Music
BS in Arts Administration-Theatre
Astronomy and Astrophysics, BA, BS LAS
Biology, BA, BS LAS
Business Administration, MBA COB
Chemistry, BA, BS LAS
Classical Studies, BA LAS
Communication Sciences and
Disorders, BA CCOM
Computer Science, BA, BS LAS
Creative Writing, MFA LAS
Criminology, BA LAS
Criminology and Psychology, BA LAS
Critical Communication and
Media Studies, BA CCOM
Dance JCA
BFA in Dance-Performance
BA in Dance-Pedagogy
BS in Dance-Arts Administration
Digital Media Production, BA
CCOM
Economics, BA, BSE LAS, COB
Educational Administration, MS (EPPSP) COE
Effective Teaching and
Leadership, MS (METL) COE
Elementary Education, BS COE
English, BA LAS
Creative Writing
Literary Theory, Culture, and Criticism
Literature
Public and Professional Writing
English, MA LAS
Entrepreneurship and Innovation, BS COB
Environmental Studies, BA, BS LAS
Finance, BS COB
French, BA LAS
Gender, Women, and Sexuality Studies, BA LAS
General Program, AA, AS LAS
German, BA LAS
Graduate Initial Licensure Program Grades 5-12 (GILP) COE
Health Sciences, BSHS COPHS
History, BA, MA LAS
History and Anthropology, BA LAS
History and Political Science, BA LAS

Human Communication and Organizational

Leadership, BA
CCOM
Individualized Major, BA, BS LAS
International Business, BS COB
International Studies, BA LAS
Africa, Asia, Europe, or Latin America
Journalism, BA CCOM
Management Information Systems, BS COB
Marketing, BS COB
Mathematics, BA, BS
LAS
Middle/Secondary Education, BS
Music, BA
Composition Emphasis
Jazz Studies Emphasis
Music History Emphasis
Music Performance Emphasis
Music Theory Emphasis
Piano Pedagogy Emphasis
Music, BM JCA
BM in Composition
BM in Jazz Studies
BM in Music Education (choral/general; instrumental/general; or area-5-year program)
BM in Performance (instrumental, piano, or voice)
BM in Performance and Music Education (5-year program)
Music, BMA (pending approval)
JCA
Music, MM
Composition
Conducting (choral or instrumental)
Music Education
Music History
Performance (instrumental, piano, or voice)
Piano Pedagogy
MM with a double major
Peace and Conflict Studies, BA
LAS
Pharmaceutical Sciences, MS
Medicinal Chemistry, Pharmacy
Administration, Pharmacology,
Pharmaceutics, Clinical Sciences
Pharmacy, PharmD
COPHS
Pharmacy, PharmD/MS in Pharmaceutical
Sciences
COPHS
Pharmacy, PharmD/MBA COPHS/COB
Philosophy, BA
LAS
Philosophy and Religion, BA
LAS
Philosophy and Psychology, BA
Physician Assistant, MPAS
LAS

Physics, BA, BS
COPHS

Political Science, BA
LAS
Political Science and Psychology, BA
Psychology, BA
LAS
LAS
LAS
Recording Industry Studies, BA
Religion, BA
COB

School Counseling, MS
COE
Science, Technology, and Society, BA, BS LAS
Sociology, BA LAS
Specialization in social work and social policy
Sociology and Criminology, BA LAS
Specialization in social work and social policy
Sociology and Psychology, BA
LAS
Specialization in social work and social policy
Software Engineering, BA, BS LAS
Spanish, BA LAS
Sports Media, BA CCOM
Strategic Communication: Public Relations and
Advertising, BA CCOM
Theatre JCA
BA in Theatre
BS in Arts Administration-Theatre
Undergraduate students may choose to add a minor to their study. Minors are posted to the student's transcript along with the major and degree earned.

## Minors

Actuarial Science
African Studies
Anthropology
Art + Design
Astronomy
Biology
Business Administration
Business Law
Chemistry
Chinese
Classical Studies
Computer Science
Criminology
Critical Communication and Media Studies
Digital Media Production
Early Childhood Education
Economics
English Literature
English as a New Language
English Creative Writing
English Public and Professional Writing
Entrepreneurship and Innovation
Environmental Studies
Ethics
French
Gender, Women, and Sexuality Studies
Geography
German
Health Care Management
History
Human Communication and Organizational Leadership
International Business

International Studies
Jazz Studies
Journalism
Management Information Systems
Marketing
Mathematics
Music
Neuroscience
Peace and Conflict Studies
Philosophy
Physics
Political Science
Psychology
Reading Teacher
Recording Industry Studies
Recreation and Sports Studies
Religion
Risk Management and Insurance
Science, Technology, and Society
Sociology
Spanish
Special Education-Mild Interventions
Strategic Communication
Theatre

## Graduation Honors

Butler University offers two types of graduation honors: students may graduate with University honors, departmental honors, or both. To be eligible, a student must be an undergraduate who has completed at least 60 academic hours for a grade at Butler University.

## University Honors

Cum laude-a Butler cumulative grade point average (GPA) of 3.70, or both an average of 3.50 and completion of the University Honors Program.

Magna cum laude-a Butler cumulative GPA of 3.70 and completion of the University Honors Program.

Summa cum laude-a Butler cumulative GPA of 3.90 and completion of the University Honors Program.

## Departmental Honors

The purpose of departmental honors is to recognize students for exceptional achievement within their major. Students are nominated for departmental honors by the head of the department of their academic major. Three levels of departmental honors are awarded:

- "in (major) with honors" is awarded to a nominee who has a GPA of at least 3.60 in the academic major.
- "in (major) with high honors" is awarded to a nominee who has a GPA of at least
3.70 in the academic major and who either presents an honors thesis approved by the department and the University Honors Program Committee or passes a comprehensive examination in the major subject.
- "in (major) with highest honors" is awarded to a nominee who has a GPA of at least 3.80 in the academic major and who both presents an honors thesis approved by the department and the University Honors Program Committee and passes a comprehensive examination in the major subject.

All comprehensive exams must comply with five minimum standards. They must:

1. Be developed and administered by the departments or programs-i.e., GRE and other external standardized tests are not appropriate
2. Be relevant to the student's coursework in the department
3. Include a written component
4. Include a component that is common to all students, and that tests their understanding of core knowledge in the discipline
5. Include questions that require synthesis of ideas and comprehensive reflection about a substantial portion of the student's coursework in the department

## University Honors Program

The Butler University Honors Program exists to meet the expectations of academically outstanding students in all colleges and majors who wish to develop their talents and potential to the fullest. It is designed-through a combination of honors courses, cultural events, independent study, and creative activity-to foster a diverse and challenging intellectual environment for honors students and to enhance the academic community by adding a distinctive note of innovative thinking and interdisciplinary dialogue. The program will issue invitations to apply to the University Honors Program based on test scores ( 1320 or higher combined SAT score or 30 or higher composite ACT score) or class rank (top 5 percent). Admission to the program for incoming students will be based on an application essay. Students who complete one or two semesters at Butler University (16 or 32 graded credits) with a cumulative GPA of at least 3.60 also are invited to enter the program. Other students may be admitted upon the approval of the University Honors Board.

The University Honors Program requires satisfactory completion of the following:

## Honors Courses

Four honors courses are required, including at least one HN200 and at least one HN300, in addition to either HN397 or HN398 and the departmental honors course most relevant to one's thesis. A student must earn a minimum grade of B for an honors course to count toward completion of University Honors Program requirements. Honors First Year Seminar (HN110 and HN111) is taken in the first year. Students who do not take HN110 and HN111 in their first year must replace this experience with another honors course, either an HN200 or an HN300.

## Departmental Honors Course

Students must take the designated departmental honors course within their department or college for credit. The designated departmental honors course does not count toward the four required honors courses.

## Honors Thesis Proposal Course

Typically taken during spring semester of the penultimate academic year, the product of the course (HN397, HN398) will be a thesis proposal, which will be submitted for review on the Friday before Spring Break.

## Honors Thesis

All University Honors Program students are required to complete an honors thesis. The thesis is a major research or creative project, usually (but not necessarily) in the field of the student's major, and advised by a full-time faculty member. The project begins following approval of the thesis proposal, and the completed thesis is due during the semester of the student's intended graduation date. Each student must give an oral presentation of her or his thesis before an audience at an appropriate forum.

## Other Requirements

Honors Community Events: Students are required to attend eight honors community events during their first three years. These community events will be announced to all honors students and may include honors course speakers, honors course presentations, presentations/performances of undergraduate thesis work, community events sponsored by the Student Honors Council, and/or special events sponsored by the University Honors Program.

Satisfactory progress at the sophomore review: All students will be reviewed in the second semester of their second year, i.e., in the fourth semester at Butler. To remain active in the program, students must have a minimum of 64 credit hours at Butler with a GPA of at least 3.4, progress toward completion of the honors
curriculum (at least two honors courses), and satisfactory attendance at cultural events. All students have the right of petition to waive or substitute certain criteria.

## Center for High Achievement and Scholarly Engagement (CHASE)

The University Honors program is coordinated by the Center for High Achievement and Scholarly Engagement (CHASE) office. CHASE provides a variety of services and support for Butler students who want to enhance their education by pursuing additional opportunities while at Butler and for those who wish to continue their education beyond Butler. Along with Honors, these include programs to support undergraduate research and creative activity, advising for professional school related to law and health, advising for competitive fellowships and scholarships, and domestic semesteraway programs, including the Washington D.C. Learning Semester, described below.

For more information, contact CHASE at Jordan Hall, room 253, 317-940-9581, chase@butler.edu, or visit www.butler.edu/chase.

## Honors Courses

HN110, Honors First Year Seminar: This introductory course of the honors curriculum is designed to transition students from high school academic experiences to Butler's Honors Program. A topic or subject area will be explored allowing students to reflect on "big questions" about themselves, their community, and their world. Individual sections of HN110 will have more detailed course descriptions. Students who enroll in this course are expected to enroll in HN111 in the spring. Completion of HN110 and HN111 together will satisfy the requirements of FYS101, FYS102, and one HN seminar. Completion of HN110 alone will satisfy only the requirement for FYS101. Completion of HN111 alone ( 4 credits) will satisfy only the requirement for CC102 or FYS102 (3 credits). Prerequisites: Must be registered in the University Honors Program, or receive permission from the director of the University Honors Program. (U)(4) Fall.

HN111, Honors First Year Seminar: The second semester of the introductory course of the honors curriculum is designed to transition students from high school academic experiences to Butler's Honors Program. A topic or subject area will be explored allowing students to reflect on "big questions" about themselves, their community, and their world. Individual sections of HN111 will have more detailed course descriptions. Completion of HN110 and HN111
together will satisfy the requirements of FYS101, FYS102, and one HN seminar. Completion of HN111 alone will satisfy only the requirement for FYS102. Prerequisites: Must be registered in the University Honors Program, or receive permission from the director of the University Honors Program. (U)(4) Spring.

HN200, In-Depth Honors Seminar: Students will participate in a comprehensive exploration of a single topic: a great book or an enduring text; a masterwork of music, art, dance, film, or drama; a particular individual (artist, author, historical figure, scientist, etc.); or a theory, institution, or organization. Individual sections will have detailed course descriptions. Prerequisite: Must be registered as active in the University Honors Program or have permission from the University Honors Program director. (U)(2) Fall and spring.

## HN203, HN205, HN206, and HN208,

 Honors Global and Historical Studies: This interdisciplinary, sophomore-level course in the honors curriculum is designed to satisfy all the learning goals of GHS (allowing students to employ a conceptual framework for global and historical studies that appreciates cultures as dynamic, heterogeneous, and constantly in conversation with one another, drawing on a variety of sources and disciplines-including the arts, the humanities, and the social and natural sciences, recognizing both the benefits and challenges of living in a culturally diverse and increasingly globalized world and continuing development of skills of expository writing). In addition, this course will incorporate the learning and pedagogical goals of the honors program, which include challenging students to think at a more complex level about the issues and ideas, and asking students to be more independent, creative, and actively involved in their learning process. All students who complete an Honors GHS course with a grade of $B$ or better will earn honors credit for one HN $200-l e v e l$ course. Topics vary by course number and/or term; consult Course Search utility or contact the Honors Program for additional information. (U)(3) Fall and spring.
## HN300, Interdisciplinary Honors Seminar:

Students will explore selected interdisciplinary topics of interest presented in an active and challenging learning format. Wide-ranging subject areas will be considered from multiple perspectives. Individual sections will have detailed course descriptions. Prerequisite: Must be registered as active in the University Honors Program or have permission from the University Honors Program director. (U)(2) Fall and spring.

HN351, Honors Tutorial: In this tutorial, students will explore a topic guided by an instructor. Students will be required to submit an outline of a plan of study to the honors office early in the semester and a final instructor evaluation of the completed tutorial. All Honors Theses are published in the University library, and students additionally have the option to publish their works in the Digital Commons, which is an internationally-accessible repository. Prerequisites: At least one HN110-HN111, HN200, or HN300 experience; the instructor's consent; and approval by the honors University Honors Program director. (U)(1) Fall and spring.

HN352, Honors Tutorial: In this tutorial, students will explore a topic guided by an instructor. Students will be required to submit an outline of a plan of study to the honors office early in the semester and a final instructor evaluation of the completed tutorial. Prerequisites: At least one HN110-HN111, HN200, or HN300 experience; the instructor's consent; and approval by the University Honors Program Director. (U)(2) Fall and spring.

HN397, Honors Independent Study-Thesis Proposal: This course grants credit to honors thesis proposal writers and is required by the University Honors Program curriculum. Students are required to attend three proposal workshops during the semester; create a study plan with thesis advisor; submit the study plan to the honors office early in the semester; and submit a thesis proposal by the designated due date. Completion of the required departmental honors course is strongly recommended prior to enrolling in this course. Prerequisites: a provisional pass or pass for honors sophomore review; instructor's consent; and approval by the honors director. P/F (U)(1) Students with an approved honors thesis proposal may have the option to take XX499 (AN499, BI499, CH499, etc.) for three hours of graded credit in the department of the thesis. This is not a requirement of the University Honors Program. (U)(1) Fall and spring.

HN398, Honors Independent Study-Thesis Proposal: This course grants credit to honors thesis proposal writers and is required by the University Honors Program curriculum. Students are required to attend three proposal workshops during the semester; create a study plan with thesis advisor; submit the study plan to the honors office early in the semester; and submit a thesis proposal by the designated due date. Completion of the required departmental honors course is strongly recommended prior to enrolling in this course. Prerequisites: a
provisional pass or pass for honors sophomore review; instructor's consent; and approval by the honors director. P/F (U)(2) Students with an approved honors thesis proposal may have the option to take XX499 (AN499, BI499, CH499, etc.) for three hours of graded credit in the department of the thesis. This is not a requirement of the University Honors Program. (U)(2) Fall and spring.

HN499, Honors Thesis: (U)(2) Fall and spring.

## International Education

Butler University encourages students to study in international settings as part of their academic experience. Students may choose to study for a semester, academic year, or during the summer. All students who wish to study abroad must apply through the Center for Global Education and are expected to select their program from the Center's List of Approved Programs for Overseas Study. Students may study abroad during their sophomore and junior years, and possibly their senior year, if their academic dean approves their petition to intrude upon their final 30 hours at Butler.

## Butler Semester in Spain Program

Butler offers a faculty-led program at the University of Alcalá de Henares each fall term. Butler students are able to take an entire semester's load of 12 credits that can be applied toward the Spanish major and minor, or can count as electives. All participating students take one course with the Butler faculty director, while the rest are taught by professors at the University of Alcalá de Henares in courses designed for non-native speakers of Spanish. Students with superior Spanish language skills can petition to enroll in university courses for native Spanish speakers. The program includes guided excursions to other regions of Spain. All students live with carefully selected Spanish families, thus enriching their opportunities for cultural immersion. Students must have completed two 300-level Spanish courses in order to be eligible for the program.

## Global Adventures in the Liberal Arts (GALA) Programs

Each spring semester, Butler offers a facultyled study program in a particular world region. Previous destinations have been Europe, Latin America, South Africa, and East Asia. Up to 20 students travel to several countries in the region while taking four or five undergraduate courses taught by Butler faculty members. The courses are designed to satisfy Core Curriculum requirements that are usually undertaken in the
sophomore year. Some cross-listing is possible in order to provide flexibility for students who already may have completed some of the core requirements included in the program.

## Faculty-led Summer Courses

Students can take summer classes while traveling abroad with a faculty member and a group of Butler students. All the colleges at Butler organize three- to four-week summer courses in overseas locations. Students consistently report that these experiences offer a valuable opportunity to learn about the course content while visiting the actual locations they are studying.

## International Exchange Programs

Reciprocal exchanges provide opportunities for Butler students to attend carefully selected partner universities abroad while students from those universities attend Butler, on a one-forone basis. Butler has developed some of these exchange opportunities; others are available through the International Student Exchange Program. The University's faculty and studyabroad advisor will work closely with individual students to select the program that best fits each student's academic and personal development needs.

Butler has established reciprocal student exchange relationships with premier universities in other countries, including Australia, Brazil, Canada, Chile, China, France, Germany, Hong Kong, Japan, The Netherlands, New Zealand, Spain, Switzerland, Taiwan, Turkey, and Wales.

A wide range of courses are available at the partner universities in areas such as business, education, languages and cultural studies, and many other disciplines in the arts and sciences. Students also have access to the comprehensive services available to all students attending the university, as well as the continued support provided by the Center for Global Education.

Butler is a member of the International Student Exchange Program (ISEP), headquartered in Washington, DC. ISEP is a worldwide network for international education, consisting of 340 institutions from more than 35 countries, through which students may exchange on a one-for-one reciprocal basis. Each student Butler sends to an ISEP member institution receives tuition, room and board, and other benefits as defined by the hosting institution. Since ISEP is a totally integrated program, students studying in countries where the language of instruction is not English must prove sufficient language proficiency in order to participate.

## Study-Abroad Programs

Butler University has been fortunate to have a cooperative agreement with the Institute for Study Abroad (IFSA-Butler), founded on Butler's campus in 1988. IFSA-Butler is one of the main study-abroad program providers for Butler students. The organization annually sends about 3,000 students from 400 U.S. universities to more than 90 universities in Argentina, Australia, Chile, Costa Rica, Egypt, England, Mexico, New Zealand, Northern Ireland, Republic of Ireland, and Scotland. IFSA-Butler is a separate service organization that helps students through the application process, assists with travel plans, arranges overseas housing, and advises on a variety of related issues. In addition to the Indianapolis office, IFSA-Butler maintains fully staffed offices in each country where it has programs. The overseas offices conduct student orientations, sponsor excursions, and provide various student services. All grades earned through an IFSA-Butler program are posted to an official Butler University transcript.

Students also may select their overseas study opportunity from programs offered by more than 15 other colleges, universities, and wellrespected study-abroad organizations. All provide a wide range of student services and give careful attention to safety and security issues. Approved programs represent a broad range of geographic regions and areas of study. Educational opportunities may be classroombased or experiential, including internships or service learning.

## Tuition and Financial Aid Applicability for Study Abroad

In most cases, federal and state aid will apply to study-abroad costs if the student currently is receiving aid. Students who study abroad will pay Butler University tuition during their semester(s) abroad. Those who participate in the Butler Semester in Spain program and the Global Adventures in the Liberal Arts program as well as in reciprocal exchange programs-through Butler's bilateral exchanges or ISEP-may apply 100 percent of their Butler institutional financial aid to their tuition for their semester(s) abroad. Those who participate in other approved studyabroad programs may apply 50 percent of their Butler institutional financial aid toward their tuition for their first study-abroad semester, and 25 percent for their second semester abroad.

## Center for Global Education (CGE)

The Center for Global Education provides leadership, coordination, and
administrative support for the comprehensive internationalization of the University. CGE manages all study-abroad activity; it provides advising, organizes pre-departure and reentry sessions, and maintains Butler's list of approved programs for overseas study. These programs offer a wide variety of options to Butler students interested in studying abroad during the academic year. All programs on the list meet Butler's high standards for academic excellence. Students are expected to select their overseas study program from the approved list. The programs fall into two broad categories: reciprocal exchanges and study-abroad programs, in addition to some of Butler's own programs.

For more information, contact CGE in Jordan Hall, or visit www.butler.edu/global-education.

## Domestic Off-Campus Programs

## Washington Learning Semester

Through its CHASE office, Butler University runs a semester-long program in Washington, DC, which features internships for Butler students from a wide variety of colleges and disciplines. Butler's on-site program director identifies internship opportunities tailored to each student's career interests and academic needs. Recent Butler student internships have included chemistry research at the Food and Drug Administration; marketing/administration for National Geographic magazine; working in the management/operations division of the Improv Club; and interning in the White House, the Smithsonian Museum, the office of the Speaker of the House, as well as in the offices of numerous senators and representatives. During their intern semester, students also take courses that are specially designed to enhance their DC experience, such as The Public Arts of Washington, DC, and Our Nation's Capital: How the Locals See It. Students register and pay tuition with Butler, receive their regular financial aid and scholarships, and earn credits in their degree programs. Information and applications are available on the CHASE website at www.butler.edu/chase.

DC300, Washington Semester Enrollment: Program includes academic seminars and supervised internship in the nation's capital. Open to Butler students in all colleges. Internships are arranged according to students' academic and professional interests. Prerequisites: Admission to the Washington Learning Semester program, second semester
sophomore standing, and upper-level work in the field and approval by academic advisor. (U)(0) Fall and spring.

DC301, Washington DC Seminar: Offered in DC, a special topics seminar designed to make use of the learning opportunities particular to the nation's capital. Available to students enrolled in Butler's Washington Learning Semester program. Approval by program coordinator required. Seminar is repeatable for credit. (U)(1) Fall and spring.

DC302, Our Nation's Capital: How the Locals
See It: This course, as part of the curriculum of the Washington Learning Semester program, offers an experiential, multidimensional exploration of the neighborhoods of city of Washington, $\mathrm{DC}-$ not the city the tourists see, but the city the locals call home. During this course, our primary textbook will be our nation's capital. Our emphasis will be on active learning, stressing the fundamental processes of discovery and observation. This active-learning paradigm may lead us to public products, such as oral presentations, photographic displays, videos, etc., as well as written texts. (U)(3) Fall and spring.

## ROTC Programs

Butler students may enroll in Air Force and Army ROTC (Reserve Officer Training Corps) programs. Army ROTC courses (100 and 200 level) are taught on the Butler campus. Through classes and field training, Army ROTC provides the tools to become an Army officer without interfering with other classes. ROTC also provides students with discipline and money for tuition while enhancing the college experience. Students interested in enrolling in Army ROTC can start by taking an Army ROTC basic elective course that is open to all students. Talk to the Butler Military Science instructor about other ways to join Army ROTC and incentives available, including opportunities to compete for two-, three-, or four-year scholarships. More information: 317-274-0073, fax 317-2'74-0069, jlbarker@butler.edu, www.butler. edu/rotc. Air Force ROTC (AF ROTC) courses are offered at the Indiana University campus, Bloomington, and also may be available for online administration or individualized distancelearning options depending on your schedule. All Air Force ROTC courses (100-400 level) include a separate leadership laboratory, which meets once each week. This laboratory augments the AF ROTC academic curriculum by providing prospective Air Force officers the opportunities and feedback needed to develop the leadership, followership, managerial, and supervisory skills required of successful Air Force officers. More
information: 800-IUB-ROTC, afrotc@indiana.edu.

## Air Force ROTC Courses

AI101, The Air Force Today 1: These survey courses briefly cover topics relating to the Air Force and national defense. It focuses on the structure and missions of Air Force organizations, officership, and professionalism. It also serves as an introduction into the development and use of professional communication skills that will continue to be developed and employed throughout the entire aerospace studies curriculum. (U)(2) Fall.

AI102, The Air Force Today 2: These survey courses briefly cover topics relating to the Air Force and national defense. It focuses on the structure and missions of Air Force organizations, officership, and professionalism. It also serves as an introduction into the development and use of professional communication skills that will continue to be developed and employed throughout the entire aerospace studies curriculum. (U)(2) Spring.

AI201, The Evolution of USAF Air and Space Power: These survey courses are concerned with the beginnings of manned flight and the development of aerospace power in the United States, including the employment of air power in WWI, WWII, Korea, Vietnam, the Gulf War, and beyond, as well as the peaceful/humanitarian employment of U.S. air power in civic actions, scientific missions, and the support of space exploration. (U)(2) Fall.

AI202, The Evolution of USAF Air and Space
Power: These survey courses are concerned with the beginnings of manned flight and the development of aerospace power in the United States, including the employment of air power in WWI, WWII, Korea, Vietnam, the Gulf War, and beyond, as well as the peaceful/humanitarian employment of U.S. air power in civic actions, scientific missions, and the support of space exploration. (U)(2) Spring.

AI301, Leadership Studies 1: These courses study the anatomy of leadership, the need for quality leaders and development of management expertise, the role of discipline in leadership situations, and the variables affecting the successful exercise of individual leadership. Case studies are used to examine Air Force leadership and management situations as a means of demonstrating and exercising practical applications of leadership concepts. Students will also contend with actual leadership problems and complete projects associated with planning and managing the AF ROTC Leadership Laboratory. (U)(2) Fall.

AI302, Leadership Studies 2: These courses study the anatomy of leadership, the need for quality leaders and development of management expertise, the role of discipline in leadership situations, and the variables affecting the successful exercise of individual leadership. Case studies are used to examine Air Force leadership and management situations as a means of demonstrating and exercising practical applications of leadership concepts. Students will also contend with actual leadership problems and complete projects associated with planning and managing the AF ROTC Leadership Laboratory. (U)(2) Spring.

## AI401, National Security Affairs \&

 Preparation for Active Duty: In these courses, students learn about the role of the professional military leader in a democratic society; societal attitudes toward the armed forces; the requisites for maintaining a national defense structure; the impact of technological and international developments on strategic preparedness and the overall policy-making process; and military law. In addition, students will study topics that will prepare them for their first active-duty assignments as officers in the United States Air Force. (U)(3) Fall.
## AI402, National Security Affairs \&

 Preparation for Active Duty: In these courses, students learn about the role of the professional military leader in a democratic society; societal attitudes toward the armed forces; the requisites for maintaining a national defense structure; the impact of technological and international developments on strategic preparedness and the overall policy-making process; and military law. In addition, students will study topics that will prepare them for their first active-duty assignments as officers in the United States Air Force. (U)(3) Spring.
## Army ROTC Courses

RZ101, Foundations of Officership: This course introduces you to issues and competencies that are central to a commissioned officer's responsibilities. Topics include leadership, values and ethics, fitness, and time management. Gain insight into the Army profession and the officer's role within the Army. Leadership labs, physical training sessions, and a weekend field training exercise are optional, but highly encouraged. (U)(1) Fall.

RZ102, Basic Leadership: Learn and apply principles of effective leading by focusing on leadership theory and decision making. Reinforce self-confidence through participation in physically and mentally challenging exercises involving land navigation, basic military tactics, and communication skills. Leadership labs, physical training sessions, and a weekend field training exercise are optional, but highly encouraged. (U)(1) Spring.

## RZ201, Individual Leadership Studies:

Learn and apply ethics-based leadership skills that contribute to building effective teams. Develop skills in oral presentations, writing concisely, leading groups, advanced first aid, land navigation, and basic military tactics. The course concludes with major case study. Leadership labs, physical training sessions, and a weekend field training exercise are optional, but highly encouraged. (U)(2) Fall.

# Center for High Achievement and Scholarly Engagement (CHASE) 

Rusty Jones, PhD, Faculty Director

Located in Jordan Hall, room 153, CHASE provides services and support for Butler students who want to enhance their education by pursuing additional opportunities while at Butler and for those who wish to continue their education beyond Butler. Included are the University Honors Program; programs to support undergraduate research and activity; a domestic semester-away learning program in Washington, D.C.; advising for pre-health and pre-law students; a Mock Mediation team; advising for nationally and internationally competitive fellowships and scholarships, and administration of the University's chapter of the honor society Phi Kappa Phi. Additional information about CHASE-sponsored programs is available at www. butler.edu/chase or by contacting the Center at chase@butler.edu or 317-940-9581.

## Undergraduate Research and Creative Activity

With support from the Holcomb Endowment and the Fairbanks Foundation, the Programs for Undergraduate Research Committee and CHASE assist the research and creative projects of students in all disciplines in a variety of ways:

- The Butler Summer Institute provides an opportunity for students to work one-onone with a faculty mentor for nine weeks during the summer on a creative, scholarly, or research project. Students who are accepted to the program receive $\$ 2,500$ and free lodging for the duration of the program. In addition to conducting their projects and presenting their findings, students participate in luncheon seminars and other activities. They also are encouraged to engage in a group community service project. Through the Butler Summer Institute, students can experience a close working relationship with a member of the faculty and an opportunity to expand their scholastic and professional horizons.
- The Undergraduate Student Research Program encourages undergraduate students in the sciences (broadly defined)
to collaborate on research projects with a member of the faculty by providing a grant to support their joint project through the academic year.
- The Butler University Undergraduate Research Conference, held every spring, attracts more than 500 participants from colleges and universities around the Midwest and beyond. Presentations are given in a wide variety of disciplines.
- Student Thesis Grants support some of the costs of conducting research necessary for completion of honors theses.
- Travel Grants are available to support the travel costs of presenting the results of research or creative endeavors at international or national conferences.


## Competitive Scholarships and Fellowships

The CHASE office provides recruiting, mentoring, advising, and coaching for students interested in applying for nationally competitive scholarships such as Fulbright, Goldwater, Marshall, Rhodes, and Truman scholarships. In recent years, Butler has had a distinguished record of success in these competitions. Most, but not all, support graduate study, and many support study at overseas institutions. Most of these programs require institutional endorsement through an internal selection process. For more information about specific scholarship programs and internal deadlines, visit the CHASE website or contact CHASE at chase@butler.edu.

## Pre-Health Professions

(pre-medicine, pre-dentistry, pre-veterinary medicine, pre-optometry, pre-physical therapy)
Although any major may be chosen, most pre-health students elect a major in either the biological sciences or chemistry. For admission, most professional schools require a minimum of one year of biology, one year each of general and organic chemistry, and one year of physics; however, the expectations of professional schools vary, and students should consult with their Butler advisor and the pre-health advisor concerning the requirements of the particular professional schools in which they are interested. Pre-health coursework varies according to the student's goal, but every student has the choice
of a number of elective courses. These are offered both to enhance pre-professional training and to broaden and deepen the student's education. Students also may participate in research programs, shadowing experiences, and campus and community service opportunities. Many pre-health students also are in Butler's Honors Program. A science major (biology, chemistry, etc.) in the College of Liberal Arts and Sciences requires a minimum of 30 hours of coursework in that department. Regardless of the major area of study, courses in biology, chemistry, and physics are required to adequately prepare the student for success in his or her professional field. Faculty advisors work one-on-one with students to tailor an academic program designed to meet individual needs and career goals. Students' individualized academic schedules will allow them to meet all professional school entrance requirements and prepare them for the nationally administered entrance examinations for health professional schools.

## Pre-Law

Butler pre-law students may choose any major. The Law School Admission Council advises that "Law schools want students who can think critically and write well, and who have some understanding of the forces that have shaped the human experience. These attributes can be acquired in any number of college courses, whether in the arts and humanities, the social sciences, or the natural sciences." In addition, courses introducing legal principles may be helpful to students in assessing whether to continue to pursue law. Finally, courses in logic, mathematics, and analytical reasoning may enhance preparation for the Law School Admission Test. Students also may participate in engaged-learning experiences such as our Mock Mediation team, networking events, and internship opportunities in Indianapolis or in the Washington D.C. Learning Semester.

## University Honors Program

The CHASE office serves as the administration for the University Honors program. For more information, refer to the Academic Programs section of the Bulletin.

## Washington D.C. Learning Semester

The CHASE office serves as the administration for the Washington D.C. Learning Semester, which engages juniors and seniors of any academic discipline in an internship and interdisciplinary coursework. For more information, refer to the Academic Programs section of the Bulletin.

## Professional School Advising

CHASE helps students make informed decisions about pursuing a graduate or professional school education. Diverse activities, programs, and services are available to students with an interest in law, medicine, dentistry, optometry, veterinary medicine, theology, and various graduate programs.

The office maintains a library, which includes catalogs from graduate and professional programs, entrance exam preparation materials, career-oriented publications, and alumni placement information. CHASE also offers advising and guidance to students and alumni on the application process, including assistance in selecting programs, preparing personal statements, and obtaining recommendation letters. CHASE staff members serve as advisors to the Pre-Health Society (a recognized chapter of the American Medical Students Association) and the Pre-Law Society. Students interested in pre-health, pre-law, or pre-graduate school advising should contact CHASE early in their academic careers.

## Internship and Career Services (ICS)

Gary Beaulieu, Director

Internship and Career Services provides Butler students and alumni with support in development of academic and career opportunities. ICS offers many individualized services to help students explore internship and career options, including help with résumé and cover letter development, practicing interview skills, job or internship searching, and networking with alumni. The office also leads the on-campus employment effort at Butler, which supports more than 900 student jobs and provides students with extra spending money as well as valuable work experience.

ICS offers additional resources. Students who need help deciding on a major or those who wish to look at career options for majors, for example, can do so through individualized career advising or interest assessments such as the Strong Interest Inventory and the Myers-Briggs Type Indicator. Extensive information on a variety of topics involving occupation exploration, résumé development, interviewing, job searching, and networking are found on the ICS website. The office offers a variety of workshop options throughout the academic year to prepare students for the job or internship search. During the school year, many employers seeking interns or full-time employees visit campus to interview
students. For students completing an internship over the summer months in Indianapolis, the Indy Summer Experience program allows them to live on campus and explore the city by participating in cultural activities and visiting local attractions. A complete listing of programs, employers visiting campus, and information about Indy Summer Experience is available on the ICS website at www.butler.edu/ics. To make an individual appointment, contact the office at 317-940-9383 or ics@butler.edu.

## Learning Resource Center (LRC)

Jennifer Griggs, Director
The Learning Resource Center is committed to supporting and guiding students as they strive to reach the highest standards of academic excellence. The office serves as a coordination site for services, programs, and resources that promote academic success. Services are designed to assist students who are interested in enhancing their study skills; who wish to explore a variety of academic, intellectual, and professional pursuits; who need help in their coursework; and who need a friendly ear to discuss any problems or concerns they may be experiencing. Students are encouraged to take advantage of these support services early in the semester to increase their chances of success.

For questions and more information, contact the LRC at 317-940-9308 or learning@butler.edu, or visit www.butler.edu/learning.

## Academic Transition

The LRC is dedicated to assisting new students as they acclimate to the academic environment of Butler University. The Center plays a collaborative role in coordinating New Student Registration Days, Welcome Week, January Orientation, and other transition-to-college programs.

## Academic Success Workshops

Academic Success Workshops provide students with a comprehensive array of strategies and techniques that can assist in meeting the unique demands of college-level academics. Workshop topics may vary from semester to semester, but generally include topics such as time- and self-management, effective study habits, exam preparation, memory enhancement, effective reading, and note-taking strategies.

## Academic Success Coaching

Individual sessions are available to students interested in enhancing and refining academic skills. Students will gain insight into areas of academic strength and will identify strategies to address areas of concern. They will work collaboratively with an academic success coach to develop a plan of action to improve academic performance, and they will learn strategies and techniques to aid in approaching their coursework in an active, engaged, and goaldirected manner.

## Study Tables and Peer Tutoring

Study tables are group walk-in tutoring sessions that meet regularly at a specified time and place. Individual departments coordinate study tables that are available in a variety of academic disciplines. This service is staffed by student moderators who have been chosen by the faculty based on their performance in the subject area. Students may come and go freely from study tables, where they have access to student moderators for questions and assistance.

Individualized peer tutoring, coordinated through the LRC and requiring the endorsement of the course instructor, allows the student to meet one-on-one with a qualified and recommended peer tutor. This service is provided for a variety of introductory courses on an as-needed basis and is offered to the student for a limited time. The goal of individualized tutoring is to bring students up to speed so that they are able to continue at the same pace as the rest of the class. Before requesting an individual tutor, the following conditions should be met:

- Endorsement by the course instructor is required.
- Student must be attending all classes and laboratories.
- Student must be completing all assignments to the best of his or her ability.
- Student must be attending departmental study tables if available for the subject.
- Student must be working with the course instructor during office hours.

In most cases, individualized tutoring is limited to one or two sessions per week for a limited number of weeks, depending on individual circumstances.

## Exploratory Studies Program

Exploratory Studies is a structured program aimed at helping students identify interests, explore academic options, gain exposure to the career-development process, and gather information about majors and careers that
interest them. Students who are undecided or who have multiple interests are encouraged to exercise their intellectual curiosity through a number of programs and classes designed to help students determine their own best course of study. In addition, students receive specialized attention from trained academic advisors who assist the students in their decision-making process. Program services include these:

- Developmental academic advising
- Exploratory Studies class (LC103)
- Workshops and guest speakers
- Self-assessments
- Assistance in setting up job shadowing and informational interviewing opportunities
- Transitional advising for students who desire to change majors or add programs of study


## Courses

LC100, Strategies for Success: This course is designed to offer tools and techniques to enhance academic success at the college level. Topics may include time and self-management, effective classroom strategies, goal setting, and academic planning. The course will involve discussion and reflection on the proven strategies for creating greater academic, professional, and personal success. (U)(1) Fall and spring.

LC103, Exploratory Studies: This course is specifically designed for first-year Exploratory Studies majors. Decision making, selfassessment, academic exploration, and career planning are foundational components. The course encourages students to reflect upon assessments, personal values, skills, interests, and decision-making styles while being exposed to various academic fields of study. Students apply this knowledge to investigate suitable career options. (U)(2) Fall.

LC200, Peer Education: A training course for peer educators who participate in the PAWS (Peers Advocating Wellness for Students) or GEAR (Greeks as Educators, Advocates, and Resources) programs, designed to enhance knowledge and skills regarding collegiate health and wellness. Enrollment by permission of the Coordinator for Health Education only. (P/F) (U) (1) Spring.

## LC201, Residence Life-College Student

Development: A training course for residence assistants, designed to enhance skills in interpersonal communication, community building, programming, and counseling. By permission of the Director of Residence Life only. (P/F) (U)(1) Spring.

## LC301, Career Planning Strategies-

 Foundations for Success: This course is designed to teach lifelong career-planning skills critical to a smooth and successful transition to the workplace. Assignments include résumé composition, practice interviews, and career research. Additionally, students will learn to navigate challenges, while working toward independent career goals. This course is intended for juniors and seniors. (U)(1) Fall and spring.
## Student Disability Services (SDS)

Michele Atterson, Director

Butler University is committed to providing equitable access for all members of the University community. For qualified students with disabilities, accommodations and support services are arranged on a case-by-case basis. Written documentation from an appropriate licensed professional should be submitted directly to SDS in Jordan Hall, room 136. SDS staff will arrange an individualized discussion with students seeking services as part of the process for accommodation consideration. For further information, contact SDS at 317-9409308 or visit www.butler.edu/disability.

## Information Technology

Butler University offers a wide variety of technology services, ranging from University computing equipment to systems and network infrastructure, as well as technology consulting and support services for students, faculty, and staff.

## Network Infrastructure

The Butler network is a joint effort between Information Technology and Facilities Management that provides voice and data services to the entire Butler campus. The network is accessible by Ethernet and wireless connection and provides connectivity for computers, printers, phones, and other IPenabled devices. The network supports all generally accepted computing platforms (Macintosh, Windows, Unix/Linux) and is available to all students, faculty, and staff. Use of the Butler network is governed by Butler's Computer Use Master Policy and other regulations. Visit www.butler.edu/it for more information.

## Computing Labs

Butler University supports 20 studentcomputing facilities, several of which are open 24 hours per day during the fall and spring semesters. Standard applications include Microsoft Office, Adobe Creative Suite, and other software. All computer labs have access to Butler's online library resources, printers, and network file storage. Most labs are available for use outside of scheduled class time. Visit butler. edu/it/labs for hours and locations.

## Center for Academic Technology

Academic computing resources include the Center for Academic Technology (CAT)-a division of Academic Affairs located in the lower level of Jordan Hall-and the Information Commons, a collaboration between CAT and the Butler Libraries, with locations in Jordan Hall and Irwin Library. Support includes one-on-one consultation and training; small-group training for students, faculty, and staff; faculty/ staff development activities; and a lending library of digital tools for faculty and staff. For more information, visit www.butler.edu/cat.

## Information Commons

The mission of the Information Commons is to provide student-led support for Butler University students in the academic use of technology Student-consultants facilitate discovery and creation of information, academic technology assistance and training, library and research assistance, and training in the use of specialized content such as digital video, desktop publishing, social media applications, and Butler's standard technologies, including ePortfolio. Consultants are available in Irwin Library, Jordan Hall, room 037, or by individual appointment. Visit www. butler.edu/information-commons or contact Information Commons at infocommons@butler. edu for more information.

## Electronic Resources

All students are provided with a Butler network account that allows access to most of Butler's electronic resources. The most popular services are:

- Email and personal calendaring (BUmail). bumail.butler.edu
- Password management. login.butler.edu
- Moodle-course management
moodle.butler.edu
- My.Butler-grades, course registration, student account. my.butler.edu
- BUfiles-network file storage. www.butler.edu/it/bufiles
- Google Apps-collaborate with others. www.butler.edu/it/google-apps
- PrintSmart-print allotments for academic printing needs. www.butler.edu/it/printsmart

Students also have access to networked printers, personal website hosting, and through the library, access to more than 150 subscriptionbased databases.

## Technology in University Housing

All University residences (residence halls and Apartment Village) have wireless and wirednetwork access as well as 24 -hour computer labs. Each room has one connection to the campus cable TV network. Students may supply their own cable-ready TV. Basic cable is provided. Find more information about cable TV service and a full channel lineup at www.butler.edu/it/cabletv.

Students who connect personal computers to the Butler network are required to meet minimum standards by keeping their computer up to date and running a current antivirus program. More information on these standards, as well as computer recommendations, can be found at www.butler.edu/it.

## Computer and Software Purchases

Butler provides discounts on a variety of computer hardware and software, including free antivirus software and Microsoft Office for students. Visit the IT website at www.butler.edu/it for more information and links to the online stores.

## PrintServices

PrintSmart is Butler's print-accountability program. All students receive an allotment of print credits to use for their academic printing needs, and faculty and staff use PrintSmart to print, copy, fax, and scan. Print allotments help make the most responsible use of Butler's printing resources and support our commitment to be environmentally responsible. All students should review the PrintSmart FAQ section in order to understand the allotment program and know what to expect when printing on campus. Visit www.butler.edu/it/printsmart for details.

## Technology Support

All Butler technology is supported through the Information Technology Help Desk, which provides phone, email, web, and walk-in support. 317-940-HELP (4357), helpdesk@butler.edu, itrequest.butler.edu, www.butler.edu/it/help, Holcomb Building, room 315.

## Learning Assistance

## Mathematics Tutoring Lab

The University Core Curriculum requires all students to take a course in Analytic Reasoning. There is a wide range of courses to fulfill this requirement. The Mathematics Tutoring Lab provides free help to students enrolled in prerequisite math courses such as MA101 and MA102, and the core courses AR210-MA, AR211-MA, AR212-MA, MA106, MA125, and MA162. Peer tutors are students majoring in mathematics, actuarial science, and/or mathematics education. The lab is open Monday-Thursday, 2:30-4:30 PM and 7:00-10:00 PM, and Sunday evenings, 7:00-10:00 PM The lab is located in Jordan Hall, room 272 C , and is the longest-running tutoring lab on campus. Appointments are not required. For more information, call the Department of Mathematics and Actuarial Science at 317-9409521 or 317-940-9441.

## Modern Language Center

The Modern Language Center (MLC) is a multilingual facility to advocate and support second language and culture acquisition. The MLC (Jordan Hall, room 391) includes a comprehensive foreign-feature and instructional film collection, a large group-viewing area, film viewing stations for individuals, computers, a Smart Board, gaming systems (DS, Wii, etc.) with games in a variety of languages, and more. In addition to state-of-the-art facilities, the MLC hosts a number of activities including study tables, movie nights, and karaoke club to promote learning about language and culture. The MLC staff is trained in academic technology and research methodology to support all facets of language learning and teaching at Butler.

## Speakers Lab

The Speakers Lab is a peer-to-peer tutoring organization that provides assistance in creating and delivering oral presentations. Speakers Lab tutors also engage the community by volunteering with Girls Inc. Located in the Fairbanks Building, rooms 140 and 250, the Speakers Lab is open Sunday-Thursday to assist students by walk-in or appointment. Services include topic selection, research, outlining, organization, and delivery. For more information, visit www.butler.edu/speakers-lab or contact Allison Harthcock at aharthco@butler.edu.

## Writers' Studio

Writing is essential to intellectual life, the learning process, and professional development.

University study involves communicating ideas, analysis, and information across a wide range of subjects and disciplines. Peer tutors are available to help other students at any point in the writing process. Assistance is available to generate ideas for writing, develop those ideas, and work on documentation, style, and editing. Hours are generally 10:00 AM-8:00 PM, MondayThursday; 10:00 AM-2:00 PM on Friday; and 3:00-6:00 PM on Sunday. Students may either stop by the Writers' Studio in Jordan Hall, room 304 , or contact the studio for an appointment at 317-940-9804 or writers@butler.edu. Additional writing resources and online tutorials are available at www.butler.edu/writers-studio.

## Butler University Libraries

Julie Miller, Dean
The Butler University Libraries make available the materials needed to support study, teaching, and research in all areas of intellectual endeavor pursued at Butler. There are two libraries on campus. The Irwin Library includes the business, education and curriculum resources, liberal arts, and performing and fine arts collections. The Ruth Lilly Science Library houses materials supporting studies in the fields of computer, mathematic, pharmaceutical, physical, biological, and behavioral sciences. The combined holdings of the Butler Libraries include approximately 100,000 e-books, 200 databases, 35,000 electronic journal subscriptions, 350,000 print materials, 16,000 audiovisual materials, and more than 17,000 musical scores.

Library faculty are available to offer individual research assistance through walk-up assistance at the libraries' information desks, via instant messaging at buanswers.butler.edu, by phone at 317-940-9235, and by appointment. Librarians also collaborate with assigned colleges and departments to provide discipline-specific, classroom instruction on library research skills. In addition, students can obtain basic research and technology support for their classes by visiting or contacting the Information Commons. This is a student-staffed, class support service in which students can receive basic research help or technology training related to their classes. The Information Commons service includes a walk-up desk in Irwin Library; numerous online communication options (texting, IM, email, and phone); and prearranged appointments.

The libraries' website, www.butler.edu/library, serves as a portal to the libraries' online and print collections and provides details about services, staff, policies, and hours. One place to start one's
research is at the subject LibGuides directory. Created by library faculty, LibGuides are available based on subject areas, Butler majors, and specific Butler classes.

## Irwin Library

Dedicated in memory of William G. Irwin, a longtime benefactor of Butler University, Irwin Library provides seating for about 400 students at study tables, individual study carrels, and group/individual study rooms. Collaborative learning spaces are available where students can move soft seating to facilitate group work. Irwin Library provides access to desktop PCs and Macs, maintains a computer lab in the Information Commons area, offers laptops and iPads for checkout, and supports wireless access throughout the building. The lower level also houses a rich-media room, where students can record and edit audio and video presentations.

The Hugh Thomas Miller Rare Books and Special Collections Room, located on the library's third floor, houses early or rare books, prints, manuscripts, scores, maps, newspapers, and memorabilia. Special collections include the largest English-language collection about the Pacific Islands in the mainland United States and the most important Sibelius collection outside of Finland. This department also administers the University Archives and the Eliza Blaker Room.

## Lilly Science Library

The Ruth Lilly Science Library is located in the heart of the Butler University science complex, on the second and third floors of the Holcomb Building. Comfortable furnishings and a skylight on the third floor create a pleasant and quiet atmosphere for research and study. The library can seat approximately 100 users, provides access to desktop PCs, offers laptops for checkout, and supports wireless access.

In addition to printed materials, the library maintains extensive DVD/video collections and provides online access to numerous science and technology databases. The library and its services are available to the entire Butler community. A science librarian is available weekdays for assistance.

## Center for Faith and Vocation (CFV)

Daniel Meyers, Director

The Butler University Center for Faith and Vocation in the "Blue House" across from the Schrott Center on Sunset Avenue provides a place where all people at Butler discover lives of purpose, meaning, and contribution. The Center is rooted in Butler's belief that reflection on spiritual questions and commitments can support this discovery. We encourage open discussion, curiosity, and respect for the diverse and distinct views people bring to our campus community.

As part of vocational reflection for students, we provide internships, one-on-one advising, salonstyle conversations, and service projects. Butler faculty and staff are involved too, taking part in workshops to learn how to help their students understand what they are called to do with their lives.

The CFV is also the home and a source of support for the many communities that together compose the multifaith religious landscape at Butler. There are numerous student religious organizations, such as the Butler Catholic Community, Hillel at Butler, the Butler Muslim Students Association, as well as the Secular Student Alliance. In addition to the Orthodox Christian Fellowship, there are many protestant communities, including Cru, Young Life, Grace Unlimited, and several others.

The primary goals of the CFV include helping students have access to spiritual and religious resources and community of all kinds as well as encouraging students to utilize their time at Butler as a season of discernment and reflection on their passions and future contributions.

For more information, contact Daniel Meyers, dgmeyers@butler.edu, or visit www.butler.edu/cfv.

## Center for Urban Ecology (CUE)

Julia Angstmann, Director
The vision of the CUE is to be a national leader in the study and practice of urban ecology. CUE's mission is to innovatively explore, steward, and enhance urban ecosystems. In the liberal arts tradition, we view urban ecology as inherently interdisciplinary and aspire to create a culture within Butler and in the city of Indianapolis that recognizes the fundamental importance of ecological knowledge for a sustainable society.

The CUE operates with a foundation in ecological science and facilitates interdisciplinary research and education, placebased projects, and public outreach by creatively engaging Butler students, faculty, staff, and community partners.

CUE activities include:

- Internships that place students with our campus and community partners for realworld experiences
- Interdisciplinary research projects sponsored by faculty and CUE staff
- Service projects on campus and in the community
- Outreach programs with local nonprofit organizations, governments, and schools
- Campus sustainability initiatives

For more information, visit www.butler.edu/cue or email cue@butler.edu.

## Butler Institute for Research and Scholarship (BIRS)

Taura Edwards, Director

The Butler Institute for Research and Scholarship serves as the University's office of sponsored programs and research integrity. Students interact with BIRS primarily through its research integrity programs, including the Responsible Conduct of Research component and the Institutional Review Board. All students who participate in research undertaken through a grant from the National Science Foundation and the National Institutes of Health are required to undergo Responsible Conduct of Research training. Butler uses the Collaborative Institutional Training Initiative, an online program that administers training modules to ensure compliance with federal research guidelines. All faculty, students, and staff who employ research methodologies requiring oversight, including working with human subjects involving quantitative or qualitative data, are directed to the BIRS to complete the required application. More information about Butler's research compliance programs can be found at www.butler.edu/birs.

## CAMPUS SERVICES

The Division of Student Affairs strives to integrate educational experiences and cocurricular programming into a campus setting with opportunities, challenges, and services that promote a student's holistic development. Within the Division of Student Affairs, enhancing the overall quality of the life of students is our mission. Services includes those for residence life; dining; Greek life; leadership and service programming; recreation; diversity programs; band and spirit programs; health programs; student conduct and Title IX case resolution; counseling; consultation; and commencement.

The Vice President for Student Affairs serves as the primary liaison for students and various segments of the University community. Rules and regulations governing student life are outlined in the Student Handbook and available on the Butler University website. The primary offices of the Division of Student Affairs are located in Atherton Union and the Health and Recreation Complex. The Office of the Vice President for Student Affairs is located in Atherton Union, room 200.

John W. Atherton Union houses the University bookstore, Starbucks, the Marketplace dining room, many offices within the Division of Student Affairs, and Internship and Career Services. Atherton Union maintains numerous facilities, including student organization offices, the Volunteer Center, the Efroymson Diversity Center, meeting rooms, student soft space, ATMs, and a computer lab. Snacks, grill, and fountain items are available in the C-Club and Starbucks. The Programs for Leadership and Service Education (PuLSE) office, which is responsible for the operation of Atherton Union, is located in room 101. Concerns regarding the physical space and maintenance of Atherton Union may be directed to the PuLSE office.

## Campus Safety

The Department of Public Safety maintains a safe and secure environment for the University community. Student "Right to Know" information (mandated by the federal Clery Act) can be found on the department's website at www.butler.edu/bupd/annual-security-reports.

The Butler University Police Department is responsible for investigating incidents, traffic enforcement, issuing student identification cards, and providing assistance in emergency situations, including contacting local fire and
ambulance services. Officers are on duty 24 hours a day, seven days a week. University Police are also responsible for coordinating crime prevention programs for students, faculty, and staff throughout each semester.

The Office of Environmental Programs is responsible for maintaining compliance with numerous federal, state, and local regulations that govern fire, safety, and environmental issues at Butler University.

## Victim Advocate Program

The Victim Advocate Program provides 24-hour response to students who have experienced sexual assault or interpersonal violence, provided by a trained advocate throughout the academic year. The needs of someone who has been sexually assaulted vary from person to person and over time. The victim advocate can help a student connect to campus or community resources he or she would find most helpful and healing. To obtain assistance and an explanation of services, contact the program at 317-910-5572. To report a crime, contact Butler University Police at 317-940-9396. Additionally, programs and workshops regarding issues such as sexual violence prevention/response, dating violence prevention/response, bystander intervention, and healthy sexual choices are available through the Health Education and Outreach Programs Office located in the Health and Recreation Complex, room 101, 317-940-8311.

## Civil Rights Equity Grievance Policy (CREGP) and Deputy Title IX Coordinator

Butler University actively fosters an inclusive environment of respect where differences are honored. All individuals who work, study, and participate in Butler activities have the right to be free of harassment and discrimination. To ensure that our campus addresses allegations of harassment and discrimination, the University adopted a comprehensive Civil Rights Equity Grievance Policy (CREGP), available through the Human Resources website at www.butler. edu/hr. Addressed within this policy are sexual harassment, sexual misconduct, and sexual exploitation, as those actions are considered extreme forms of harassment. Additionally addressed is discrimination based on race, ethnicity, sex, sexual orientation, gender identity or expression, disability, age, and any other
protected characteristic. The Deputy Title IX Coordinator facilitates the process for student-on-student policy violations. Butler University addresses the CREGP policy and topics of discrimination by regular communication of expectations and through the provision of programs and conversations.

The Deputy Title IX coordinator is located in the Office of the Vice President for Student Affairs, Atherton Union, room 200. Visit www.butler.edu/respect for detailed information.

## Commencement and Student Recognition Programs

Butler University commencement ceremonies are coordinated within the Office of the Vice President for Student Affairs. The University hosts two commencement ceremonies each year (winter and spring), in which students receive their diploma onstage. An honorary degree is presented to an individual who may serve as the commencement speaker.

For more than 60 years, the University has recognized students of outstanding character, scholarship, engaged citizenship, leadership, and commitment to fostering diversity through the Outstanding Student Recognition-Top 100 program. Juniors and seniors are nominated and selected through an application process for Top 100 consideration. Once selected as a Top 100 student, candidates are given the opportunity to submit letters of recommendation for consideration to be a Top 10 Man or Woman or Most Outstanding Man or Woman. Committees of faculty, staff, and alumni govern the selection process. Recognition by this program is considered to be a high student honor; students can receive the honor twice during their academic career.

The Commencement and Student Recognition coordinator is located in the Office of the Vice President for Student Affairs, Atherton Union, room 200. Visit www.butler.edu/commencement for detailed information.

## Diversity Programs

The Office of Diversity Programs, located in the Efroymson Diversity Center, Atherton Union, room 004, combines services designed to enhance the cultural diversity and awareness of the campus community and supports the admission and retention of students from diverse underrepresented populations. The director serves as advisor to several diversity student
organizations and manages the Efroymson Diversity Center and the Morton-Finney Leadership Program. The director and staff also coordinate the Celebration of Diversity Distinguished Lecture Series, a collaboration between Butler University and the Office of the Mayor, and the campus-wide Celebration of Diversity, which presents thematic programming and events, including the Hispanic Heritage Celebration, the Martin Luther King Jr. Holiday observance, African-American History Month, Women's History Month, and various diversity programs throughout the academic year. Visit www.butler.edu/diversity for detailed information.

International Student Services, located in the Efroymson Diversity Center, Atherton Union, room 004, is the coordinating agency for Butler's international students. The Associate Director for International Student Services provides services and opportunities for students attending Butler on a visa, including advice on cross-cultural concerns and immigration and visa requirements, and maintains all records in cooperation with the Registrar to ensure compliance with the Student and Exchange Visitor Information System/U.S. Citizenship and Immigration Services. Advising is also provided for international student organizations, coordination of Butler international activities and special projects, and the International Living Unit, located in the Residential College. Visit www.butler.edu/international for detailed information.

The Efroymson Diversity Center exists to enhance the personal development and academic success of students by preparing them to be active and responsible citizens demonstrating respect and appreciation for the diverse cultures represented on campus, as well as the diversity inherent within our global society. The Center was made possible by a generous gift from Lori Efroymson-Aguilera, the Efroymson Family Foundation, and the Central Indiana Community Foundation.

The Office of Diversity Programs and the Office of International Student Services are housed in the Center, also known as "The DC," which provides office space for several diversity student organizations. Center facilities include a multipurpose lounge/program area equipped with study tables, reception area, television and entertainment center, library and art gallery, kitchen, prep room, and storage space. For more information, call 317-940-65\%0 or visit www. butler.edu/diversity for a complete listing of programs and hours.

## Health and Recreation Complex

The Health and Recreation Complex (HRC) houses recreation programs, Health Services, Health Education and Outreach, and Counseling and Consultation Services.

The Health Education and Outreach Programs Office addresses critical wellness issues affecting college students by coordinating peer-education programs, including Peers Advocating Wellness for Students; Greek Educators, Advocates, and Resources; and The Red Cup Culture Facilitation Team. The coordinator provides programming and consultation to students in areas related to wellness. The office is part of the Division of Student Affairs and is inside the HRC, room 101.

Health Services, also located in HRC, suite 110, is available to all Butler students, with office hours posted at www.butler.edu/health-services. Services are provided by appointment, and walkins are accepted as the schedule allows. Registered nurses, mid-level providers, and physicians provide treatment in the Health Services office for minor accidents, sport injuries, preventive care, and illnesses on an outpatient basis. Providers are available Monday-Friday for wellness/preventive care, acute/chronic care, women's and men's health issues, and to address general health care needs on a personalized basis. Individual health insurance will be billed, so students need to bring their insurance cards when they visit. Copayments and any balance owed may be directed to the student's University account so that cash on hand is not necessary in order to be seen. To utilize Health Services, students must have submitted to myhealth.butler.edu a completed health history, a copy of a physical exam completed in the last 12 months, a copy of immunization records, and proof of health insurance.

Counseling and Consultation Services (CCS) helps all students on an individual and group basis with academic and personal issues during the student's time at the University. All counseling is voluntary, and students may expect to have their concerns addressed in usually no more than 10 sessions. Students seeking support and wishing to work on specific issues, such as relationships, depression, anxiety, grief and loss, sexual-assault survivorship, and other issues, do so through individual and group therapy. Licensed psychologists and closely supervised interns staff the facility. The predoctoral internship is fully accredited by the American Psychological Association. Students are seen by appointment. Students who wish to start counseling can phone 317-940-9385. Students seeking resources,
information, and programs can also find those services at CCS.

The Recreation Department creates opportunities and environments that inspire people to participate in leisure activities, both passive and active. Through intramural athletics, challenge education, club sports, fitness, and aquatics programs, Butler Recreation supports the holistic development of Butler's students, faculty, staff, and alumni while being committed to upholding the mission of liberal arts and professional education.

## Residence Life The Office of Residence

Life works to provide a living environment that is conducive to students' intellectual, social, cultural, and personal development, as well as a positive living-learning environment in all campus residence halls. Any matters pertaining to housing, programming, food service, etc. should be directed to the staff members in Residence Life, located in Atherton Union, room 303.
Butler University provides a variety of housing options. All first-year students not living at home with a parent or legal guardian are required to live in one of the University residence halls. All sophomore and junior students (including those affiliated with a Greek organization) not living at home with a parent or legal guardian are required to live in University housing or an approved Greek housing unit of which he or she is a member. The housing requirement does not apply to fully employed persons who are residents of the Indianapolis metropolitan area and who wish to attend Butler on a part-time basis. Applications and agreements for campus housing are available through the Office of Residence Life. Leadership and employment opportunities such as hall government, unit representatives, desk assistants, and resident assistants are also available to students living within the residence halls.

## DiningServices

An "All Access" meal plan is required for all residence hall students. An all-you-care-to-eat meal plan with "flex dollars" is featured in the plan. Students may dine as many times as they desire throughout established dining hours. Declining-balance flex dollars may be used at Starbucks, C-Club, Zia Juice Bar, and the Dawghouse (a convenience store in the Apartment Village). Dining managers are available to meet with students about special dietary needs and restrictions. Additionally, any student who resides off campus, as well as faculty and staff, are able to purchase meal plans or Dawg Bucks, which can be utilized in all dining venues. Members of Greek organizations may have the ability to secure
meal plans through their respective fraternity or sorority. Dining Services offices are located on the main floor of Atherton Union.

## Greek Life

Fourteen national Greek collegiate fraternities and sororities maintain chapters at Butler. The fraternities are Delta Tau Delta, Lambda Chi Alpha, Phi Delta Theta, Sigma Chi, and Sigma Nu. The sororities are Alpha Chi Omega, Alpha Kappa Alpha, Alpha Phi, Delta Delta Delta, Delta Gamma, Kappa Alpha Theta, Kappa Kappa Gamma, Pi Beta Phi, and Sigma Gamma Rho.

The Office of Greek Life, located in Atherton Union, room 312 , serves as the administrative focal point for all fraternity/sorority activities. The director works with and advises the Interfraternity Council, Panhellenic Association, and Order of Omega leadership, in addition to individual students and organizations. The director is responsible for overseeing recruitment, working with house directors, serving as liaison to alumni/alumnae advisory and housing boards, organizing educational and leadership workshops, and providing individual and group advising for fraternity/sorority members.

## Leadership and Service Programs

The Office of Programs for Leadership and
Service Education (PuLSE) strives to promote student learning and development through leadership and service opportunities. The staff of PuLSE encourages the development of students into critical thinkers with the ability to lead, serve, and contribute to their communities and commitments through programming, education, and practical experiences.

To accomplish these goals, PuLSE staff members advise the Student Government Association; oversee campus-wide weekend and late-night programs; work with approximately 140 student organizations; coordinate leadership programs including Emerging Leaders; and supervise the student-run Volunteer Center, which connects students to service opportunities with Indianapolis agencies. PuLSE furthers service initiatives by organizing Ambassadors of Change, Bulldogs into the Streets, and alternative break trips. In addition, the office collaborates with numerous campus offices in the annual coordination of Welcome Week.

Students who want to get involved in student organizations or community service should stop by the PuLSE Office, in Atherton Union, room 101, to talk with a staff member about their interests.

A list of student organizations is available on the PuLSE website, www.butler.edu/involvement.

## University Band and Spirit Programs

The University Band and Spirit Programs encompass the marching bands, cheerleaders, and "Hink," the University costumed mascot. These student representatives are available for University-wide events, off-campus events, and athletic events. Students are encouraged to get involved in the Butler Marching Band, Basketball Band, cheerleaders, or mascot programs by visiting www.butler.edu/spirit.

## Spiritual Life

The spiritual and religious needs of the Butler community are addressed by a number of individuals and student-led groups. The Center for Faith and Vocation at the "Blue House" is home to many of these religious organizations, including those serving Catholics, Jews, Evangelical Christians, mainline Protestants, Orthodox Christians, and Muslims. Clergy and other religious leaders are available for individual conferences and spiritual counseling. Varied programs dealing with religious and spiritual concerns also are offered by the Center. For more information, call 317-923-7252 or visit www. butler.edu/cfv.

## Athletic Events

Butler University is a Division I member institution of the National Collegiate Athletic Association. Student-athletes at Butler are known as "Bulldogs" and proudly wear the official school colors of blue and white. All of Butler's 19 teams, with the exception of football, compete in the BIG EAST Conference. Other BIG EAST Conference members are Creighton University, DePaul University, Georgetown University, Marquette University, Providence College, Seton Hall University, St. John's University, Villanova University, and Xavier University. Butler fields competitive conference programs for men in baseball, basketball, cross country, golf, soccer, tennis, and track and field, and for women in basketball, cross country, golf, soccer, softball, swimming, tennis, track and field, and volleyball. The Butler University football program competes at the Division I FCS level, as a member of the Pioneer Football League. Information about Butler athletics is available at www.butler.edu/athletics.

# ADMISSION INFORMATION and REQUIREMENTS 

## Admission

## Contact Information

Office of Admission
Butler University
4600 Sunset Ave., Indianapolis, IN 46208-3485
local: 317-940-8100
toll-free: 888-940-8100
fax: 317-940-8150
admission@butler.edu•www.butler.edu/ admission
CEEB SAT code 1073; ACT code 1180

## Visiting Campus

Students and their families are encouraged to visit campus. Students will develop a better understanding of the University setting after meeting with an admission counselor, touring the campus, and interacting with current students and faculty. Appointments are generally scheduled 9:00 AM-4:00 PM weekdays. The office is open 10:00 AM-1:00 PM on most Saturdays during the academic year, with student-guided tours at various times throughout the day. In addition, several campus visitation programs are scheduled throughout the year. For scheduling, visit www.butler.edu/visit.

## First-Time Students

Prospective first-year students, regardless of major, are required to have the following academic preparation:

- Four years of English
- Three years of math, including algebra I, algebra II, and geometry
- Three years of laboratory science
- Two years of history or social studies
- Two years of the same foreign language

Butler University strongly urges all prospective students from Indiana to complete the CORE 40 or Indiana Academic Honors Diploma curriculum in high school. Students intending to major in science, engineering, pharmacy and health sciences, or mathematics are strongly encouraged to have additional units in science and math. Students intending to major in business or computer science are also encouraged to have additional units in mathematics.

In evaluating students' credentials, the Admission Committee strives to determine
potential for success in Butler's rigorous academic programs, taking into account the following criteria:

- Academic achievement in high school (GPA, class rank, and course selection)
- SAT and/or ACT scores, including the writing components (refer to the International Students section for nonEnglish speakers' requirements)
- Writing sample
- Guidance counselor/teacher recommendations
- Leadership experience as demonstrated in list of activities/résumé

All admission credentials must be received by the Office of Admission before the student's application can be processed. It is the student's responsibility to see that all required documents are sent. Admission decisions for students applying by the early-action deadline of November 1 will be released by mid-to-late December. Admission decisions for students applying by the regular decision deadline of February 1 will be released on a rolling basis beginning February 15. Admitted students have until May 1 to decide if they will attend, and may elect to defer their enrollment for one year, with written request.

All application materials become the property of Butler University and are kept on file for one year. Application materials as well as transcripts received from other institutions will not be returned to the student or released to another institution or third party.

## Advanced Course

## Placement

Butler offers advanced course placement, with appropriate academic credit, in most subjects covered by:

- Advanced Placement (AP) examinations (administered to students in participating high schools), International Baccalaureate (IB) programs, or College Level Examination Program (CLEP) tests (administered at test centers). Applicants should request that their AP, IB, and/or CLEP scores be reported to the Office of Registration and Records.
- 100-level or higher coursework designated as Dual Credit or Dual Enrollment through another accredited institution.

Scores required for credit have been established by the appropriate department heads and are available in the Office of Admission and at www.butler.edu/admission.

A student who has not attempted to qualify for credit under these programs may be placed in an advanced course if the department head or senior faculty member in that area is satisfied that the student can handle the work. A student who wishes to receive credit for the course or courses bypassed should consult the appropriate dean and department chair or designated faculty member. Upon their joint recommendation, credit may be awarded on the basis of the student's performance in the advanced course.

## Applying for First-Year Student Admission

## Application Methods

Students who wish to complete the Application for First-Year Student Admission and Scholarships may apply at www.butler.edu/apply or submit the Common Application at www. commonapp.org. Butler gives equal consideration to both the Butler and Common applications.

## Arts Applicants

All prospective students, except students applying for Art + Design, must submit a Jordan College of the Arts program application in addition to the Application for First-Year Student Admission before an audition or interview can be scheduled. Both applications must be on file two weeks prior to the audition or interview date. Art + Design students will submit a portfolio within the Application for First-Year Student Admission.

A personal audition is required for all dance and music applicants. A personal interview and audition or portfolio presentation and interview also are required for theatre applicants. An interview is required for all arts administration general students. An electronic portfolio review is required for all Art + Design students.

## High School Students

Student may apply for First-Year Student Admission upon completion of the sixth semester of high school. Students attending high school in the United States or similar institutions overseas should submit the following:

1. Application for First-Year Student Admission and Scholarships accompanied by the nonrefundable application fee. The fee is waived for applications filed online,
as well as for applicants who have parents, grandparents, or siblings who graduated from or are currently attending Butler.
2. Official high school transcript showing coursework completed through at least the sixth semester of the junior year, and, if the student is currently in high school, a list of courses for the entire senior year.
3. Secondary School Report from the high school guidance office. All admitted students must submit an official final transcript indicating the date of graduation from a secondary school approved by a state or regional accrediting agency.
4. Official score reports of the SAT and/or ACT, including the writing components. Score reports should be sent directly to Butler University (codes: SAT 1073; ACT 1180).
5. Writing sample, as indicated in the application.
6. List of activities/résumé, as indicated in the application.

## International Students

Applying for admission-Students who are not U.S. citizens or U.S. permanent residents should submit the following items:

1. Application for International Undergraduate Admission and Scholarships; no application fee is required.
2. Original or official certified/attested true copies of transcripts from each secondary school (high school), college, or university attended. All transcripts must be sent directly from each school to the Office of Admission in separate sealed envelopes and must be accompanied by certified English translations, if needed.
3. Test scores. International students must submit at least one of the following tests:
a. Test of English as a Foreign Language (TOEFL) score of 550 (paper-based test), 213 (computer-based test), or 79 (internet-based test).
b. Scholastic Aptitude Test (SAT) Critical Reading score of 450. (Note: International students are required to submit SAT scores if they wish to compete in varsity athletics; all others are strongly encouraged to submit their scores.)
c. American College Test (ACT) English score of 19 .
d. International English Language Training System (IELTS) score of 6.0.
e. Michigan English Language Assessment Battery (MELAB) score of 80 .
f. London or Cambridge General Certificate of Education (GCE)/General Certificate of Secondary Education (GCSE) English Language Exam grade of A or B.
g. International Baccalaureate (IB) Higher Level English exam score of $5-7$ or grade of A or B.
4. Essay: Your personal statement/essay should include information concerning your life, education, practical experience, special interest, and specific purpose for applying to Butler University.
5. Secondary School Report and/or letter of recommendation from a guidance counselor or teacher.

## Completing the Application for Form I-20

After admission to Butler University, international students must also complete Butler University's Application for Form I-20*. This application will provide biographical information, an affidavit of support, and financial sponsor information Butler needs to issue the Form I-20 in the U.S. Citizenship and Immigration Services SEVIS information system. For the 2015-2016 academic year, the estimated total cost used on Form I-20 for undergraduates is $\$ 53,565$ for tuition, room, board, fees, books, health insurance, and incidentals. Once you receive an I-20 from Butler University, you must pay the SEVIS fee and then schedule an appointment to meet with the nearest U.S. embassy or consulate to apply for a visa.

* Certificate of Eligibility for Nonimmigrant (F1) Student Status-For Academic and Language Students


## Home-Schooled Students

Butler welcomes candidates who have received a home-study-based education. As is the case with all Butler applicants, home-study candidates will be considered on an individual basis to determine an appropriate admission decision. A candidate may be evaluated for admission on the basis of six semesters of high school coursework. Home-schooled students are expected to present the following documents to the Office of Admission:

1. Application for First-Year Student Admission and Scholarships accompanied by the nonrefundable application fee. The fee is waived for applications filed online, as well as for applicants who have parents, grandparents, or siblings who graduated from or are currently attending Butler.
2. Official copy of the academic record indicating the GPA; a summary of all courses taught by the home school (curriculum list, bibliography); the title of each course completed by the student, the grade received, and the name of the instructor (if that person is different from the registered home schooler); and official transcripts received through a correspondence school or a regional organization that provides this service for home schools (should list courses completed, grades, and the accreditation status of the school or organization).
3. Registration number and name of the home educator, if registered with your state department of education. If you have not registered, provide a statement of the home school's mission and structure.
4. Official score reports of the SAT and/or ACT. Score reports should be sent directly to Butler University (codes: SAT 1073; ACT 1180).
5. Secondary School Report Form.
6. Writing sample as indicated in the application.
7. Two letters of recommendation.
8. List of activities/résumé as indicated in the application.
9. All admitted students must submit an official final transcript from an accredited home-school institution or agency indicating the date of graduation. Official satisfactory General Education Degree (GED) scores will be required in the absence of an official final transcript from an accredited home-school agency.

The following items may be requested:

- Official results of SAT subject tests in each of the following areas: mathematics, natural science, and social science.
- General Educational Development Test Certificate. Students who did not complete high school, but successfully completed the General Education Development Test (GED), are expected to follow the same procedure as indicated for first-time students and submit official satisfactory GED results. Additional information may be requested depending on the student's academic record.


## First-Year Student Application Dates

Butler offers two non-binding admission programs for first-year students, each following an established timeline. Students applying for
early action should present a strong record of academic achievement and plan to take the SAT or ACT with writing no later than October/ November of the senior year.

## Early Action

- Complete application submitted electronically or postmarked on or before November 1.
- Decisions will be released mid-to-late December.
- Consideration for the First-Year Student Academic Scholarship program and the Honors Program.
- Enrollment Form and deposit returned by January 31.* This deposit is refundable until May 1.
* Returning the Enrollment Form and deposit by this date is not required; however, it affords the student the opportunity to attend Early Registration beginning in March and to be considered for a First-Year Student LivingLearning Center.


## Regular Decision

- Complete application submitted electronically/postmarked on or before February 1.
- Decisions will be released on a rolling basis beginning February 15.
- Consideration for the First-Year Student Academic Scholarship program.
- Enrollment Form and deposit returned by May 1*.
* Returning the Enrollment Form and deposit by this date makes you eligible to attend New Student Registration beginning in May.


## Enrolling in the University as a First-Year Student

All newly admitted full-time students will be asked to make an enrollment deposit, which holds a place in the class and is applied toward first-semester costs. The deposit is refundable until May 1 prior to the fall term, and December 1 prior to the spring term. Deposits paid after May 1 for fall enrollment, or December 1 for spring enrollment, are nonrefundable.

Admitted students also must submit an official final transcript indicating the date of graduation from a secondary school approved by a state or regional accrediting agency.

## Explanation of Benefits

Course Registration<br>(Early Registration/New Student<br>Registration)

Special registration days for early-action students begin in March of the student's senior year in high school. Registration session placement is made based on the date the enrollment deposit is received.

## First-Year Student Academic Scholarship Program

For details and application criteria, visit www.butler.edu/financial-aid.

## Living-Learning Centers

Living-Learning Centers allow small groups of students to share a common experience while living in the same housing unit of a residence hall. In each of these centers, a faculty-inresidence coordinates study efforts and provides other academic and co-curricular programming. This program helps students develop study groups and promotes interaction between students and faculty outside of the classroom.

## Transfer Students

Any student who has completed 12 or more hours of college coursework after high school graduation and is seeking to complete an undergraduate degree, or any student seeking a second undergraduate degree, is considered a transfer student and must submit the Application for Transfer Admission and Scholarships.

The admission of transfer students is made on a selective basis. In evaluating transfer applications for admission, the University takes into account the accreditation and the general quality of previous coursework. Transfer applicants must have earned at least a $C$ average (2.0/4.0) to be considered for entrance in a degree program and must be qualified to carry a chosen program of study. Transfer applicants to the College of Pharmacy and Health Sciences' pharmacy program must have earned at least a B average (3.0/4.0) to be considered for entrance. Transfer applicants to the College of Pharmacy and Health Sciences' physician assistant program must have earned at least a $3.2 / 4.0$ to be considered for entrance. Eligibility for consideration does not guarantee admission. Any transfer applicant whose high school record would not have met Butler's requirements for First-Year Student Admission is required to demonstrate a strong record of college-level work after a minimum of one year of study.

A student who has completed fewer than 12 hours of successful college coursework after high school graduation will be required to meet the criteria as defined for First-Year Student Admission, in addition to submitting official transcripts of all college-level work.

## Applying for Transfer Admission

Applications for transfer admission are reviewed on a rolling basis. (Students applying to the College of Pharmacy and Health Sciences should refer to the appropriate sections below.) To be considered for admission as a transfer student, students must submit the following:

- Application for Transfer Admission accompanied by the nonrefundable application fee. (The fee is waived for applications filed online.)
- Official transcripts from all colleges attended, sent directly from the schools to the Office of Admission. Only transcripts received from the registrar of former colleges will be treated as official. Concealing previous college attendance is grounds for denial and dismissal.
- Certification that the student is in good standing, not on probation, and eligible to return to that college.
- Official high school transcript indicating the date of graduation from a secondary school approved by a state or regional accrediting agency. Students who did not complete high school, but successfully completed the General Education Development (GED) Test, should submit official satisfactory GED results. Neither is required of students who have earned a four-year undergraduate degree.
- Personal statement as indicated in the application.
- Official ACT (with writing) or SAT scores (waived if applicant has graduated from high school or equivalent more than four years prior).
- Official results of Advanced Placement (AP) or College Level Examination Program (CLEP). Exam scores should be sent to the Office of Registration and Records.
- For international students: official results of the Test of English as a Foreign Language (TOEFL) indicating a score of 550 (paperbased), 213 (computer-based), or 79 (internet-based).

All application materials become the property of Butler University. Transcripts received from other institutions will not be returned to the student or released to another institution or third party.

## Transfer Scholarships

A limited number of scholarships are available for students who transfer to Butler for the fall semester and enroll in a minimum of 12 credit hours of study per semester. Only students applying to the colleges of Business, Communication, Education, and Liberal Arts and Sciences are eligible for consideration. Contact the Office of Admission for application deadline information.

## College of Pharmacy and Health Sciences Transfer ApplicantsSpecial Requirements

The College of Pharmacy and Health Sciences offers a doctor of pharmacy, master of science in physician assistant studies, and master of science in pharmaceutical sciences, as well as two dual-degree programs-doctor of pharmacy/ master of business administration and doctor of pharmacy/master of science in pharmaceutical sciences.

Pharmacy and physician assistant transfer applicants are considered only for fall entry. Previous applicants electing to re-apply to the College of Pharmacy and Health Sciences should submit a new application for admission and transcripts of additional coursework. The final decisions for determining which applicants will be admitted and which will be placed on the waiting list for the professional phase are made by the College's Academic Affairs Committee and the Office of Admission.

## Pharmacy Applicants

Students transferring into pharmacy are required to study no fewer than four years at Butler University to complete the degree. Transfer applications for the pre-professional phase of the pharmacy program must be submitted to the Office of Admission by December 1 (postmark date). Students applying to the professional phase of the program must complete an application through the Pharmacy College Application Service (PharmCAS: www. pharmcas.org) by January ${ }^{7}$. Selected candidates will be invited to campus for an interview with faculty. Consideration for transfer admission into the program is limited to:

- Students with a minimum cumulative GPA of 3.0/4.0
- Students with less than a bachelor's degree from regionally accredited schools in the United States
- Students who hold a bachelor's degree in any area other than pharmacy from a regionally accredited school in the United States
- Students who hold a bachelor's degree in pharmacy from a school outside the United States
- International students who also submit TOEFL scores as described above for transfer students
- Students who submit official results of the Pharmacy College Admission Test (PCAT)

It is strongly recommended that students sit for the PCAT exam during the fall testing.

## Physician Assistant Applicants

Applications and supporting documents for the professional phase of the PA program must be filed through the Central Application Service for Physician Assistants (CASPA: www.caspaonline. org) by December 1. Selected candidates will be invited to campus for an interview with faculty.

Consideration for transfer admission into the program is limited to:

- Students with a minimum cumulative GPA of 3.2/4.0
- Students who hold a bachelor's degree in any area from a regionally accredited school in the United States
- Students who hold a bachelor's degree from a school outside the United States
- Students who submit official results of the Graduate Record Exam (GRE)


## Enrolling in the University as a Transfer Student

Newly admitted transfer students must submit an enrollment deposit, which will be applied to the first semester's costs. For students entering as a transfer student in the fall semester, the deposit is refundable through May 1. Fall semester deposits paid after May 1 are nonrefundable.

Admitted students who have not already earned a four-year undergraduate degree also must submit an official final transcript from the most recent college attended.

## Other Admission Options

## Renewed Enrollment

Previously enrolled undergraduate students who have not attended Butler for one or more semesters, or previously enrolled graduate students who have not attended Butler for two or more semesters, must file an application for renewed enrollment with the Office of Registration and Records. The application can be found at www.butler.edu/registrar. Due to the sequential and cumulative nature of health science curricula, students seeking renewed
enrollment in the College of Pharmacy and Health Sciences after an absence from the College of two semesters or more must seek approval for renewed enrollment from the dean. Remedial coursework and/or assessment of current knowledge and skills may be required as a condition for enrollment. An official transcript of any coursework taken since last attending Butler must be sent directly to the Office of Registration and Records from the college(s) attended.

Students seeking to renew enrollment into a program different from their previous degree, or at a new degree level, must submit the appropriate application to the Office of Admission. Students who have been dismissed for academic or disciplinary reasons during their previous enrollment at Butler also must be approved for readmission by the appropriate college dean.

## Non-Degree

Applicants who wish to take courses for credit while not pursuing a degree may apply for nondegree status. Non-degree applications may be obtained from the Office of Admission or found on its website, and must be submitted to the Office of Admission one week prior to the first day of the term.

Non-degree applicants who have completed high school but who have not attended a college or university must have an official high school transcript (or a copy of their satisfactory GED results) sent to the Office of Admission to complete the application. Students who have attended a college or university must submit an official transcript from the last school attended indicating a C (2.0/4.0) or higher cumulative GPA and eligibility to return.

A non-degree student may apply only 18 hours of credit earned as a non-degree student toward a degree program. A degree-seeking student at Butler may not be reclassified as non- degree.

The following are all non-degree options:
Audit for Enrichment-The Audit for
Enrichment (AFE) program is designed for adults who have achieved at least a high school academic diploma to participate in some courses. With your first application, you will be asked to provide transcripts of your highest-level academic work. You will be notified of your acceptance into the program by the Registrar. Departmental approval is required for all AFE enrollments. Courses taken in this program will be designated as an "audit" on an official transcript and may not be changed to "credit"
enrollment later in the semester. You may register as early as the first day of class, and all registrations are on a space-available basis.

The AFE fee ( $\$ 100$ per credit hour) together with all additional course-related fees are payable at the time of registration and are not refundable. For an application, visit the Registrar's office in Jordan Hall, room 133, or find it at www.butler. edu/registrar.

Gifted and Talented-Selected high school students may be admitted as non-degree students to take courses for college credit at Butler University while still attending high school. Enrollment in courses is based upon placement exam results and consultation with the academic department(s) and/or the Learning Resource Center. Credits earned may be applied toward a degree at Butler.

Such students must submit to the Office of Admission a non-degree application, a written recommendation from a high school teacher or principal, and a transcript indicating exceptional ability. The Admission Committee will review the application; depending upon the course selection, additional review by academic departments may be necessary. Students are limited to six hours of credit each semester.

Shortridge-Butler Early College Program-By special agreement between Butler University and the Indianapolis Public Schools, an Early College Program has been established with Shortridge High School. Select Shortridge high school students who are in their junior or senior year may enroll in one Butler class per semester, earning Butler college credit while working toward completion of their high school degree. Information for students and families regarding the application process, student selection, scholarships, and course availability is available at Shortridge. Information for Butler faculty is available from the Associate Provost for Student Academic Affairs.

Visiting Students-Students who are attending other collegiate institutions and wish to enroll at Butler as visiting students must submit to the Office of Admission a non-degree application and an official transcript or statement from the registrar at the home school indicating an overall average of C (2.0/4.0) or higher and eligibility to return.

## Non-Degree to Degree-Seeking Status

Students who have been attending Butler University in a non-degree capacity may apply for degree-seeking status by submitting an
application for admission and following the guidelines listed in this Bulletin. Check with the Office of Admission or the Office of Registration and Records for the appropriate application dates.

## Graduate Studies

## Graduate Degree-Seeking Admission

The following information generally is applicable to all graduate programs. For exceptions and special requirements, refer to the specific admission requirements by college.

Admission is based upon undergraduate grades and other information, as may be required for a specific program. Some programs may require standardized test scores (e.g., GMAT, MAT, GRE, etc.) in order to be considered for graduate admission. These test scores are valid for five years. Prospective students may visit the departmental website of their respective programs in order to obtain more information regarding standardized test requirements and waivers.

Students whose first language is not English must demonstrate English proficiency by taking either the TOEFL or IELTS exams. This requirement may be waived, however, if the student has already received a baccalaureate or equivalent degree from a regionally accredited university in the United States or other country in which English is the official language.

Butler seniors desiring to take graduate courses may make special arrangements with the dean of the college in which the graduate degree is to be earned. Credit for such courses will not be recorded on a graduate record until the bachelor's degree is awarded, and the student has been admitted to a graduate program. Note: Students must be degree-seeking MBA or MPAcc admits to be eligible to enroll in College of Business graduate-level courses.

Students intending to work toward an advanced degree must satisfy the prerequisites for the program. If prerequisites are to be completed, the student may, under some circumstances, be admitted with a stipulation that the courses be completed satisfactorily. If not admitted, a student may, depending on the college, enroll as a non-degree student while completing the prerequisites.

## Graduate Non-Degree-Seeking Admission

A person holding a baccalaureate degree from a regionally accredited college or university who
wishes to enroll in graduate courses at Butler University for purposes other than obtaining an advanced degree (e.g., for teacher licensure, to transfer to another institution, or for selfenrichment) may file a non-degree application. Application forms may be obtained from and submitted to the Office of Admission. An official transcript with an attached baccalaureate degree posted must be mailed directly from the issuing institution to the Office of Admission. Applications and supporting materials must be received one week prior to the first day of the term.

If a non-degree student chooses to enter a graduate degree program, the student must complete a graduate degree-seeking application and follow the application procedures for that graduate program. Check with the Office of Admission for exact dates. A maximum of 12 graduate credit hours completed as a non-degree student may be applied toward the selected degree program. Prospective students should check with individual colleges with regard to policies governing converting from non-degree to degree-seeking status.

## Applying for Graduate Admission

Applications may be obtained from the Office of Admission and on Butler's website. All candidates for admission to graduate programs must submit the following:

- Application for Graduate Admission, accompanied by the nonrefundable application fee. Former Butler students are not required to submit the application fee. If a student applies online, the application fee is waived as well.
- Official transcript from each college or university previously attended, mailed directly from the issuing institution. International students must hold a degree from a school recognized by the government or educational ministry within the country.
- International students also must provide official financial documentation, as required by the Bureau of Citizenship and Immigration Services and the U.S. Department of State.
- Students whose first language is not English must meet a minimum level of proficiency in the English language and submit proof of this proficiency to the Office of Admission, unless they have already received a baccalaureate or equivalent degree from a regionally accredited university in the United States or other country in which English is the official language. Minimum English proficiency can be met by the
following: Test of English as Foreign Language (TOEFL) indicating a minimum score of 213 (computer-based test), 79 (internet-based test), or 550 (paper-based test); students not applying for the master of science in pharmaceutical science may choose to meet English proficiency by completing the International English Language Training System (IELTS) with a score of 6.0.
- Additional requirements for programs in each college, if any, are listed below.

All application materials become the property of Butler University. Transcripts received from other institutions will not be returned to the student or released to another institution or third party.

## Renewed Enrollment-Graduate Students

See Other Admission Options/Renewed Enrollment section above for general information. In addition, students enrolled in a graduate program at Butler University 10 or more years previously, as well as students seeking enrollment into a new degree program or degree level, must submit a new degreeseeking application (see Applying for Graduate Admission) and meet current admission requirements. Only coursework taken subsequent to the new admission will be counted toward degree requirements. All academic records, however, will be maintained so that the transcripts will reflect all of the studies and cumulative GPA undertaken at Butler University.

## Graduate Transfer Credit

All work toward a graduate degree should be completed at Butler. However, under special circumstances and within certain limits, graduate work taken at a regionally accredited institution may be transferred and applied toward the degree. Note: College of Business graduate transfer credits must be from an AACSB-accredited institution. In order for credit to be transferred, a prospective student must receive a grade of A or B. All coursework must be approved by the student's Butler University academic advisor. Subject to these restrictions, up to nine semester hours may be transferred in 30 -hour programs and up to 12 hours may be transferred in 36-hour and longer programs. The student should file a transfer credit form with the Office of Registration and Records for acceptance of transfer credits.

## Time Limitations

Beginning at the time when their first graduate degree-applicable course is taken, students in 30 -hour programs have five years to complete the degree requirements, and students in longer programs have seven years to complete the degree requirements.

## Degree Requirements

Thesis/Project: Some graduate programs may require a thesis or scholarly project. Generally, three credit hours are allotted for a thesis/project, although six-hour projects may be authorized. Regulations governing the preparation and submission of the thesis are available from the college in which the work is being done. If a comprehensive examination also is required, half of the exam is allotted for the thesis defense. Students may contact their respective graduate program to see if their specific program requires a thesis.

GPA: Students must achieve a grade average of $B$ or better in all graduate courses attempted. Courses in which a student earns a C-, D, or F will not be counted toward degree requirements. While grades below a C are not counted toward the completion of degree requirements, they are counted in determining the student's GPA. In no case may a student take more than 12 credit hours in excess of the degree requirements in order to satisfy the foregoing GPA requirement. Any graduate student who fails to make satisfactory progress in the courseworkwhether degree-seeking or non-degree-seekingmay be declared academically ineligible for additional enrollment.

## Student Status

Full-time: An individual must take a minimum of six and a maximum of 12 credits of graduateeligible courses per semester in order to be considered a full-time student. A petition can be filed for consideration of lesser credits for the final semester before graduation. International students with F1 visa status can be admitted for full-time status only. A maximum of four years is allowed to complete all the degree requirements.

Part-time: Prospective students should contact their respective program to determine the feasibility of part-time enrollment for timely completion of the degree.

- Applicants must comply with all admission requirements.
- Professionals admitted in the program must take a minimum of three credit hours per semester and complete all degree requirements within a maximum of seven
years, with the didactic coursework being completed within five years of entry in the program.
- Research toward a thesis for the MS in pharmacy and health sciences program must be independent of research projects ongoing at the student's place of employment and be publishable under an affiliation with Butler University.
- Research must be conducted during the course of the program.
- Part-time students will not be eligible for any financial assistance from Butler University.
- The research advisor for the MS in pharmacy and health sciences program must be a full-time faculty member in the College of Pharmacy and Health Sciences.


## Financial Assistance

A limited number of stipends in the form of graduate assistantships will be provided to qualified full-time graduate students conducting research in College of Pharmacy and Health Sciences laboratories.

Graduate assistants will be required to work up to 20 hours per week on campus on projects assigned by the director of the graduate program, subject to valid immigration status. A full-time student must maintain a minimum cumulative GPA of 3.0 and show satisfactory progress in his or her research project in order to qualify for financial assistance. Stipends will be competitively awarded every year, with previous recipients given preference. Graduate assistantships will be limited to a two-year period for each recipient. Each student is required to pay regular tuition and maintain approved health insurance during the course of study. There is no assurance of financial assistance for any admitted applicant.

The freedom to leave the program, for any reason and at any time, will be available to all students; however, untimely withdrawal from the program causes financial and emotional distress to the University community. Therefore, to protect the University's investment, it is the policy that any student accepting the stipend as graduate assistant is expected to complete the MS program. Any such student leaving the program prior to completion and without compelling reason will be required to pay back the full amount of the stipend that has been awarded by the University.



Tuition, fees, and other charges paid by the student cover approximately 80 percent of the educational costs at Butler University. The University provides the remaining funds through income from its endowment and gifts from foundations, business and industry, alumni, and friends. Tuition and fee levels are set by the Butler University Board of Trustees and are subject to change by action of the board.

The college year consists of two semesters and a one-session summer school. The academic year includes the fall and the spring semesters. The unit of instruction is the semester hour, which normally signifies one recitation a week throughout a semester or an equivalent.

## Educational Costs 2015-2016

Tuition charges are based on the number of credit hours (with the exception of PharmD, 6th year) and the college of enrollment. The rates are as follows:

## Undergraduate Tuition <br> COB, COE, JCA, LAS, CCOM

Full-time (12-20 hours) 1-11 hours
Each hour above 20 hours \$18,025/semester \$1,502/hr \$1,502/hr

## COPHS

Full-time (12-20 hrs)
Health Sciences
Health Sciences year 1
(pre-Health)
Health Sciences year 2
(pre-Health)
Health Sciences
year 3 curriculum $\quad \$ 19,340 /$ semester
Health Sciences
year 4 curriculum
Pharmacy
Pharmacy year 1
(pre-Pharmacy)
\$18,025/semester
Pharmacy year 2
(pre-Pharmacy)
Pharmacy year 3 (P1)
Pharmacy year 4 (P2)
Pharmacy year 5 (P3)
PharmD (6th year only)

1-20 hours is billed:
$5 \%$ Summer I $\quad \$ 2,125$

5\% Summer II \$2,125
$45 \%$ Fall $\$ 19,115$
45\% Spring \$19,115
Each hour above 20 hours is $\$ 1,612 /$ hour;
$1-11$ hours* is $\quad \$ 1,612 /$ hour
*exception: PharmD, 6th year

## Graduate Tuition

Tuition rate is based on college of enrollment:

| Liberal Arts and Sciences | $\$ 520 / \mathrm{hr}$ |
| :--- | :--- |
| MFA in Creative Writing | $\$ 760 / \mathrm{hr}$ |
| College of Education | $\$ 520 / \mathrm{hr}$ |
| Jordan College of the Arts | $\$ 520 / \mathrm{hr}$ |
| Pharmacy and Health Sciences $\$ 700 / \mathrm{hr}$ |  |
| PA Master's-Clinical Phase | $\$ 560 / \mathrm{hr}$ |
| PA Graduate | $\$ 40,000 /$ year |
| $20 \%$ Summer I |  |
| $40 \%$ Fall | $\$ 8,000$ |
| $40 \%$ Spring | $\$ 16,000$ |
| MBA | $\$ 16,000$ |
| MPAcc | $\$ 760 / \mathrm{hr}$ |

## Miscellaneous Fees

Full-time activity fee $\quad \$ 173 /$ semester
Health and Recreation
Complex fee
Applied music fee \$285/credithour
Welcome Week fee $\$ 155$
New student registration fee* $\$ 100$
Residence hall program fee $\$ 40 /$ year
COPHS Mobile Comp. (P3) $\$ 475 /$ semester COPHS Mobile Comp.
(P1, P2, PA1, PA2, PA3) \$175/semester
COPHS Mobile Comp. (P4) \$150/semester
Student Health Insurance** \$1,645/annual

* One-time fee
${ }^{* *}$ May be waived by providing evidence of comparable health insurance coverage in an online insurance waiver process. For details, visit www.butler.edu/student-accounts.

Room and Board Rates
Room Rates
Ross Hall/Schwitzer Hall (9-month contract)
Triple/Quad Room $\quad \$ 2,365 /$ semester
Double Room $\quad \$ 2,675 /$ semester
Single Room \$3,980/semester
Residential College (Resco) (9-month contract)
Double Room \$2,990/semester
Single Room $\$ 4,300 /$ semester
University Terrace (9-month contract)
Shared Room $\quad \$ 3,475 /$ semester
Single Room
Studio Apartment, shared \$4,105/semester

Apartment Village (10-month contract)
Single Room
\$4,730/semester
Board Rates
All Access Plan
\$3,195/semester
Voluntary Meal Plans
40 Block Meal Plan
plus $\$ 315$ Flex/semester $\$ 625 /$ semester
65 Block Meal Plan
plus $\$ 450$ Flex/semester \$955/semester
The charges above do not include the cost of books, supplies, parking fee, or other incidental expenses students may incur during the course of the academic year.

## Educational Costs 2016-201'7

Tuition and fees for the 2016-2017 academic year will be published on the Office of Student Accounts website, www.butler.edu/studentaccounts. This information should be available by April 2016.

## Accept Financial Responsibility

Butler University policy requires all students to complete the Acceptance of Financial Responsibility statement, accessible via my.butler.edu (located under the Finance section in the Student Center). Acceptance is required prior to enrollment each semester. The Acceptance of Financial Responsibility statement outlines the student's responsibility for paying all expenses incurred, including any applicable penalties.

## Payment Terms

Students who register through the early registration process for fall 2015 will receive an electronic billing statement (E-Bill), July 8, 2015, for tuition, fees, room, and board. (E-Bill notification is sent via a student's Butler email address.) Payment is due in full August 4, 2015,
if the student is not enrolled in the Monthly Payment Plan for fall 2015. Students not enrolled in the Monthly Payment Plan who have not paid in full by the first day of classes will be assessed a monthly finance charge of 1.5 percent (18 percent APR). Course registration may also be cancelled. Students who register after their regular registration timeframe will be required to pay all charges in full to receive grade or transcript information. If enrollment is added after the term or semester has ended, the student must pay for the course(s) before grade and/or transcript information will be released from the University.

## Monthly Payment Plan Option

Butler University offers a payment plan that allows students and families to divide the semester charges (e.g., tuition, fees, room, board, etc.) into manageable monthly payments. There is a nominal participation fee of $\$ 25$ (four payments). Further information regarding the 2015-2016 payment plan is available at www.butler.edu/student-accounts. A late fee of 1 percent of the past-due amount will be charged to your account if payment is not received by the due date on the E-Bill, or if the amount received is less than the payment indicated on your E-Bill. Payment plan participation may be jeopardized and discontinued after two missed payments or payments submitted that are less than the amount billed. If the payment plan is discontinued, the balance will accrue interest and will be due in full immediately.

Students with past-due balances may also have classes cancelled. Individuals with past-due balances or poor payment histories with the University may be denied participation in the plan.

## E-Pay and E-Bill

The Office of Student Accounts accepts electronic billing (E-Bill) and electronic payment (E-Pay), for which information is available at www.butler.edu/student-accounts. Payment is accepted electronically by check (no fee) or credit card. Credit card payments include a 2.75 percent nonrefundable convenience fee. MasterCard, Discover, American Express, and Visa are accepted. Note: The Office of Student Accounts also accepts paper checks, cash, money orders, and 529 savings plan distribution for payment.

## Prepaid Tuition

The University provides a tuition prepayment plan, which guarantees a fixed tuition rate for all prepaid semesters. The prepaid tuition
rates are based on the first term in which the student participates in the prepaid program. This program applies only to students enrolled on a full-time basis in an undergraduate degree program or the PharmD program during the fall and spring terms only. The prepayment plan does not apply to graduate programs and does not apply to summer tuition charges. Contact the Office of Student Accounts for contract and cost information.

## Federal Student Permissions

Federal regulations require that Butler University apply federal (Title IV) financial aid funds first to "allowable charges," which are tuition, mandatory fees, and room and board charges contracted with Butler University.

To apply any remaining federal funds to miscellaneous charges (e.g., bookstore charges, parking fee, health services charges, traffic fines, interest charges), the University is required to obtain student authorization. If authorization is not received before financial aid funds post to the student account, the federal Title IV funds will not be applied to miscellaneous charges. This may result in an outstanding balance on the student account, resulting in late fees and services restricted until the outstanding balance is paid in full. Students may grant permission for federal Title IV funds to pay miscellaneous charges at my.butler.edu. Navigation instructions are available at www.butler.edu/studentaccounts. Once Federal Student Permission is granted, it continues to be valid for future years. The permission can only be revoked if the student submits a written request directly to the Office of Student Accounts.

## Tuition Refund Schedule

The official schedule is available at www.butler. edu/student-accounts. Students should refer to the refund schedule prior to making any schedule changes. Also, it is critical for students receiving financial assistance from any aid program (University, federal, and/or state) to contact the Office of Financial Aid before changing enrollment.

## Withdrawals

Students who fail to attend class and/or pay tuition charges are not considered withdrawn from the course(s). Withdrawals must be made through the advisor or dean of the college in which the student is enrolled. All past-due balances must be paid before a student will be permitted to enroll for a new semester/term.

## Butler University Return of Funds Procedures

Federal regulations require that, as a part of an institution's Return of Funds Policy, an office or offices must be designated as the point of contact for students to begin the withdrawal process. The designated office(s) must document the date the student withdraws or otherwise provides official notification to the institution of the intent to withdraw. At Butler, the Office of Registration and Records is the designated office at which a student must withdraw. Official notification from the student must be in writing. The date of withdrawal will be utilized by the Office of Financial Aid in determining the amount of financial assistance that may be retained by the student, based upon the percentage of the enrollment period (semester) which the student completed to that point in time. In the case of a student who does not withdraw or otherwise notify Butler University of the intent to withdraw, the date used will be the midpoint of the payment period for which assistance was disbursed, unless the attendance records document an earlier or later date.

## Credit Balance Accounts

The Office of Student Accounts requires students to complete a refund request form to receive a refund check for a credit balance on the account. However, if the credit on the account is due to federal (Title IV) financial aid funds, the Office of Student Accounts will issue a check automatically. If the credit balance is due to a federal Parent Loan for Undergraduate Students (PLUS), the refund check will be issued in the name of the parent borrower and mailed to the address on file for the PLUS borrower. If the student is anticipating a credit balance, it is recommended that a refund request form be completed regardless of funding sources. Refund checks are issued weekly while classes are in session. Forms must be submitted by end of day on Tuesday to receive a check on Friday. Refund checks are not issued when classes are not in session.

## Unpaid Items Charges

A student who is past due in any debt to the University is not permitted to register in any school or college of the University and is not entitled to an official transcript, grade report, or diploma from the Office of Registration and Records until the indebtedness has been paid in full. Any check presented to the University that fails to clear the bank shall be subject to a nonrefundable $\$ 25$ handling charge. If the check is for payment of a debt, it also will be considered
as nonpayment. Any E-Check transaction that is rejected by either banking institution will be charged a nonrefundable returned E-Check fee of $\$ 25$. Students may be assessed reasonable collections fees, attorney fees, and court costs without relief of evaluation and appraisement law to collect outstanding balances. When a student is in possession of University property or owes a particular department for charges not applied to the student account, the department may call for a hold to be placed on a student's record. The hold prevents the release of University records and future enrollment. This hold is removed upon confirmation from the requesting department.

## Delinquent Bill Accounts

Students who have not met their financial obligations to Butler University will be refused grades, transcripts, and readmission. Delinquent accounts will be charged interest on the unpaid balance. Accounts that remain delinquent will be assigned to a collection agency. All costs of collection will be the responsibility of the student. Interest charges and collection fees will be charged to the student account.

## Outside Billing

The University will bill a third party for tuition, room and board, and miscellaneous fees, provided that: 1) a voucher and/or written authorization is received by the Office of Student Accounts prior to the beginning of each semester;
and 2) payment will be made on or before the first day of the semester. The University will not bill any employer or third party who pays upon completion of the course(s). Any balance remaining unpaid on the first day of the semester will be assessed a monthly finance charge of 1.5 percent (18 percent APR). If the third party will not pay the finance charge, the student will be responsible for payment. Students will continue to receive a billing statement directly from Butler University until the account balance is paid in full. It is the responsibility of the student to contact the third-party payer to determine why a delay in payment has occurred.

## Business Services

Check cashing: up to $\$ 100$ per day for enrolled students with a valid Butler I.D. during cashiering hours for the Office of Student Accounts. The University reserves the right to deny check-cashing privileges for students on financial hold or students with a history of returned checks with the University. The release of grades and/or transcripts will be prevented for any unpaid returned checks. Anyone with an unpaid returned check may lose check-cashing privileges.

Money orders: available for purchase with cash only up to a maximum of $\$ 200$ each for a $\$ 5$ fee. A valid Butler I.D. must be presented to purchase a money order.



Butler University offers a variety of financial aid programs based on academic excellence, performance ability, and the family's ability to contribute. Financial aid may be offered in the form of scholarships, grants, student loans, and on-campus employment. Funding for these programs is provided by federal, state, and Butler University resources. Students who are seeking financial aid are encouraged to file the Free Application for Federal Student Aid (FAFSA) by March 1 each year, complete their financial aid file by May 1, and be registered for full-time enrollment by May 15.

Any application materials or documents submitted to the Office of Financial Aid by the student or on his or her behalf become the property of the University and a permanent record of the Office of Financial Aid. The Office of Financial Aid is responsible for compliance with federal, state, and University regulations and guidelines. Financial aid counselors are available at 317-940-8200, 877-940-8200 (toll-free), or finaid@butler.edu. Financial aid information is available at www.butler.edu/financial-aid.

All information was correct at the time of publication. Changes to any program may occur without notice.

## Butler University Gift Programs

Butler University awards gift assistance through programs like the First-Year Student Academic Scholarship, Jordan College of the Arts Audition Award, Athletic Grant in Aid, and Butler Grant. These awards are available for tuition only to full-time undergraduate students pursuing their first bachelor's degree, unless otherwise stated. Additional programs and details are available at www.butler.edu/financial-aid.

## Federal and State Grants

Students who complete the FAFSA may be eligible for federal and state grants. Program details and application requirements are available at www.butler.edu/financial-aid.

## Loans

Student loan programs are available for students who complete the FAFSA. Loans must be repaid and managed carefully.

Additional information regarding loan programs is available at www.butler.edu/financial-aid.

## Financial Aid and Study Abroad at Butler University

Butler University is supportive of students who wish to study abroad. Butler University funds may be used in the full amount for overseas study in an approved exchange program. An approved non-exchange program is limited to 50 percent of the award amounts for the first semester of overseas study and 25 percent of the award amounts for the second semester of overseas study. Butler funds are only eligible for two semesters of overseas study. The full amount of federal and state awards (i.e., Federal Pell Grant, Federal Direct Loans) may be used for the studyabroad semester, depending upon the cost of the program.

## Other Financial-Aid and Loan Policies

## Leave of Absence Policy

To reserve merit awards if you leave the University for personal reasons, you must request a leave of absence from the Office of Financial Aid. The written request must be submitted prior to the 10th day of the semester for which the leave is requested. If the Office of Financial Aid approves the leave of absence, the merit awards may be reserved for a maximum of two semesters. Personal reasons may include those that are medical, financial, or experiential; however, attendance at another university or college does not qualify.

## Outside Scholarships

According to federal regulations, scholarships received from donors outside of Butler University are considered to be a resource available to meet your financial aid eligibility. As a financial aid recipient, a student must report all outside scholarships from sources other than the federal, state, and University programs. The policy for treatment of outside scholarships is at www.butler.edu/financial-aid.

## Satisfactory Academic Progress

Federal regulations require that all financial aid recipients make satisfactory academic progress toward a certificate or degree. The standards apply to all terms, regardless of whether or not the student received financial aid. The Satisfactory Academic Progress Standards can be found at www.butler.edu/financial-aid.

In addition, students must meet the retention standards of the University as outlined in the Butler University Handbook.

## Special Circumstances

If a significant loss of income is projected, resulting in circumstances that restrict your parents' ability to contribute to your education, write a letter explaining the circumstances, and the Office of Financial Aid will review your situation. Special circumstances are defined as situations that the family has minimal control over: death, disability, loss of income due to layoff, and unemployment. Voluntary circumstances are not eligible for consideration. Such voluntary items would include consumer debt, voluntary leave of employment, and loss of income due to change in job or school attendance.

## Withdrawal

Before withdrawing from all classes, a student should visit the Office of Financial Aid. The University's refund policy is administered through the Office of Student Accounts. However, federal law dictates that the refund of financial aid is calculated based on days of attendance (earned aid), which can result in a balance owed to the University or to financial aid programs.

## Student Consumer Information

The Student Consumer Information regulations of the U.S. Department of Education require universities to provide students with access to certain information to which they are entitled as consumers. This information is available at www.butler.edu/financial-aid.



All undergraduate students are urged to review the Student Handbook, at www.butler. edu/campus-life/student-handbook, which details the academic rules and regulations of the University. While academic advisors are available to help students plan their academic career, the Butler student is responsible for:

- Knowing and meeting degree requirements
- Consulting with an advisor prior to each registration period
- Enrolling in appropriate courses to ensure timely progress toward a degree
- Discussing issues related to academic performance

However, the availability of an advisor does not relieve the student of the responsibility for knowing and following the published programs and policies. Each student should become an expert on the program being pursued, and on the regulations and procedures of the University. A student must maintain high standards of conduct to continue in, and to be graduated from, the University.

The school year at Butler consists of two semesters approximately 15 weeks in length and two seven-week summer sessions.

## Unit of Instruction

Each course carries an approved number of semester hours credit. A semester hour is generally equivalent to one lecture per week, or two or three hours of laboratory work per week. Most degree programs require an average of 16 semester hours each semester for eight semesters. Neither more nor less credit than the amount stated in the Registration and Records student information system is permitted in any course.

## Grading System

Each student is expected to attend all class meetings in which he or she is enrolled. Being absent from class therefore may affect the final grade assigned for the course. Butler is on a 4.0 grading system. When a student completes a course, one of the following grades with the corresponding grade points will be assigned:

$$
\begin{array}{ll}
\text { A } & 4.00 \text { grade points } \\
\text { A- } & 3.67 \text { grade points } \\
\text { B+ } & 3.33 \text { grade points }
\end{array}
$$

| B | 3.00 grade points <br> B-$\quad$2.67 grade points <br> C+$\quad 2.33$ grade points |
| :--- | :--- |
| C | 2.00 grade points |
| C- | 1.67 grade points |
| D+ | 1.33 grade points |
| D | 1.00 grade points |
| D- | 0.67 grade points |
| F | 0.00 grade points |

The following grades are not computed in the grade point average (GPA):
W-Official withdrawal. Permitted through the 10th week of a fall or spring semester. Students should contact Registration and Records for withdrawal dates during the summer.
P-Passing grade. Semester hours are counted as hours passed, but are not used in computing the GPA.
PV-Pass with validation. Grade given in student-teaching classes to students who may be certified to teach.

## AUD-Audited course.

NC-Enrollment in a course on a non-credit
basis. A student may change from credit to noncredit in a course through the 10th week of a fall or spring semester. The instructor's signature is required. An instructor may change the noncredit grade to withdrawal if the student does not attend class.

## NR-Grade not reported.

I-Incomplete grade. This grade may be assigned by an instructor when exceptional circumstances prevent a student's finishing all work required in a course. The "I" must be removed within the next regular session of the student's enrollment or within two years if the student is not again enrolled during that time. If the " T " is not removed within the stated time, the " I " will be changed to "X."
X-Unredeemed incomplete grade. This indicates no credit earned, no hours attempted, and no grade points.
T-Transfer credit.
Z-Undergraduate course taken by a graduate student; no credit or grade points earned.

## Academic Standing

A student's GPA is figured by dividing the total number of hours attempted into the total number of grade points earned.

When a student's cumulative GPA falls below a 2.0 , he or she is placed on academic probation.

Excessive probation, or continued probation without improvement, can lead to the student being declared academically ineligible.

## Repeat Policy

A student, with the approval of his or her advisor, may repeat a course one time that is not otherwise repeatable for credit. Upon completion of the subsequent attempt, only the second attempt will count in his or her GPA. When repeating a course, a student may not withdraw from the course or change the course credit registration to non-credit unless the student withdraws from the University. This policy shall apply only to courses taken at Butler. The same policy applies to graduate students.

## Independent Study Policy

Not more than six hours of credit in independent study may be counted toward an undergraduate degree, except for students majoring in science, who may take a maximum of nine hours of independent study.

## Dean's List

Any degree-seeking undergraduate student earning at least 12 academic hours of graded credit in a given semester may be placed on the Dean's List of the college of enrollment if the semester GPA is in the top 20 percent of all eligible students in that college. Courses taken under the pass/fail option do not count toward 12 academic hours of graded credit.

## Classification of Students

To attain a class standing, a student should have twice the number of grade points as hours attempted and have earned the following number of hours. Classifications are applicable to all colleges of the University.

First-Year Student
Sophomore
Junior
Senior
5th year Pharmacy
6 th year Pharmacy

0-28 hours
29-58 hours
59-90 hours
$91+$ hours
133-170 hours
171+ hours

## Registration

Each fall and spring semester, enrollment begins with a two-week rollout of individually assigned My.Butler registration appointments. Registration remains open until the fifth day of class each semester. Students must meet with their advisor before registering. Registration in any course for credit or in any course under the pass/fail option, or any change involving the
addition of a course, is not permitted after the published deadlines. If a student wishes to make a change in his or her registration, permission must be secured from a student's academic advisor and/or from the dean of the college in which the student is enrolled. Permission also is required if a student intends a complete withdrawal from the University. A student may register for an "independent study" course with permission of the department chair or dean concerned.

## Consortium for Urban Education

The Consortium for Urban Education comprises the following higher educational institutions in and around Indianapolis: Butler University; Franklin College; University of Indianapolis; Indiana University Purdue University Indianapolis, including the Herron School of Art; Indiana Vocational Technical College; Marian University; and Martin University. The consortium allows a student of one member institution, under specified conditions, to enroll at another Consortium for Urban Education institution in a course not available at the home institution. Butler students interested in enrolling for a course not currently taught at Butler, but available at a member institution, are invited to consult the Registration and Records office, Jordan Hall, room 133, 317-940-9442, or visit www.butler.edu/registrar for details.

## Pass/Fail Option

The University permits students to elect up to four courses from their total undergraduate degree for pass/fail credit. Courses offered only as pass/fail credit are not included in this total. Courses required for graduation by the University Core Curriculum, individual colleges or departments, or in the student's academic major or minor may not be taken as pass/fail. Students who have elected the pass/ fail option earn credit and a "pass" grade for work equivalent to a D - or better. Courses taken for pass/fail do not count in the GPA if passed; if failed, they are counted as F. Upper-division courses taken pass/fail shall count for upperdivision credit if passed. A change from pass/fail to grade credit or from grade credit to pass/fail shall not be permitted after the last day noted in the academic calendar. Pass/fail is not available to graduate students as an option, but some courses in the Jordan College of the Arts are designated as pass/fail.

## Special Non-Credit

During the fall and spring semesters, fulltime degree-seeking students may, with the approval of the department chair or dean whose subject matter is involved and if resources are available, register for a maximum of two courses per semester on a non-credit basis without additional tuition, with the exception of independent study and applied music (individual instruction) classes. Students should register for special non-credit courses at the end of the registration period.

## Student Social Security Numbers

New students will receive a random student identifier when they are admitted that will be used as the student's I.D. The Social Security number is a secondary identifier for all students. In accordance with federal and state law, students have the right to refuse disclosure of the Social Security number.

## Final Year of Academic Residence

Normally, a student is expected to take his or her final 30 hours of academic work at Butler University; however, the dean of the college concerned may, for reasons deemed valid, allow intrusions up to 30 semester hours if the student has completed at least 64 semester hours at Butler with a cumulative GPA of at least 2.0.

## Graduation

The student must file a degree application in the Office of Registration and Records by the specific dates as published in the academic calendar. In the year in which the degree is awarded, candidates are expected to attend the commencement exercises in academic costume. If a student finds it necessary to have the degree conferred in absentia, he or she must notify the Office of Registration and Records at least two weeks before the commencement exercises. If the petition is approved, the diploma may be picked up several days after the commencement exercises or the student may contact Registration and Records to make arrangements to have the diploma mailed. No diploma will be released before the date of graduation.

## Graduation with Major in Two Colleges

Majors may be obtained in two colleges of the University through the secondary major
program. This option is available to a student in one college who completes a minimum of 39 hours in another college ( 30 hours in a major field and at least nine additional hours designated by the dean of that college). The secondary major is indicated on transcripts and in the graduation program; however, only one degree is awarded.

## Graduation with Minors

Minors can be obtained in a college or department separate from the student's primary major by satisfying the program as designated by that college or department. A minor consists of 18-24 semester hours; it will be indicated on transcripts.

## Requirements for Graduation

All candidates for undergraduate degrees must complete the University Core Curriculum. All students with a previous bachelor's degree are waived from the core. At least 45 semester hours of work must be completed at Butler. At least 30 of the 45 hours must be in the college granting the undergraduate degree.

At least 40 hours of the total curriculum must be courses numbered at the 300 level or above. Candidates for undergraduate degrees must have at least a 2.0 GPA. Candidates for graduate degrees must have at least a 3.0 GPA.

All candidates in the College of Liberal Arts and Sciences must pass a minimum of 120 semester hours. Candidates in the College of Education must pass a minimum of 126 semester hours. Candidates in Jordan College of the Arts must pass a minimum of 124-128 semester hours depending on the major. Candidates in the College of Business must pass a minimum of 121 semester hours. Candidates for the bachelor of science in health sciences must pass a minimum of 140 semester hours; master of physician assistant studies candidates will complete an additional year ( 52 semester hours) of coursework. Candidates for the doctor of pharmacy degree must pass a minimum of 210 semester hours. Candidates in the College of Communication must pass a minimum of 126 semester hours. Candidates who hold a bachelor's degree from Butler University may earn a second baccalaureate degree from Butler; they must complete a minimum of 30 additional hours at Butler and must meet all the specific requirements for the second degree.

GOAL Verify experimentally


## COLLEGE of LIBERAL ARTS and SCIENCES

## Administration

Jay Howard, PhD, Dean; Stuart Glennan, PhD, Associate Dean; Jennifer L. Poor, PhD, Associate Dean for Student Affairs

## College Website

www.butler.edu/las
The power, importance, and centrality of the liberal arts are affirmed daily in the College of Liberal Arts and Sciences (LAS). The College offers 29 majors and 31 minors across 12 departments and four programs in the humanities, the social sciences, and the natural sciences. Students in the College are encouraged and expected to explore different ways of understanding the world, to experience cultures diverse from their own, to practice critical thinking, to appreciate the value of and joy associated with learning, and to recognize the power their education provides them for personal gain and social change. A liberal arts degree from Butler positions students to do almost anything with their lives beyond Butler and to make a difference in their lives and in the lives of those with whom they interact.

We work on a daily basis to strengthen ties between students and faculty members. Students and their faculty mentors work closely together both in and out of the classroom. They conduct collaborative research projects, make joint presentations at professional meetings, and publish the results of their work in the literature of their disciplines. They talk about ideas, the future, and the world. And they very frequently remain in touch long after graduation.

We also believe that learning takes place in many settings in addition to the classroom. Students in the College of Liberal Arts and Sciences participate in internships in Indianapolis and around the world, and they regularly study abroad and in various field locations.

## Core Values of the College of Liberal Arts and Sciences

The liberal arts' basic and historic purpose is at once to teach us to think for ourselves, to act wisely and well in the world, and to undertake occupations useful to ourselves and others.

Liberal arts education seeks ultimately to open us to the human condition in its pains and joys, thereby to nurture our personal integrity, and to foster in us compassion and respect for those whose lives we share in our own communities and around the world.

Liberal arts education rests on a paradox: thinking soundly oneself means first listening carefully to the thoughts of others. The liberal arts urge us to cultivate ourselves through the consciousness of others; careful attention to their ideas and actions help us refine our own.

Liberal arts education is pluralistic. It is composed of many voices, each appropriate to time and place, some discordant, none absolute. It seeks to develop in us wit to judge which skills are appropriate at which times. Liberal arts education is restless. It takes nothing for granted. Its characteristic activity is not uncritical assent but critical judgment. It scrutinizes sacred truths of every sort.

The liberal arts develop not only critical but also creative skills, not only rational analysis but also creative expression. They seek to develop and realize the fullness of the human personality. Their exercise aims as well at preparing students to educate themselves long after they have left formal school. Liberal arts education is meant to train its students for public responsibility, not just private good.

A liberal arts education is as much about the journey as the destination. It takes as much delight in the minute-by-minute quirks of learning as in the fulfillment of distant goals. It balances the will to know with empathy and wonderment.

The Latin word "ars" means at once skill, knowledge, and practice. A liberal arts education begins with the skills of language and thought.

It teaches us to read well; to listen well; to write clear, concise prose; to speak privately in conversation, publicly in discussion, and formally in speeches; to judge one's audience and regard one's own words through the eyes and ears of others; to learn proper ways of integrating and citing the words and thoughts of others into one's own work; to do these things reasonably well in languages and worldviews other than our own.

It teaches us to set out a case or hypothesis or argument; to evaluate the rigor of others' arguments; to find and judge information in libraries, on the internet, and in other repositories. It teaches us modes of ascertaining truth and falsehood; resourcefulness appropriate to moral and aesthetic judgment; methods of logical, experimental, scientific, mathematical, and statistical reasoning.

These skills allow us to tackle and solve increasingly difficult and challenging problems, appreciate sources of bias and means of overcoming them, and entertain arguments from dissonant points of view. They develop in us a sense of subtlety, depth, and complexity.

A liberal arts education sees the cultivation of these skills not only as an end in itself but also as a preparation for the pursuit of knowledge and the other purposes of human life. The Chinese I Ching (Book of Changes) well captures a fundamental quality of liberal arts education when it intimates that knowledge and practice cannot be mastered until they have been regarded from different perspectives.

As students of the liberal arts, we cultivate as fully as possible the legacy of human thought, imagination, creativity, and research; observe
nature; confront and evaluate important theories that shape our understanding of the world and how to care for it; figure out how societies, our own and those of others, work and can be improved; weigh the costs and benefits of modern human life to the individual and the planet; seek to grasp and reduce the sources of human hatred and conflict; aim to understand and strengthen what inspires human cooperation; explore the workings of the human mind and body; unknot claims of teachers, politicians, advertisers, scientists, preachers, columnists, and your roommate; ponder history from the earliest epochs to the unfolding present; investigate the mechanisms of the cosmos, from the atom to the stars; delve into the past experiences of our own and other societies, as well as the current news; make ourselves at home in other cultures; make those from other cultures at home among ourselves; see the interplay between our beliefs about the natural world and our beliefs about religion, politics, and culture; search out purpose, ponder the meaning of life, scrutinize the human heart, and weigh conscience; discover the sweep of living systems, from microbes to biomes; learn to account for ourselves in a moral world that is neither black nor white; engage in a careful search for truth; know the ways of money and the nature of work; wrestle with ideas about God; fathom the relations between technology and human life; raise children-our own and those of others; consider the well-being of future generations; appreciate the beauty and uses of mathematics; forge agreements with loved ones, friends, and enemies; and engage ourselves in the principles, purposes, and practice of public life.

As students of the liberal arts, we do these things as part of a community with venerable roots-a community still evolving in space and time, a community of thought, imagination, value, labor, and action.

## General Information

## College Graduation RequirementsBachelor of Arts Degree

Students may be graduated upon completion of 120 semester hours, including the Core Curriculum, 40 hours of upper-division work, the foreign language requirement, and a major in the College.

## College Graduation RequirementsBachelor of Science Degree

To receive a bachelor of science degree, students must, in addition to satisfying the regular University, College, and major requirements, complete at least 60 hours of courses in the natural sciences and mathematics-specifically courses in biological sciences, chemistry, physics, astronomy, mathematics, computer science, software engineering, and Core Curriculum courses in The Natural World and Analytic Reasoning.

## Foreign Language Requirements

Students in the College of Liberal Arts and Sciences seeking the degree of bachelor of arts or bachelor of science must demonstrate competence in a foreign language by earning at least six hours of credit in one foreign language at the 200 or 300 level. Foreign language courses are offered at the 100 level for students in need of preparation for more advanced study. Although 100-level courses do not satisfy the foreign language requirement, they do count as credit hours toward the degree. All first-year students must take a placement examination. Further information is available in the Department of Modern Languages, Literatures \& Cultures. American Sign Language (ASL) also fulfills the LAS language requirement. Students should contact the College of Communication's Communication Sciences and Disorders program for more information on ASL. Students with Liberal Arts and Sciences secondary majors whose primary majors are in other colleges must fulfill the foreign language requirement.

## Majors

Students in the College of Liberal Arts and Sciences must declare their majors in the Office of the Dean. They then will be assigned an advisor in the department of their major. Programs are planned in consultation with this advisor and bear his or her approval. Students who change majors must also declare this change in the Office of the Dean. Students may choose majors from any of the following fields in the College:

- Actuarial Science
- Anthropology
- Astronomy and Astrophysics
- Biology
- Chemistry
- Classical Studies
- Computer Science
- Criminology
- Economics
- English
o Concentration in Creative Writing
o Concentration in Literary Theory, Culture, and Criticism
o Concentration in Literature
o Concentration in Public and Professional Writing
- Environmental Studies
- French
- Gender, Women, and Sexuality Studies
- German
- History
- Individualized Major
- International Studies
- Mathematics
- Peace and Conflict Studies
- Philosophy
- Physics
- Political Science
- Psychology
- Religion
- Science, Technology, and Society
- Sociology
- Sociology (with Specialization in Social Work and Social Policy)
- Software Engineering
- Spanish

All majors consist of at least 30 hours in the subject with a minimum of 20 hours in courses numbered above 299. Ten hours of each major must be completed at Butler University. Grades below C- and courses taken pass/fail do not count toward the major.

Students may earn double majors (two majors within the College) or add a secondary major (a major in another college) to their major in the College of Liberal Arts and Sciences.

## Combined Majors

Combined majors consist of at least 40 hours in closely related fields, with 20 hours of upperdivision courses, and must have the approval of the chair of each department or program concerned.

To assist students considering combined majors, LAS departments have developed standard lists of requirements for certain combined majors:

- Criminology and Psychology
- History and Anthropology
- History and Political Science
- Philosophy and Psychology
- Philosophy and Religion
- Political Science and Psychology
- Psychology and Anthropology
- Sociology and Criminology
- Sociology (with Specialization in Social Work and Social Policy) and Criminology
- Sociology (with Specialization in Social Work and Social Policy) and Psychology

Students may consult departments or the College of Liberal Arts and Sciences website for further information on these combined majors. They may also petition departments to consider other combined majors, or they may elect to propose an individualized major.

## Minors

Students who choose to add minors to their programs indicate their choice on a form available in the Office of the Dean. They confer
with the chair of the department for advising. The College offers minors in the following areas:

- Actuarial Science
- African Studies
- Anthropology
- Astronomy
- Biology
- Chemistry
- Chinese
- Classical Studies
- Computer Science
- Criminology
- Economics
- English
o Concentration in Creative Writing
o Concentration in Literature
o Concentration in Public and Professional Writing
- Ethics
- Environmental Studies
- French
- Gender, Women, and Sexuality Studies
- Geography
- German
- History
- International Studies
- Mathematics
- Neuroscience
- Peace and Conflict Studies
- Philosophy
- Physics
- Political Science
- Psychology
- Religion
- Science, Technology, and Society
- Sociology
- Spanish

A minor must consist of at least 18 hours of coursework in the subject. Ten hours of each minor must be completed at Butler University. Grades below C- and courses taken pass/fail do not count toward a minor.

## Degree After Completing One Year of Professional Study

Candidates for the degree of bachelor of arts or bachelor of science may be permitted to spend their senior year in an approved school of medicine, dentistry, law, religion, or forestry, and may receive a degree from Butler University provided they complete the following:

- All Core Curriculum requirements of Butler University for the bachelor's degree.
- Foreign language requirement of the College.
- 98 hours with a minimum GPA of 2.0. (Transfer students in LAS pre-professional programs who have successfully completed at least 64 semester hours at Butler University, of which at least 10 hours are upper division, and who have a total of at least 98 hours, also may spend the senior year in professional school and complete the requirements for the BA or BS degree at Butler.)
- All requirements for the major.
- At the professional school, a number of credits equivalent in hours and grade points to the omitted work of the senior year at Butler University.


## Preparation for Teacher Licensure

Students in the College of Liberal Arts and Sciences may seek a teaching license, but preparation for licensure is handled by the College of Education. Students may choose a primary major in the College of Education and a secondary major in the College of Liberal Arts and Sciences. Alternatively, students may choose a primary major in the College of Liberal Arts and Sciences, while taking courses required for licensure in the College of Education. In either case, advising concerning requirements for licensure is handled by the College of Education.

## Associate Degree

To earn an associate degree, students are required to complete a minimum of 60 semester hours, including the University Core Curriculum, but excluding the Writing across the Curriculum and Speaking across the Curriculum requirements, and with a reduced number of Butler Cultural Requirement events. A cumulative GPA of at least 2.0 is needed to graduate. The elective hours taken as part of an associate degree program may be taken in a particular field or major. Students may consult the Office of the Dean of Liberal Arts and Sciences for further information concerning the degree.

In addition, the last 20 hours must be taken in residence at Butler unless permission for an exception is granted. Students who hold associate degrees may later earn bachelor's degrees. To do so, they must complete a minimum of 15 additional hours at Butler University and all requirements for the second degree. A minimum of 20 hours of the associate degree must be taken at Butler University.

An associate of science degree is awarded if the majority of the elective hours are in a department
that awards a bachelor of science degree to fouryear degree recipients. Others receive the AA degree.

## Graduate Programs

Graduate programs in the College require a 30-hour major, plus a thesis, or a 36-hour major (non-thesis option), depending upon departmental requirements. The College of Liberal Arts and Sciences offers the following graduate degrees:

- Master of Arts in English Literature
- Master of Arts in History
- Master of Fine Arts in Creative Writing

Information about these degrees is listed under the entries for the Departments of English and History and Anthropology.

For general information on applying and admission to any Butler graduate program or course, see Admission Information and Requirements chapter. College- and programspecific requirements are detailed below

## AREAS of

## INSTRUCTION

African Studies Minor

Administration<br>Terri Jett, PhD, Program Coordinator

The minor in African studies at Butler University is designed for students with any major who wish to enrich their program with study of one of the most interesting areas of the world. The program is interdisciplinary, drawing upon areas of the humanities, social sciences, and occasionally, the fine arts. Students are encouraged to individualize their programs with study-abroad experiences in Africa, if possible, or internships focusing on museums, performing arts organizations, communication and media agencies, or nongovernmental agencies. Note that faculty in the program may also offer special-topics courses with African content that may be substituted or added to the list of classes below.

## Requirements for the Minor

The minor consists of 18-19 hours, with courses selected from the following (each 3 hours):

- AN360, People and Cultures of Africa
- FR334, Topics in Francophone Culture
- FR485, Topics in Francophone Studies
- HST305, Topic: Old and New South Africa
- HST381, History of Africa
- HST382, Modern Africa
- PO350, African Politics
- PO386, Black Political Thought
- RL354, Islam: Religion, Culture, Society

Additional courses with African content or focus that may count toward the African Studies minor are offered throughout the University and may include African literature, international communication, African film, or other topics.

Study abroad: Students who complete a studyabroad program in Africa may count the credit from that experience toward the minor. For details, consult the coordinator of the African Studies program (Terri Jett, Jordan Hall, room 347B).

Foreign language: Students complete the Liberal Arts and Sciences requirement in foreign language, with the recommendation that the language selected be one widely spoken on the African continent (such as French).

## Biological Sciences

Administration<br>Travis J. Ryan, PhD, Department Chair<br>Professors<br>Thomas E. Dolan, PhD; Travis J. Ryan, PhD; Carmen M. Salsbury, PhD; James L. Shellhaas, PhD

## Associate Professors

Shelley Etnier, PhD; Jennifer R. Kowalski, PhD; Katherine M. Schmid, PhD; Philip J. Villani, PhD
Assistant Professors
Sean T. Berthrong, PhD; Nathanael R. Hauck, PhD; Lindsay K. Lewellyn, PhD; Andrew M. Stoehr, PhD

## Instructors

McKenzie Beverage, MA; Rebecca Dolan, PhD, Director, Friesner Herbarium; Erin Gerecke, PhD; Marva Meadows, MS; Tracey Mills, MS; Michael P. Trombley, PhD

Department Website
www.butler.edu/biology

## Why Study Biology?

Biology is the study of living things, including plants, animals, and microbes. A major in biology will provide you with a broad education in the biological sciences, exposing you to many different facets of this diverse science. Biological sciences is a liberal arts major, and therefore it is largely about teaching students how to learn and think about the world. Students will develop an understanding of the scientific method, a process that develops analysis and reasoning skills.

Students will learn to think logically, for example, by designing and following an experiment through to its conclusion and analyzing the results. Many students do not realize the amount of creative thinking and problem-solving skills that also go into biology; these will be developed as well. Biology majors also have the opportunity to hone their communication skills, both oral and written, as they present the results of their experiments.

While many of these skills are emphasized in the classroom, independent research projects with faculty members and external internships afford many students the opportunity to apply these skills to real questions and problems.

A biology degree is versatile. While many students major in biology as a precursor to medical or dental school, there are a number of other fields that students may pursue as well. Students may go on to work as lab technicians at hospitals, or at the state crime lab; others may go on to teach at the primary, secondary, or college level. Many choose to pursue environmental careers, such as working in forestry or parks, or even as an environmental lobbyist. Many biology majors choose to go on to graduate school, where they pursue research in genetics, ecology, cell biology, medical research, or any other of the wide variety of fields in biology. Many other career opportunities are available in biomedical research, agriculture, and environmental management, among other fields.

## Why Study Biology at Butler?

The Department of Biological Sciences offers a curriculum emphasizing broad training in biology as the key to success in graduate school, professional school, teacher education, and technical careers. The major is built upon a strong foundation of core courses in the liberal arts, general biology courses, and biology electives to meet student interests. Students studying science should be exposed early and often to the methods of discovery, inquiry, and problem solving used by scientists to explain the natural world. Our faculty members are familiar with these methods as we apply them in our individual research programs, and we strive to develop such capabilities in our students.

Therefore, we give our students opportunities to actively use the tools of scientific investigation in the lab and the field through a variety of courses at the molecular, cellular, organismal, and population levels of biological organization.

Personalized attention is an important aspect of studying biology at Butler. Our biology class sizes are small relative to those at many
institutions; even most of our introductory classes typically have fewer than 30 students, and many upper-level courses have fewer than 20 students. Classes are thus interactive learning environments that foster not only hands-on scientific inquiry skills, but also communication and critical-thinking skills that serve students well no matter what professional path they may choose after graduation.

The low student-to-faculty ratio also provides opportunities for students to gain more intensive experiences through independent study with a faculty mentor. During the academic year, students are welcome to register for research credits.

Another popular option, the Butler Summer Institute, is a nine-week program in which participants undertake independent projects they design with a faculty mentor. Student research is frequently showcased during the annual Butler Undergraduate Research Conference, which attracts college students throughout the Midwest each spring to present their research results to their peers. Students may also apply for funds to travel to other regional or national meetings via the Holcomb Undergraduate Grants program. Finally, students often co-author papers with faculty members for publication in professional journals or presentation at conferences. For example, recent joint student-faculty articles have been published in Biochemical Genetics, Evolution, Journal of Experimental Biology, Journal of Herpetology, American Naturalist, and Animal Behavior.

Students studying biology at Butler also have opportunities for off-campus study, internships, and career exploration through special affiliated programs. For example, the Center for Urban Ecology educates and engages Butler students and citizens in the local community about the discipline of urban ecology and aims to create "citizen scientists" dedicated to continued stewardship of the natural world. Students can attend workshops, take classes, devise independent research projects, or participate in internship opportunities in ecology and environmental topics. Another option, the Smithsonian Tropical Research Institute (STRI) in Panama, is dedicated to understanding tropical biodiversity. The ButlerSTRI partnership includes opportunities for students to serve as paid interns in Panama for existing research projects conducted by STRI scientists and for students to engage in new research initiatives with Butler faculty in Panama. Further, the partnership includes two
field-based courses taught on site in Panama by Butler biology faculty. Students may also want to apply for biology internships, which are available throughout Indianapolis, the state of Indiana, and surrounding states.

Some students choose a major in biology as a gateway toward a career in health-related fields. Butler students who have qualified themselves with outstanding academic performance in the major have had great success in entering professional schools in medicine, dentistry, optometry, physical therapy, and veterinary medicine. Students receive individual advising by faculty on the selection of courses that will both satisfy the minimum entrance requirements and prepare them well for the professional school of their choice.

In addition, the pre-professional school advising area within the Center for High Achievement and Scholarly Engagement plans co-curricular activities, maintains a reference library of useful publications, and coordinates the application process.

## Biology Student Learning Outcomes

We expect that students will be able to show mastery of various types of learning during their progression through different types of courses in the major. By the time they complete the biology major, students should be able to:

- Demonstrate content knowledge and proficiency in using and explaining techniques essential to the study of fundamental areas of biology: genetics, cellular and molecular biology, and ecology and evolutionary biology
- Use and apply scientific literature properly to ask and answer questions in the biological sciences
- Design experiments and collect, analyze, and interpret data using graphical and statistical analyses, in order to evaluate hypotheses
- Communicate scientific ideas, concepts, and findings through writing and speaking
- Apply scientific findings to relevant societal issues


## Degree Programs

- Major in Biology (BS, BA)
- Minor in Biology


## Requirements for the Major

A total of 37 biology credit hours are required. All first-year students must complete BI111 (Contemporary Issues in Biology) and the three fundamentals courses, which consist of BI210
(Genetics-Fundamentals), BI220 (Cellular and Molecular Biology-Fundamentals), and BI230 (Ecology and Evolutionary BiologyFundamentals). BI230 is a prerequisite for all BI courses numbered 300 and higher. All students must also complete BI299-Biology Seminar (pass/fail) in the spring semester of their second year in the major. To acquire the remaining credit hours for the major, students must take biology electives at the 300 level or above; at least four of these electives must be lab courses. One of the electives must be an organism-based course chosen from the following: BI301, BI302, BI311, or BI438 (indicated with an asterisk below). All senior biology majors must complete BI480 (Biology Capstone). In addition, all biology majors must take general chemistry (CH105-106 or CH107). Note: BI325, Principles of Pathogenic Microbiology, cannot be counted toward the 37 hour minimum required for the biology major. Students will be allowed to use a maximum of three hours of independent study credit, internship credit, research, or honors thesis credit toward the 37 -hour minimum required for the biology major.

Students must earn a grade of C- or better in all prerequisite courses as well as in all required courses for the major.

## Required Courses

Note that all BI courses numbered 300 and above require BI230 with a C- or better except where noted below:

- BI111, Contemporary Issues in Biology (first-semester majors and exploratory students only; transfer students and those joining the major after their first semester at Butler are exempt from BI111, but must complete an additional hour of biology elective credit at the 300 level or above)
- BI210, Genetics-Fundamentals
- BI220, Cellular and Molecular BiologyFundamentals (prerequisite BI210 with C- or better)
- BI230, Ecology and Evolutionary BiologyFundamentals (prerequisite BI220 with C- or better)
- BI299, Biology Seminar (pass/fail)
- BI480, Senior Biology Capstone (prerequisite BI230 and senior standing)
- BI301*, Principles of Zoology
- BI302*, Principles of Botany
- BI306, Mammalogy
- BI307, Vertebrate Biology
- BI308, Tropical Field Biology
- BI309, Local Flora
- BI311*, Biology of Algae and Fungi
- BI320, Animal Behavior
- BI323, Principles of Immunology
- BI339, Philosophy of Biology
- BI401-403, Independent Study
- BI405-409, Topics in Biology
- BI411, Principles of Physiology
- BI413, Vertebrate Histology and Microtechnique
- BI417, Tropical Terrestrial Biology
- BI418, Advanced Ecology
- BI419, Conservation Biology
- BI423, Advanced Evolutionary Biology
- BI430, Animal Development
- BI431, Plant Development
- BI432, Plant Physiology
- BI433, Advanced Cell Biology
- BI434, Transmission Genetics
- BI435, Molecular Genetics (BI203)
- BI436, Genomics, Bioinformatics, and Gene Evolution (BI203)
- BI438*, Microbiology
- BI440, Practical Molecular Biology
- BI442, Comparative Biomechanics
- BI460, Cellular and Molecular Neurobiology
- BI490, Internship in Biological Sciences
- BI499, Honors Thesis
* Indicates organism-based courses, one of which must be taken as an elective for credit toward major.


## Requirements for the Minor

The minor consists of 21 credit hours. Students must complete the three fundamentals courses (BI201, BI202, and BI203) and two BI elective courses with lab at the 300 level or above (excluding BI325).

## Core Courses Offered by Biological Sciences

NW200-BI, Biology and Society: This course will examine current societal issues with biological connections, the role scientists and others play toward helping us understand these issues, and the underlying biological concepts for each topic. Course includes lecture and laboratory components. A course for non-science majors only. (U)(5) Annually, term varies.

## NW201-BI, Environmental Biology:

Application of scientific principles to understanding and managing the environment. Emphasizes the human relationship with the environment and possible solutions to environmental problems. Lecture and laboratory. A course for non-science majors. (U)(5) Occasionally.

NW202-BI, The World of Plants: Introduction to Plant Biology. How the anatomy and physiology of diverse plants help them to survive,
reproduce, and benefit humans and ecosystems. Lecture and laboratory. A course for non-science majors. (U)(5) Annually, term varies.

NW203-BI, Genetics and Evolution: A study of the significant concepts in molecular, organismal, and population genetics and the theory of evolution. All topics will be taught within their historical and contemporary contexts. Lecture and laboratory. A course for non-science majors. (U)(5) Annually, term varies.

NW204-BI, Survey of Biology: A survey of the major concepts in the biological sciences. Lecture and laboratory. A course for non-science majors. (U)(5) Occasionally.

NW205-BI, Urban Ecology-Exploring and Enhancing the Urban Environment of Indianapolis: The majority of the world's population now lives in urban areas, but environmental scientists have only begun to explore the ecology in and of cities recently. This course uses the city of Indianapolis as a case study to understand the effect that cities have on the environment, the processes that take place in the urban ecosystem, and the opportunities cities hold for ecological restoration. Lecture and laboratory. A course for non-science majors. (U)
(5) Annually, term varies.

NW206-BI, Life, Death, and Immortality: How the HeLa Monster Did and Didn't Change the World: A patient on a 1951 "colored" ward unknowingly contributed to science, changing medicine forever. Exploring the underlying biology/genetics through lecture and laboratories, we'll also review the ethical, socioeconomic, racial, and gender issues related to these HeLa cells, including a community outreach project that may be used to satisfy the ICR. (U)(5) Occasionally.

## NW20'7-BI, Ecology and the Natural

Environment: This course will explore the foundational ecological principles that govern the interactions between species and the abiotic and biotic world and, in turn, determine patterns of distribution and abundance. Fundamental concepts of ecology at the population, community, and ecosystem levels will be emphasized. (U)(5) Spring.

NW261-BI-I, Food: Pasture, Table, Body, and
Mind: This course about food will encourage society to consider how food connects to both society and to science and how society and science connect to one another. By using a framework of pasture, table, body, and mind, we will explore the ecological relationship between a healthy environment and growing healthy food,
the factors that influence our food choices, the constituents of food and how they contribute to our physical well-being, and the ways in which society and culture influence our eating habits. A course for non-science majors. (U)(5) Occasionally.

## Biological Sciences Courses

BI105, Introductory Cell Biology: An introduction to the basic principles of cell biology for first-year pharmacy students. The course will cover introductory chemistry, biochemistry, cell structure, metabolism, genetics, and embryology. Will not count for credit toward a major in biology. Only available to COPHS students. (U)(3) Fall and spring.

BI111, Contemporary Issues in Biology: This topic-driven course is designed to illustrate the connection between biology and current societal issues. In addition to coverage of background information, a portion of the course will be dedicated to problem-based activities and class discussions. (U)(3) Fall.

BI210, Genetics-Fundamentals: This course introduces students to basic principles of transmission and molecular genetics. Topics include meiosis, transmission genetics, gene expression, and mutations. Laboratories emphasize basic techniques. (U)(4) Fall and spring.

## BI220, Cellular and Molecular Biology-

Fundamentals: This course introduces students to basic properties and functions of cells and the molecules they contain, including the relationship between the structure and function of diverse cell types. Prerequisite: BI210 with a C- or better. (U)(4) Fall and spring.

## BI230, Ecology and Evolutionary Biology-

Fundamentals: This course introduces students to basic theory of ecology and evolutionary biology. Laboratories emphasize experimental design, statistical analysis, and scientific communication. Prerequisite: BI220 with C- or better. (U)(5) Fall and spring.

BI257, Human Anatomy and Physiology: A course for non-major students to relate structure and function in the human body. Prerequisite: CC214P, any NW-BI course, or two of the following: BI201, BI202, and BI203. (U)(5) Fall.

BI299, Biology Seminar: Attendance at and participation in the biology seminar series, including pre- and post-seminar reports. Biology majors are expected to complete this course during their second year in the major. Prerequisite: BI230 with a C- or better. (P/F)(U) (1) Spring.

BI301, Principles of Zoology: A survey of the basic principles of animal biology, covering the major animal groups, their evolutionary relationships, and their structural and functional characteristics. Prerequisite: BI230 with a C- or better. (U)(4) Annually, term varies.

BI302, Principles of Botany: A survey of the basic principles of plant biology, covering the major plant groups, their evolutionary relationships, and their structural and functional characteristics. Prerequisite: BI230 with a C- or better. (U)(4) Annually, term varies.

BI306, Mammalogy: This course will address the taxonomy, ecology, evolution, behavior, and economic importance of mammals. The laboratory portion of the course will emphasize the taxonomy of mammals and the observation and trapping/handling of small mammals. Prerequisite: BI230 with a C- or better. (U)(4) Occasionally.

BI30'7, Vertebrate Biology: Phylogeny, taxonomy, behavior, and life histories of the vertebrates. Prerequisite: BI230 with C- or better. (U)(4) Occasionally.

BI308, Tropical Field Biology: Introduction to the habitats, distribution, and ecology of tropical fauna. Includes a field trip to a tropical habitat during the semester. Prerequisite: BI230 with a C- or better. (U)(3) Spring.

BI309, Local Flora: Collection, identification, classification, uses, and ecology of Indiana flowering plants. Learning the use of identification keys will be stressed. Prerequisite: BI230 with a C- or better or any NW-BI course. (U)(3) Occasionally.

BI311, Biology of Algae and Fungi: The biology of algae and fungi including structure, life histories, classification, physiology, ecology, and experimental aspects of algae and fungi. Prerequisite: BI230 with a C- or better. (U)(4) Occasionally.

BI314, Ornithology: This course will address the taxonomy, ecology, evolution, and behavior or birds. The laboratory portion of the course will emphasize the identification, function, and behavior of birds. Prerequisite: BI230 with a Cor better. (U)(4) Occasionally.

BI320, Animal Behavior: The adaptive behavior of animals is approached from physiological, developmental, ecological, and evolutionary perspectives. Prerequisite: BI230 with a C- or better. (U)(4) Annually, term varies.

BI323, Principles of Immunology: Basic concepts and techniques of immunology.

Prerequisite: BI105 or BI230 with a C- or better. (U)(2) Fall.

BI325, Principles of Pathogenic Microbiology: The course will address microbiological concepts/principles regarding the mechanisms of infection and disease of major organ systems as well as their control. Open only to students of the College of Pharmacy and Health Sciences. Prerequisite: BI105, or BI202 and BI203. (U)(3) Spring.

BI339, Philosophy of Biology: A study of philosophical problems in biology. The course explores both theoretical problems within biology, like the evolution of altruism and problems of taxonomy, and philosophical problems that are influenced by biological theory, including the nature of morality and the status of religious belief. Prerequisite: BI230 with a C- or better or permission of instructor. (U)(3) Occasionally.

BI350, Cell Biology: The structure and function of cells, including the properties of macromolecules, membrane structure, cell organelles, cell metabolism and energy relationships, cell division, and gene expression. Lecture and laboratory. Prerequisite: BI110, or BI120 and BI122. (U)(4) Annually, term varies.

BI35 ${ }^{\text {² }}$, General Genetics: An introduction to the basics of both classical and modern genetics, with emphasis on human heredity. Prerequisite: BI110, or BI120 and BI122. (U/G)(4) Annually, term varies.

BI401, Independent Study: Open to juniors and seniors who wish to do research with a biological science faculty member in an area of the animal and plant sciences. Permission of the faculty member and the chairman of the biological sciences department required. (U/G)(1) Fall and spring.

BI402, Independent Study: Open to juniors and seniors who wish to do research with a biological science faculty member in an area of the animal and plant sciences. Permission of the faculty member and the chairman of the biological sciences department required. (U/G)(2) Fall and spring.

BI403, Independent Study: Open to juniors and seniors who wish to do research with a biological science faculty member in an area of the animal and plant sciences. Permission of the faculty member and the chairman of the biological sciences department required. (U/G)(3) Fall and spring.

BI405, Topics in Biology: Study of a current biological topic. Prerequisite: BI230 with a C- or better. (U)(1) Occasionally.

BI406, Topics in Biology: Study of a current biological topic. Prerequisite: BI230 with a C- or better. (U)(2) Occasionally.

BI40'7, Topics in Biology: Study of a current biological topic. Prerequisite: BI230 with a C- or better. (U)(3) Occasionally.

BI408, Topics in Biology: Study of a current biological topic. Prerequisite: BI230 with a C- or better. (U)(4) Occasionally.

BI409, Topics in Biology: Study of a current biological topic. Prerequisite: BI230 with a C- or better. (U)(5) Occasionally.

BI411, Principles of Physiology: Analysis of the functions of all major systems of the vertebrates with emphasis on mammalian physiology.
Prerequisite: BI230 with a C- or better. (U)(4) Annually, term varies.

## BI413, Vertebrate Histology and

Microtechnique: A study of the structure of vertebrate tissues and the techniques used in microscope slide preparations. Prerequisite: BI230 with a C- or better. (U)(4) Occasionally.

BI41'7, Tropical Terrestrial Biology: This threeweek summer field course experience, taught by Butler biology faculty, will lead students to understand how climate changes the structure and function of terrestrial ecosystems through a comparative analysis of temperate and tropical environments. The first week begins on campus and examines the diversity of a temperate forest. The last two weeks are spent at the Smithsonian Tropical Research Institute (STRI) field station in Gamboa, Panama, where field exercises are used to explore the flora and fauna typical of tropical biodiversity. Visits by world-renowned STRI scientists will exemplify the types of research questions and methodologies used to study tropical communities. Field trips include bird watching along Pipeline Road, primate observing on Barro Colorado Island, frog and bat observing during night hours, a canopy crane trip for a bird's-eye viewing of the forest, and others. Students are expected to keep a travel log and, towards the end of the course, they will develop their own research project, collect data, and give a presentation on their findings. Prerequisite: BI230 with a C- or better or permission of instructors. (U)(4) Summer.

BI418, Advanced Ecology: An exploration of various topics in the field of ecology; specific topics vary with each course offering. Prerequisite: BI230 with a C- or better. (U)(4) Occasionally.

BI419, Conservation Biology: This course will focus on the biological principles that
must be the anchor for the management and/ or preservation of native flora and fauna. Conservation biology, however, is by necessity a multidisciplinary endeavor, and the course also deals with the social, political, and economic factors that weigh on conservation decisions. Prerequisite: BI230 with a C- or better. (U)(3) Occasionally.

BI423, Advanced Evolutionary Biology: An exploration of various topics in the field of evolutionary biology; specific topics vary with each course offering. Prerequisite: BI230 with a C- or better. (U)(3) Occasionally.

BI430, Animal Development: A study of embryonic development from the formation of gametes, through fertilization, and up to the development of the multicellular organism. Emphasis will be on the anatomical changes during development and on the cellular and molecular events causing these changes. Prerequisite: BI230 with a C- or better. (U)(4) Occasionally.

BI431, Plant Development: An introduction to the cellular and molecular mechanisms important in the development of members in the plant kingdom, from multicellular algae to flowering plants. The laboratory will include techniques important in investigating developmental phenomena such as scanning electron microscopy and tissue culture. Prerequisite: BI230 with a C- or better. (U)(4) Occasionally.

BI432, Plant Physiology: Introduction to how plants work, including housekeeping functions (photosynthesis, mineral nutrition, water relations, metabolism), growth and reproduction, defenses, and responses to the environment. Laboratories include necessary anatomy but emphasize biochemistry and molecular biology. Prerequisites: BI230 with a C- or better and CH106 or CH107. (U)(4) Occasionally.

BI433, Advanced Cell Biology: This course will focus on developing a deeper understanding of the basic concepts in cell biology that were introduced in the fundamentals course (BI220). Lab will focus on application of cell biological techniques to the development of research projects. Prerequisite: BI230 with a C-or better. (U)(4) Annually, term varies.

BI434, Transmission Genetics: An in-depth look at the inheritance of traits in individuals and populations. Topics will range from classic Mendelian inheritance to quantitative genetics to epigenetics. The course will explore the topics through lectures and the discussion of primary
literature and classic texts. Prerequisite: BI230 with a C- or better. (U)(4)

BI435, Molecular Genetics: Molecular structure and biochemical function of a gene in viruses, prokaryotes, and eukaryotes as illustrated by the original research literature. Prerequisite: BI230 with a C- or better. (U)(4) Occasionally.

BI436, Genomics, Bioinformatics, and Gene Evolution: This course will introduce students to the new, rapidly expanding fields of genomics, proteomics, and bioinformatics, as well as the overarching field of systems biology. The students will also learn what these new approaches reveal about how genes and genomes evolve. Prerequisite: BI230 with a C- or better. (U)(4) Occasionally.

BI438, Microbiology: Basic principles of microbiology and associated laboratory techniques. Lecture, demonstration, and laboratory. Prerequisite: BI230 with a C- or better. (U)(4) Fall.

## BI442, Comparative Biomechanics:

Biomechanics uses physical principles to explore organism function. This course will cover basic principles of solid and fluid mechanics as they pertain to living organisms. Prerequisite: BI230 with a C- or better. (U)(4) Occasionally.

## BI460, Cell and Molecular Neurobiology:

This course covers cellular/molecular nervous system biology (e.g., nervous system structure/ development, neuronal signaling/survival/ regeneration, synapse formation/function). Labs involve independent research on neuronal function in C. elegans roundworms. Prerequisite: BI230 with a C- or better or instructor permission; BI422 recommended. (U)(4) Annually, term varies.

BI480, Biology Capstone: This course provides a capstone experience, a chance to put into practice the knowledge and analytical skills learned as a biology major. The course will explore a specific area of biology through reading and discussion of the scientific literature and preparation of a review paper. Prerequisite: BI230 with a C- or better. (U)(3) Fall and spring.

BI490, Internship in Biological Sciences: A course offering the student supervised work/ research experience in a setting pertinent to the major area of study but outside the department. Permission of the department chair is required. (U)(3) Occasionally.

BI499, Honors Thesis: (U)(3) Occasionally.

## Chemistry

## Administration

LuAnne McNulty, PhD, Department Chair Professors
Olujide Akinbo, PhD; John Esteb, PhD; Geoffrey
C. Hoops, PhD; Joseph L. Kirsch, PhD; Shannon
G. Lieb, PhD; Stacy A. O'Reilly, PhD; Robert A.

Pribush, PhD; Michael Samide, PhD; Anne M. Wilson, PhD
Associate Professors
Todd Hopkins, PhD; R. Jeremy Johnson, PhD; LuAnne McNulty, PhD
Instructors
Adam Azman, PhD; Elizabeth Davis, PhD; Paul
Morgan, PhD; Erin Whitteck, PhD
Department Website
www.butler.edu/chemistry

## Why Study Chemistry?

Chemistry is often referred to as the "central science." It plays a role in the discovery of better medicines, in the development of safer chemicals for household use, and in the development of the next generation of electronic gadgets. An essential aspect to chemistry is the necessity of doing these things in a sustainable manner.

The study of chemistry will do more than just impart technical knowledge, ideas, and techniques useful in a laboratory setting. It will allow for experiences that will develop problemsolving abilities and critical-thinking skills. Class and conference presentations, poster sessions, and lab reports will help develop proficiency in communicating in a variety of settings. The skills gained can be applied not just to careers in chemistry, but also to careers in health care, law, business, and education, and to the pursuit of advanced degrees in a variety of fields.

## Why Study Chemistry at Butler?

The faculty and staff are dedicated to providing a supportive yet challenging environment for students interested in studying chemistry at the undergraduate level. The curriculum is designed to prepare students for the evolving nature of both chemistry and the broader field of science. Students are encouraged to pursue undergraduate research with faculty whose expertise spans a wide range of chemistry subdisciplines. Beginning in the first-year curriculum, departmental poster sessions, weekly seminars, and project-driven laboratories encourage interaction between students and faculty during and outside class.

## Chemistry Student Learning

 Outcomes- Understand key concepts related to the physical and chemical properties of matter
- Communicate within and outside the chemical discipline
- Develop problem-solving skills through experimentation and analysis
- Appreciate the relationship between integrity, science, and society
- Demonstrate knowledge of and use of appropriate safety protocols in laboratory settings


## Degree Programs

- Major in Chemistry (BS, BA)
- Minor in Chemistry


## Requirements-ACS Certification

Students who plan to enter the chemical profession or pursue graduate studies in chemistry should complete the requirements (or as many of the requirements as possible) for American Chemical Society Certification. (See www.acs.org.) Students interested in chemistry as a path to a professional program and who are considering an additional major or a minor may want to pursue the major with honors eligibility. Students completing a major in chemistry with 32 hours should combine their chemistry major with another area of study and plan for a double major.

The requirements for a major in chemistry with certification from the American Chemical Society include these:

Introductory, Foundation, and Allied courses

- CH105-106, General Chemistry or CH107, Advanced General Chemistry
- CH351, Organic Chemistry I and CH352, Organic Chemistry II
- CH321, Analytical Chemistry
- CH332, Inorganic Chemistry
- CH361, Biochemistry
- CH4 71 or CH472, Physical Chemistry I or II
- MA106, Calculus I and MA107, Calculus II
- PH201-202, Intro to Analytical Physics or PH107-108, Elementary Physics


## Three additional in-depth courses from the following list:

- CH422, Analytical Chemistry II
- CH431, Advanced Inorganic Chemistry
- CH4x9, Special Topics in Chemistry
- CH462, Biochemistry II: Central Metabolism
- CH465, Environmental Chemistry
- CH471 or CH472, Physical Chemistry I or II


## Chemistry Laboratory Experiences

A minimum of 400 hours of in-lab experiences are required and must cover four of the five areas of chemistry. Labs taken as part of CH321, CH351, and CH352 count toward the 400 hours of lab experience.

- CH424, Instrumental Analysis Laboratory
- CH432, Synthesis and Characterization
- CH463, Biochemistry Laboratory I
- CH473, Physical Chemistry Laboratory I
- CH474, Physical Chemistry Laboratory II
- CH493-494, Undergraduate Research
- Butler Summer Institute
- Research Experiences for Undergraduates


## Recommended Chemistry and Allied Courses

- CH491, Chemistry Literature
- CH392, Chemistry Seminar I
- CH492, Chemistry Seminar II
- CH493-494, Undergraduate Research
- MA208, Calculus and Analytic Geometry III
- MA334, Differential Equations


## Requirements for a Major in Chemistry with Honors Eligibility

At least 32 hours of chemistry, not including CH392 Chemistry Seminar I.

- CH105-106, General Chemistry or CH107, Advanced General Chemistry
- CH351, Organic Chemistry I and CH352, Organic Chemistry II
- CH321, Analytical Chemistry
- CH332, Inorganic Chemistry
- CH361, Biochemistry
- CH392 Chemistry Seminar I
- CH4 71 or CH472, Physical Chemistry I or II
- MA106, Calculus I and MA107, Calculus II
- PH201-202, Intro to Analytical Physics or PH107-108, Elementary Physics


## Requirements for the Major

Introductory, Required, and Allied Courses

- CH105-106, General Chemistry or CH107, Advanced General Chemistry
- CH351, Organic Chemistry I and CH352, Organic Chemistry II
- MA106, Calculus I
- PH201-202, Intro to Analytical Physics or PH107-108, Elementary Physics

Complete enough hours of upper-level chemistry courses from the following list to reach 32 total hours of chemistry. Courses must include work in two of the four remaining areas of chemistry:

- CH321, Analytical Chemistry; CH422, Analytical Chemistry II; CH424, Instrumental Analysis Laboratory
- CH332, Inorganic Chemistry; CH431, Advanced Inorganic Chemistry
- CH361, Biochemistry I; CH462, Biochemistry Laboratory I; CH463, Biochemistry IIA
- CH471 or CH472, Physical Chemistry I or II; CH473 or CH474, Physical Chemistry Laboratory I or II


## Requirements for the Minor

## General and Organic Chemistry

- CH105-106, General Chemistry or CH107, Advanced General Chemistry
- CH351, Organic Chemistry I and CH352, Organic Chemistry II


## An additional course from this list:

- CH321, Analytical Chemistry
- CH332, Inorganic Chemistry
- CH361, Biochemistry
- CH471 or CH472, Physical Chemistry I or II


## Core Courses Offered by Chemistry

NW210-CH, Chemistry and Society: Study of chemistry and its applications to and impact on society. Four hours of lecture/discussion and one two-hour laboratory per week. Credit not applicable toward a major in chemistry. (U)(5) Fall, spring, and summer.

NW211-CH-I, Water Quality: Study of chemistry and its applications to water systems in and around Indianapolis. Four hours of lecture/discussion and one two-hour laboratory per week. Credit not applicable toward a major in chemistry. (U)(5).

## Chemistry Courses

CH105, General Chemistry: The study of atomic and molecular structure, reactions, stoichiometry, thermochemistry, and states of matter. Four lectures and one three-hour laboratory per week. For students with some background in chemistry. (U)(5) Fall.

CH106, General Chemistry: The study of kinetics, equilibria, acid-base theories, thermodynamics, and electrochemistry. Four lectures and one three-hour laboratory per week. Prerequisite: CH 105 or equivalent with a grade of C or better. (U)(5) Spring.

CH107, Advanced General Chemistry: A course for students with a strong chemistry background. Admission by placement exam only. Topics to be covered are chemical bonding, chemical kinetics, solution chemistry, acid-base chemistry, chemical equilibrium, thermodynamics, and electrochemistry. (U)(6) Fall.

CH110, Chemistry in the Community: Students will research, develop, and present engaging demonstrations related to chemistry and natural science. Students will research the appropriate safety concerns and scientific principles behind the demonstration while developing the communication skills necessary to connect with the expected audience. The demonstration will be presented at multiple science outreach events within the Indianapolis community during the course. Reflective writing will be assigned concerning how the interactions with the public have affected the students' perceptions of chemistry, themselves, and the community. Course counts towards the ICR requirement. Prerequisite: CH106 or CH107. (U)(1) Fall.

CH321, Analytical Chemistry 1: An introduction to the fundamental theory and techniques of quantitative analysis. Four lectures and one four-hour laboratory per week. Prerequisite: CH106 or CH107 with a grade of C or better. (U)(5) Fall and spring.

CH332, Inorganic Chemistry: The study of atomic structure, ionic, covalent molecular, and metallic substances, acid/base theories with an emphasis on main group elements and an introduction to coordination chemistry. Three lectures per week. Prerequisite: CH351 with a grade of $C$ or better. (U)(3) Spring.

CH351, Organic Chemistry: The systematic study of organic compounds stressing structure and reactions. The course covers nomenclature, stereochemistry, resonance, reactions of hydrocarbons and alkylhalides, and basic laboratory techniques. Prerequisite: CH106 or CH107 with a grade of C or better. Four hours of lecture and one three-hour laboratory per week. (U)(5) Fall.

CH352, Organic Chemistry 2: A continuation of CH351 covering reactions and mechanisms of alcohols, acids and their derivatives, amines and other functional groups as well as synthesis, spectroscopy, and advanced laboratory techniques. Prerequisite: CH351 with a grade of C or better. Four hours of lecture and one threehour laboratory per week. (U)(5) Spring.

## CH361, Biochemistry 1-Bio-Organic

Chemistry: Systematic study of the structure of biological macromolecules (proteins, nucleic acids, carbohydrates), binding of ligands in proteins, and the fundamentals of enzymatic catalysis. Prerequisite: CH352 with a grade of C or better. Knowledge in introductory biology strongly recommended for this course. Four hours lecture per week. (U)(4) Fall.

## CH392, Communication in Chemistry:

Oral communication in chemistry. Focus on both formal and informal presentation skills, preparation of appropriate visual aids, observation, and evaluation of oral presentations. Fulfills the Speaking across the Curriculum (SAC) requirement. Prerequisite: 20 hours of chemistry. (U)(2) Fall and spring.

CH402, Internship in Chemistry: Designed to give chemistry students professional and practical experience in business, industry, and other activity related to their degree objectives. Oral presentation required. Course will not count for laboratory hours required for ACS certification. Each course may only be taken once for credit. Prerequisites: junior standing and permission of the department chair. (U)(3) Fall and spring.

CH403, Internship in Chemistry: Designed to give chemistry students professional and practical experience in business, industry, and other activity related to their degree objectives. Oral presentation required. Course will not count for laboratory hours required for ACS certification. Each course may only be taken once for credit. Prerequisites: junior standing and permission of the department chair. (U)(6) Fall and spring.

CH411, Independent Study: These courses provide an opportunity for a qualified student to pursue a special course of study under the direction of a faculty mentor. Prerequisites: Fourteen hours of chemistry, permission of the instructor, and permission of the head of the department. (U/G)(1) Occasionally.

CH412, Independent Study: These courses provide an opportunity for a qualified student to pursue a special course of study under the direction of a faculty mentor. Prerequisites: 14 hours of chemistry, permission of the instructor, and permission of the head of the department. (U/G)(2) Occasionally.

CH422, Analytical Chemistry 2: This course provides an introduction to advanced instrumental theory, design, and technique. Three lectures per week. Prerequisite: CH321 with a grade of C or better. (U)(3) Annually, term varies.

## CH424, Instrumental Analysis Laboratory:

Project-based application of specific instrumental methods of chemical analysis. Instrumental techniques covered could include: atomic or molecular spectroscopy, chromatography, or electrochemistry. The topic will vary by section number. One four-hour
laboratory per week. Prerequisite: CH321. (U)(2) Annually, term varies.

## CH429, Special Topics in Analytical

Chemistry: Various advanced topics in analytical chemistry. The subject matter for study will be listed when the course is offered. Prerequisite: one year of analytical chemistry or permission of the instructor. (U/G)(3) Occasionally.

CH431, Advanced Inorganic Chemistry: The study of coordination chemistry, organometallic chemistry, and catalysis. Three lectures per week. Prerequisite: CH332 with C or better. Corequisite: CH4 71 or CH472. (U/G)(3) Fall.

## CH432, Synthesis and Characterization:

Project-based laboratory dealing with the synthesis, characterization, and properties of synthetic products. One four-hour lab per week. Section 01 Inorganic Synthesis. Section 02 Biochemical Synthesis. Section 03 Organic Synthesis. Prerequisites: CH332 and CH361 or permission of instructor. (U)(2) Annually, term varies.

## CH439, Special Topics in Inorganic

Chemistry: Various advanced topics in inorganic chemistry. The subject matter for study will be listed when the course is offered. Prerequisite: One year of inorganic chemistry or permission of the instructor. (U/G)(3) Occasionally.

## CH459, Special Topics in Organic Chemistry:

Various advanced topics in organic chemistry. The subject matter for study will be listed when the course is offered. Prerequisite: One year of organic chemistry or permission of the instructor. (U/G)(3) Occasionally.

## CH462, Biochemistry IIA: Central

Metabolism: Topics include carbohydrate and lipid metabolism, electron transport and oxidative phosphorylation, biological membranes: structure, transport, and signal transduction. Prerequisites: CH361 with a grade of $C$ or better. Three hours of lecture and one two-hour computer laboratory per week. (U)(4) Spring.

CH463, Biochemistry Laboratory 1: Laboratory separation, detection, quantitation, and characterization of proteins, including enzymecatalyzed kinetics, using chromatography, electrophoresis, and spectroscopy. This writingintensive class will also emphasize reading, writing, and peer-review skills involving biochemical literature. One one-hour lecture and one three-hour laboratory per week. Prerequisites: CH361 and CH321, both with grade of C or better. (U)(2) Spring.

CH465, Environmental Chemistry: This course focuses on the application of basic chemistry principles in understanding the source, fate, transport, and transformation of compounds in natural and polluted environmental compartments. This includes the atmosphere, hydrosphere, and lithosphere. Impact of these on a number of issues will be discussed. Prerequisite: CH351. (U)(3) Occasionally.

## CH469, Special Topics in Biochemistry:

 Various advanced topics in biochemistry. The subject matter for study will be listed when the course is offered. Prerequisite: One year of biochemistry or permission of the instructor. (U/G)(3) Occasionally.CH4'71, Physical Chemistry 1: The introduction to quantum chemistry, bonding, spectroscopy, and statistical mechanics. Prerequisites: CH352 or equivalent, MA107 or equivalent, PH202 or equivalent. (U/G)(3) Spring.

CH4'72, Physical Chemistry 2: The introduction to chemical thermodynamics and chemical kinetics. Prerequisites: CH352 or equivalent, MA107 or equivalent, PH202 or equivalent. (U/G)(3) Fall.

CH473, Physical Chemistry Laboratory:
Introduction to methods for determining physical phenomena of chemistry. The topics covered will vary by section number, and can include thermodynamics, kinetics, spectroscopy, quantum chemistry, and computational methods. Co- or prerequisite: CH 4 '71 or CH 4 ²2. (U/G)(2) Annually, term varies.

CH475, Computational Chemistry: The course covers theoretical methods of computing molecular structure. Based on the structure, thermodynamic properties, reactivity, and spectroscopic measurements (ultraviolet, visible, infrared, and nuclear magnetic resonance) can be computed. Computed values are compared to experimental data. Prerequisite: CH352 with a C or better. (U)(2) Occasionally.

CH479, Special Topics in Physical Chemistry: Various advanced topics in physical chemistry. The subject matter for study will be listed when the course is offered. Prerequisite: One year of physical chemistry or permission of the instructor. (U/G)(3) Occasionally.

CH492, Chemistry Seminar 2: Attendance at and participation in the chemistry departmental seminar series, including an oral presentation on a research project or literature review. Required for university honors. Prerequisites: CH392 and 28 hours of chemistry. (U)(1) Fall and spring.

CH493, Undergraduate Research: Individual research under guidance of a faculty member. Required for university honors. Prerequisites: 14 hours of chemistry, permission of the instructor, and permission of the head of the department. (U/G)(1) Fall and spring.

CH494, Undergraduate Research: Individual research under guidance of a faculty member. Required for university honors. Prerequisites: 14 hours of chemistry, permission of the instructor, and permission of the head of the department. (U/G)(2) Fall and spring.

CH499, Honors Thesis. (U)(3) Annually, term varies.

## CH518, Advanced Placement Workshop

 Chemistry High School Teachers: The workshop will focus on the topics found on the AP exam and in college general chemistry (atomic structure, periodic properties, bonding, kinetics, thermodynamics, electrochemistry, equilibrium, solutions, acid/base, and solubility). The focus of the workshop will be on problem solving and course content material with some limited laboratory demonstration activities. (G) (3) Summer.
## Classical Studies

## Administration

Chad Bauman, PhD, Department Chair
Associate Professor
Christopher Bungard, PhD
Assistant Professor
Lynne Kvapil, PhD

## Department Website

www.butler.edu/classics

## Why Study Classics?

The culture, history, and literature of ancient Greece and Rome have long captivated the imagination of people throughout history and across the globe, from the Renaissance to the founding fathers of America, to modern writers from the Caribbean. We continue to live in a world of classical roots, whether it be the Athenian roots of democracy or the Roman origins of our republic, the Greek love for the beauty of athletics, or an enthusiasm for theatre that moved from Greece to Rome to Shakespeare and beyond. The Greeks and the Romans helped articulate the liberal arts that are at the heart of a Butler education. As we engage with the thinking and the art of the ancients, we aim to develop an understanding, enjoyment, and critical appreciation of some abiding principles of our world. We enter into dialogue with minds of the past in order to understand ourselves better now.

Studying the Greeks and Romans, we become part of our larger family over time. We enrich our minds and our imaginations, and we sharpen our skills for work and life today.

## Why Study Classics at Butler?

- Intimate and vibrant learning community: Students in the Classical Studies Program at Butler have the opportunity to work closely with a small but dedicated faculty. Smaller classes give students a greater opportunity to engage directly with faculty and with each other. As part of a smaller major, students develop a stronger sense of being part of a community of thinkers engaging in a subject they are passionate about.
- Building on past knowledge: Our program recognizes the quality of work many students have done before arriving on our campus. Students placing into the second or third year of Latin and completing at least six hours of study in Latin are eligible for 3-9 advanced placement credit hours, which may count toward the major or the minor.
- Real engagement with the ancient world: Students are encouraged to immerse themselves in the environments that inspired the ancient Greeks and Romans. Our program offers the opportunity to study the culture and literature of the Romans while traveling to important sites in Rome and Italy, or to participate in an archaeological field school in Greece. Our program is also supportive of students who wish to study abroad in programs in Greece and Italy specifically focused around classical studies.
- Practical experience: Our students are encouraged to take advantage of opportunities to work with faculty on research of their own, whether in the form of a Butler Summer Institute project or a senior thesis. Students who have done quality research have presented their work at undergraduate conferences and regional classics conferences.
- Making your education your own: Thanks to generous support from the Georgia Watkins Fund, our program provides funds to help students participate in archaeological digs, select summer study programs, or conferences in classics. Grants are awarded on a competitive basis.
- Embracing the liberal arts: Since the field of classical studies embraces a wide variety of approaches to the study of the ancient Greeks and Romans, our program
encourages students who wish to relate their interest in classics with work in other disciplines. Our students often take courses in English, history, philosophy, religion, political science, and the modern languages.


## Classical Studies Student Learning Outcomes

Students majoring in classical studies are expected to gain factual knowledge about key figures, historical events, and concepts from Greek and Roman antiquity. They will interpret and analyze significant works from antiquity, and at the same time gain a better understanding of cultural diversity by comparing current values and practices to those of the Greeks and Romans. They will become proficient in reading Latin or Ancient Greek texts and discover how knowledge of Latin or Ancient Greek helps in the understanding of modern languages.

## Degree Programs

- Major in Classical Studies (BA)
- Minor in Classical Studies


## Requirements for the Major

A minimum of 30 hours combined of classics, Greek, and/or Latin, including one 300-level course in Greek or Latin. A minimum of three 300-level courses. Students may test out of the 200-level courses.

## Requirements for the Minor

A minimum of 18 hours combined of classics, Greek, and/or Latin. A minimum of two 300-level courses. Note: It is recommended that students learn either Greek or Latin, at least at the beginning level. If they continue with two courses at the 200 level or above, these courses will count both toward their minor and toward fulfilling the foreign language requirement for a liberal arts degree.

## Core Courses Offered by Classical Studies

PCA262-CLA, Greek Art and Myth: Art illuminates myth; myth makes sense of art. Students will acquire a sense of the major periods of Western art, will consider artistic questions large (Is art subjective? Is there a proper subject matter of art?) and small (What is contrapposto?), will study in some depth about 60 artistic images, mostly Greek, and will become acquainted with a set of Greek myths. The course will include a museum visit, a skit, and a creative art project. (U)(3) Fall and spring.

TI200-CLA, Roman Perspectives: This course will examine civic engagement in the Roman world, both as a pagan and Christian capital for the West. We will undertake this investigation by looking at a variety of original sources translated into English. As we examine the texts of these authors, we will also have the opportunity to think about how the ideas of the ancient Romans have influenced cultures from Britain, France, and Spain in the West to the shores of North Africa to the civilizations of the Eastern Mediterranean. (U)(3) Fall.

TI201-CLA, Ancient Greek Perspectives: An examination of areas of ancient Greek culture. Sources include texts of poetry, history, drama, law, medicine, and philosophy, as well as works of art. Themes will vary depending on the professor. Possible themes: deep thinking and free thinking, participation in democracy, gender roles, warfare, and empire. (U)(3) Spring.

## Classical Studies Courses

CLA261, Etymology: Word Power for Test
Takers: Course will focus on the Greek and Latin roots that are the basis for much of the scientific, technical, and professional communities.
Recommended for students intending to take the MCAT, LSAT, GRE, and GMAT. (U)(3)

CLA300, Study Tour of Classical Greece: Tour of the major archaeological sites and museums of the Bronze Age and Classical Greece. (U/G)(2-6) Summer.

CLA301, Epic Poetry: An in-depth study of the ancient epic. Course will focus on Homer's "Iliad," Homer's "Odyssey," or Virgil's "Aeneid." Other material will be brought in as background. (U)(3) Spring.

CLA303, Drama on the Ancient Stage: Course may focus on Greek or Roman tragedy or comedy. Performance may be part of the course. (U)(3) Fall.

## CLA322, Art and Architecture of Greece

 and Rome: An introduction to the art and architecture of Greece and Rome, including the topography of Athens and Rome. (U)(3) Spring.CLA323, Women in Antiquity: This course introduces students to primary source material (literary, documentary, and material) that sheds light on the lives of women in ancient Greece and Rome, methods of analyzing this data, and various debates in this field of study. We may also discuss issues of gender and sexuality, minorities, and non-elites. (U/G)(3) Occasionally.

CLA360, Topics in Classics: In-depth study of special topics not covered in regular courses. (U)
(3) Fall and spring.

CLA400, Independent Study: Individual study of a specific topic in Classics that does not involve the reading of Latin or Greek texts. (U)(1) Occasionally.

CLA401, Independent Study: Individual study of a specific topic in Classics that does not involve the reading of Latin or Greek texts. (U)(2) Occasionally.

CLA402, Independent Study: Individual study of a specific topic in Classics that does not involve the reading of Latin or Greek texts. (U)(3) Occasionally.

CLA499, Honors Thesis: Thesis research. (U) (3) Occasionally.

## Foreign Language Courses

GK101, Elementary Greek 1: Introductory course which prepares students to read the New Testament and the works of Homer, Sophocles, Plato, and others. (U)(4) Fall.

GK102, Elementary Greek: Introductory course which prepares students to read the New Testament and the works of Homer, Sophocles, Plato, and others. GK101 is a prerequisite. (U)(4) Spring.

GK203, Intermediate Ancient Greek 1: A course at the intermediate level, with emphasis on vocabulary acquisition. Material will be chosen for accessibility. Readings may include: Euripides' "Alcestis," Plato's "Crito," selections from Homer's "Iliad" or Herodotus' "History" or Lysias' speeches, or selections from the New Testament in Koine Greek. Prerequisite: GK101 and GK102 or placement at the 200 level. (U)(3) Occasionally.

GK204, Intermediate Ancient Greek 2: A course at the intermediate level, with emphasis on vocabulary acquisition. Material will be chosen for accessibility. Readings may include: Euripides' "Alcestis," Plato's "Crito," selections from Homer's "Iliad" or Herodotus' "History" or Lysias' speeches, or selections from the New Testament in Koine Greek. Prerequisite: GK101 and GK102 or placement at the 200 level. (U)(3) Occasionally.

GK301, Advanced Ancient Greek: A course at the advanced level with a vocabulary stretch and arcane points of grammar. Readings may include: tragedies of Aeschylus, Sophocles, or Euripides; Plato's "Apology," "Symposium," "Phaedrus," or selections from "The Republic;" Thucydides' The

History of the Peloponnesian War. This course is repeatable for credit. The author will change each semester. Prerequisites: GK203 and GK204, placement into the 300 level, or the permission of the instructor. (U/G)(3) Fall, spring, and summer.

GK360, Topics in Greek: In-depth study of works not covered in earlier courses. This course is repeatable for credit. Prerequisites: GK203 and GK204, placement into the 300 level, or permission of instructor. (U/G)(3) Fall, spring, and summer.

GK400, Independent Study: Directed reading in Greek. Consult head of department before registering. (U/G)(1) Fall, spring, and summer.

GK401, Independent Study: Directed reading in Greek. Consult head of department before registering. (U/G)(2) Fall, spring, and summer.

GK402, Independent Study: Directed reading in Greek. Consult head of department before registering. (U/G)(3) Fall, spring, and summer.

GK499, Honors Thesis: (U)(3) Occasionally.
LT101, Elementary Latin 1: An introductory course that prepares the student to read the Latin prose and poetry of Virgil, Homer, Livy, Ovid, and others. (U)(4) Fall.

LT102, Elementary Latin 2: An introductory course that prepares the student to read the Latin prose and poetry of Virgil, Homer, Livy, Ovid, and others. LT101 is a prerequisite. (U)(4) Spring.

LT203, Intermediate Latin 1: A course at the intermediate level, with emphasis on vocabulary acquisition. Material will be chosen for accessibility. Readings may include: Cicero's orations, Virgil's "Aeneid," or the letters of Pliny. Prerequisites: LT101 and LT102 or placement at the 200 level. (U)(3) Fall.

LT204, Intermediate Latin 2: A course at the intermediate level, with emphasis on vocabulary acquisition. Material will be chosen for accessibility. Readings may include: Cicero's orations, Virgil's "Aeneid," or the letters of Pliny. Prerequisites: LT101 and LT102 or placement at the 200 level. (U)(3) Spring.

LT301, Advanced Latin: A course at the advanced level with a vocabulary stretch and arcane points of grammar. Readings may include: Ovid's "Metamorphoses;" lyric poetry by Catullus, Propertius, Tibullus, and Ovid; satire by Horace or Juvenal; or the comedies of Plautus and Terence. Prerequisites: LT203 and LT204, placement into the 300 level, or permission of the instructor. (U/G)(3) Fall, spring, and summer.

LT360, Topics in Latin: In-depth study of works not covered in earlier courses. This course is repeatable for credit. Prerequisites: LT203 and LT204, placement into the 300 level, or permission of instructor. (U/G)(3) Fall, spring, and summer.

LT400, Independent Study: Directed reading in Latin. Consult head of department before registering. (U/G)(1) Fall, spring, and summer.

LT401, Independent Study: Directed reading in Latin. Consult head of department before registering. (U/G)(2) Fall, spring, and summer.

LT402, Independent Study: Directed reading in Latin. Consult head of department before registering. (U/G)(3) Fall, spring, and summer.

LT499, Honors Thesis: (U)(3) Occasionally.

# Computer Science and Software Engineering 

Administration<br>Jonathan P. Sorenson, PhD, Department Chair Professors<br>Zhi-Hong Chen, PhD; Panagiotis K. Linos, PhD; Jonathan P. Sorenson, PhD<br>Associate Professor<br>Ankur Gupta, PhD<br>Department Website<br>www.butler.edu/computer-science

## Why Study Computer Science or Software Engineering?

These disciplines are an excellent choice for students who enjoy problem solving and are good at mathematics and the sciences. Good communication skills are also a plus, as this type of work is typically done in small groups or as part of a team. Computers and software have become essential tools in all disciplines, so you can pair the study of computer science or software engineering with a major or minor in any other area of study, including the sciences, business, fine arts, or the humanities. Employment prospects in computer science and software engineering are excellent.

## Why Study Computer Science or Software Engineering at Butler?

- Our Engineering Projects in Community Service Program combines service learning with the practice of software engineering; student-run teams develop software for charity and nonprofit clients.
- Our supercomputer is available for student research projects, with possible support
available through the Honors Program and the Butler Summer Institute.
- Our students learn parallel programming theory and techniques both in the first-year-level CS142 course and in the junior/ senior-level CS452 course.
- Most of our students add a second major or minor and still graduate on time.
- Quality internships and part-time jobs are plentiful in the Indianapolis area.
- Our alumni advisory board is active and engaged, not only mentoring our students and visiting for pizza lunches with our students, but also advising the department on curriculum and career preparation.

Our software engineering program prepares students for professional careers as software system designers, developers, testers, maintainers, and project managers. Our computer science program is more broad-based and prepares students not only for a variety of careers in the computing disciplines, such as systems or database administration and web development, but also for graduate study either in computer science or a related discipline, or for professional programs such as law school.

## Degree Programs

- Major in Computer Science (BS, BA)
- Major in Software Engineering (BS, BA)
- Minor in Computer Science


## Computer Science Student Learning Objectives

- Analyze and solve mathematics-based problems
- Understand and explain the main concepts, principles, algorithms, data structures, and theories of computer science
- Write programs and develop software to solve problems
- Communicate and work effectively in teams
- Articulate one's role in society as a computing professional, including ethical, legal, and social obligations


## Requirements for the Computer Science Major

All of the following courses:

- MA106-107, Calculus and Analytic Geometry I, II
- MA215, Linear Algebra
- CS151 and CS252, Foundations of Computing I, II
- CS248, Object-Oriented Programming and Data Structures
- CS282 or CS283, EPICS I
- CS321, Computer Organization
- CS351, Algorithms
- SE361, Object-Oriented Design
- CS333, Theory of Database Systems
- CS452, Parallel Algorithm Design and Programming
- CS485, Computer Ethics
- CS473, Topics in Computer Science
- 1 course numbered CS440-459
- 1 course numbered CS430-439 or SE460 or above


## Requirements for the Computer Science Minor

- CS151, Foundations of Computing I
- CS248, Object-Oriented Programming and Data Structures
- 12 additional credit hours of computer science or software engineering electives numbered 250 or above


## Software Engineering Student Learning Objectives

- Analyze and solve mathematics-based problems
- Understand and explain the main concepts, principles, algorithms, data structures, and theories of computer science and software engineering
- Write programs and develop software to solve problems
- Communicate and work effectively in teams
- Articulate one's role in society as a computing professional, including ethical, legal, and social obligations
- Acquire and synthesize new knowledge for software development in specific application domains


## Requirements for the Software Engineering Major

All of the following courses:

- MA106 and MA107, Calculus and Analytic Geometry I, II
- MA162, Probability and Statistics
- CS151 and CS252, Foundations of Computing I, II
- CS248, Object-Oriented Programming and Data Structures
- CS282 or CS283, EPICS I
- CS321, Computer Organization
- CS351, Algorithms
- CS333, Theory of Database Systems
- CS452, Parallel Algorithm Design and Programming
- CS485, Computer Ethics
- SE361, Object-Oriented Design
- SE461, Managing Software Development
- SE462, Modernizing Legacy Software
- SE463, Software Testing and Quality Assurance
- SE411, Internship

One of the following two courses:

- CS435, Computer Networks
- CS441, Organization of Programming Languages
- Three additional credit hours of computer science or software engineering electives numbered 300 or above


## Core Courses Offered by Computer Science

AR220-CS, Robot Programming: This introductory programming course features personal robots that can move, draw, and take digital pictures. Robot behaviors are programmed and controlled remotely using a high-level language such as Python from a desktop or laptop computer. Topics include conditional execution, repetition, defining functions, and using arrays. No prior programming experience required. (U)(3) Fall, spring, and summer.

## Computer Science Courses

CS142, Introduction to Computer Science and Programming: An introduction to programming in a high-level language (assignment, data types, expressions, selection, loops, functions, arrays) including parallel programming for supercomputers. Topics such as AI, software engineering, and databases are also discussed. Prerequisite: MA101 or equivalent. (U)(3) Fall, spring, and summer.

CS151, Foundations of Computer Science:
Introduction to mathematical problem solving, with emphasis on techniques for designing computer-based solutions. Concepts include problem-solving principles, logic, proof techniques, sets, sequences, functions, relations, and inductive and recursive thinking. Prerequisites: MA101 or MA102 or equivalent, with a declared major or minor in CS/SE. (U) (3) Fall.

CS248, Object-Oriented Programming and Data Structures: This course is an introduction to object-oriented programming using Java. Topics include algorithm analysis, recursion, the stack, queue, tree, and heap data structures, sorting algorithms, and GUI programming. A brief survey of computer science is also included: history, software engineering, computer organization, operating systems, networks, programming languages, databases, artificial intelligence, and theory. Prerequisites: CS142 or equivalent and CS151. (U)(5) Spring.

CS252, Foundations of Computing 2: As a continuation of CS151, concepts include mathematical logic, formal grammars, algebraic structures, finite state machines and automata, graph theory, and combinatorics. Prerequisite: CS151 (U)(3) Spring.

CS282S, Epics 1 Service Learning: Supervised team software project for a local charity or nonprofit organization. May be repeated for credit. Corequisite: CS142 or equivalent. (U)(2) Fall and spring.

CS283S, Epics 1 Service Learning: Supervised team software project for a local charity or nonprofit organization. May be repeated for credit. Corequisite: CS142 or equivalent. (U)(3) Fall and spring.

CS300, Teaching Practicum: Students assist a faculty member teaching a 100- or 200-level CS course by helping students with assignments and laboratory exercises, conducting help sessions, preparing course materials, and setting up laboratory exercises. The student receives regularly scheduled supervision from the faculty instructor. May be repeated once for credit. (U) (3) Occasionally.

CS308, Problem Seminar: A survey of basic problem-solving strategies such as recursion, divide and conquer, and backtracking and applying these strategies to sample problems in mathematics, text processing, graphics, and games. Prerequisite: CS248 or permission of the instructor. (U)(1) Fall and spring.

CS321, Computer Organization: Principles of computer architecture are introduced from a layered point of view, beginning at the level of gates and digital logic, and progressing through micro-programming, the machine language execution cycle, addressing modes, symbolic assembly language, and the fundamentals of operating systems. Advanced topics including pipelined and parallel architectures are also covered. Corequisite: CS248. (U)(3) Fall.

CS333, Database Systems: An introduction to the theory, design, and use of modern database management systems. Topics include the relational, entity-relationship, and objectoriented data models, query languages such as SQL, file systems, concurrency and deadlock, reliability, security, and query optimization. Prerequisites: CS248 and CS252. (U/G)(3) Fall.

CS351, Algorithms: A systematic study of data structures and algorithms with an introduction to theoretical computer science. Topics include lists, stacks, queues, trees, and graph structure, searching and sorting algorithms, mathematical
algorithms, time and space complexity, an introduction to the theory of NP-completeness, and an introduction to computability theory. Prerequisite: CS248. (U)(3) Fall.

CS382S, Epics 2 Service Learning: Supervised team software project for a local charity or nonprofit organization. May be repeated for credit. Prerequisite: CS248. (U)(2) Fall and spring.

CS383S, Epics 2 Service Learning: Supervised team software project for a local charity or nonprofit organization. May be repeated for credit. Prerequisite: CS248. (U)(3) Fall and spring.

CS403, Independent Study: Provides an opportunity for qualified students to pursue special topics under the guidance of a department staff member. Prerequisite: Permission of the department. (U/G)(3) Occasionally.

CS411, Internship: Supervised work experience directly related to major area of study. Prerequisites: Junior or senior standing and permission of department. (U)(3) Occasionally.

## CS431, Theory of Operating Systems:

Introduces the major concept areas of operating systems principles, including the study of process, storage, and processor management; performance issues; distributed systems; and protection and security. Prerequisites: CS248, CS252, and CS321. (U/G)(3) Occasionally.

CS435, Computer Networks: An introduction to computer networks from a layered point of view beginning with the physical and data link layers, and progressing through the medium access layer, the network layer, the transport layer, and the applications layer. Specific content includes Ethernet, TCP/IP, and the Web. Students will write client/server programs that communicate across a network. Prerequisite: CS321. (U/G)(3) Occasionally.

CS441, Organization of Programming
Languages: Emphasizes the principles and programming paradigms that govern the design and implementation of contemporary programming languages. Includes the study of language syntax, processors, representations, and paradigms. Prerequisites: CS252, CS321, and SE361. (U/G)(3) Occasionally.

CS447, Computer Graphics: An introduction to the mathematical basis of computer graphics and graphics algorithms. Topics include 2D and 3D graphics, transformations, perspective, and animation. Prerequisite: CS248. (U)(3) Occasionally.

CS451, Theory of Computation: Basic theoretical principles of computer science that are embodied in formal languages, automata, computability, and computational complexity. Includes regular expressions, context-free grammars, Turing machines, Church's thesis, and unsolvability. Prerequisites: CS252, CS321, and CS351. (U/G)(3) Occasionally.

CS452, Parallel Algorithm Design and Programming: A study of theoretical and practical paradigms of parallel algorithm design. Topics include model costs, lower bounds, architecture and topology, data-parallelism, synchronization, transactional memory, message passing, and parallel design for sorting, graphs, string processing, and dynamic programming. (U)(3) Spring.

CS455, Numerical Analysis: Solutions of equations and systems, error analysis, numerical differentiation and integration, interpolation, least squares approximation, and numerical solution of ordinary differential equations. Prerequisites: MA107 and CS142 or equivalent. (U/G)(3) Occasionally.

CS458, Introduction to Cryptography and Cryptanalysis: An introduction to classical and public-key cryptographic protocols, including mathematical and algorithmic cryptanalysis. Symmetric key systems include simple substitution and transposition ciphers, the Vigenère cipher, the one-time pad, block ciphers, and quantum cryptography. Public-key systems include RSA, discrete-log systems, Diffie-Hellman and EIGamal, digital signatures, and zero knowledge protocols. Prerequisites: CS151 or MA205, and CS142 or equivalent. (U) (3) Occasionally.

CS4'73, Topics in Computer Science: In-depth study of special topics not covered in regular courses. Prerequisite: Permission of department. (U/G)(3) Fall and spring.

CS482S, Epics 3 Service Learning: Supervised team software project for a local charity or nonprofit organization. May be repeated for credit. Prerequisites: SE361 and one of CS282, CS283, CS382, or CS383. (U)(2) Fall and spring.

CS483S, Epics 3 Service Learning: Supervised team software project for a local charity or nonprofit organization. May be repeated for credit. Prerequisites: SE361 and one of CS282, CS283, CS382, or CS383. (U)(3) Fall and spring.

CS485, Computer Ethics: Ethical and social issues in computing with emphasis on professional responsibilities, risks and liabilities, and intellectual property. Prerequisites: CS142 and sophomore standing. (U/G)(1) Fall.

CS490, Research Methods: An introduction to research methodology in computer science, including an overview of computer science literature and techniques for presenting and evaluating research results. Prerequisites: CS321, CS351, and SE361, or junior standing and permission of the department. (U)(2) Occasionally.

CS499, Honors Thesis. (U)(3) Occasionally.

## Software Engineering Courses

## SE267, Business Application Development:

Programming in Visual Basic, with applications to business. Topics include data representation, control structures, arrays, functions, and objects. Prerequisite: None. (U)(3) Fall, spring, and summer.

## SE331, Web-Based Client/Server

Programming: Web-based applications programming in a Unix-based environment. Topics include XHTML/CSS and JavaScript on the client side, and PHP and Perl CGI programming on the server side. Other topics include client/server object-oriented software architectures, protection and security related to network programming, and database connectivity. Prerequisite: CS248 (U)(3) Occasionally.

SE361, Object-Oriented Design: This course uses the Unified Modeling Language (UML) as a vehicle to introduce the basic principles of object-oriented methodology and design, covering classes, objects, data abstraction, polymorphism, information hiding, and relationships among classes such as inheritance, association, aggregation, and composition. Specific design techniques are covered for object-oriented programming languages such as Java and C++. The course also provides a first exposure to the software development lifecycle of object-oriented software applications. A small team-design project is required. Prerequisite: CS248. (U)(3) Spring.

SE411, Internship: Supervised work experience in software engineering. Prerequisites: SE361, SE461, CS485, and one of SE462, CS382, or CS383. (U)(3) Occasionally.

## SE461, Managing Software Development:

 Techniques, principles, and processes for developing large, complex software systems: Systems analysis and specification, modeling, design patterns, implementation, validation and verification, quality assurance, and project management. A team-based software project is required. Prerequisite: SE361. (U/G)(3) Occasionally.
## SE462, Modernizing Legacy Software:

Fundamental concepts, principles, techniques, and tools for the maintenance and evolution of legacy software systems. Software maintenance and evolution process models, reengineering, reverse engineering, and program comprehension tools. A modernization project is required. Prerequisite: SE361. (U/G)(3) Occasionally.

## SE463, Testing and Quality Assurance:

Basic concepts, systematic techniques, and tools involved in testing and QA of software systems. Some topics to be covered include black and white box testing techniques, objectoriented testing, regression testing, system integration testing, planning, and reporting of testing activities. Prerequisite: SE361 (U)(3) Occasionally.

## SE473, Topics in Software Engineering:

In-depth study of special topics not covered in regular courses. Prerequisite: Permission of the department. (U/G)(3) Occasionally.

## Economics

## Professors

Peter Grossman, PhD, Efroymson Chair of Economics; Robert Main, PhD; William Rieber, PhD

## Associate Professor

Kathy Paulson Gjerde, PhD
Adjunct Faculty
Robert Kirk, PhD; Theodore Kuhn, MA; Thomas
Litkowski, MA; Timothy Zimmer, PhD

## Program Website

www.butler.edu/las/economics

## Why Study Economics?

Economics provides you with problemsolving and data-gathering skills to make informed decisions in a variety of settings, e.g., government, law, finance, business, and journalism; and for a variety of job responsibilities-from college intern to a newly hired bank credit analyst at one end of the spectrum, to U.S. senator, Supreme Court justice, or CEO of a successful business on the other.

Besides being a strong major in its own right, economics is a nice complement for students who have interests in philosophy, political science, sociology, history, mathematics, psychology, foreign languages, engineering, and English. Indeed, the Nobel Prize in Economics is often awarded to economists who also have a keen interest in one of the above areas.

## Why Study Economics at Butler?

You can study economics as a major in the College of Liberal Arts and Sciences and also as a major in the College of Business. The student in Liberal Arts and Sciences may have a given career path in mind but often does not. He or she knows that economics offers an array of opportunities and takes economics to learn critical-thinking skills and about the dynamic economic environment in which we live. The career choice will follow. The same applies to a student who majors in the College of Business, but the career choice in that case is more targeted to the business sector. The economics courses taken in either college are the same; the courses outside of economics, though, are different between the two colleges.

## Economics Student Learning Outcomes

Students will learn and discuss issues such as how the Federal Reserve creates money and influences interest rates domestically and around the world, why the euro changes in value against the dollar, and the reason behind Zimbabwe inflation. You'll learn about the "Wealth of Nations" from rich countries (e.g., the United States) to poor ones (e.g., Bangladesh), about growing countries (e.g., China) and countries transitioning to capitalism (e.g., Russia). You'll learn about the invisible hand of the market and the different roles of government in a mixed economy.

The tools in addressing these questions include supply and demand, international trade and exchange rate determination, monetary and fiscal policy, market structure, and statistical relationships.

## Degree Programs

- Major in Economics (BA)
- Minor in Economics


## Requirements for the Major

The major consists of 34 hours, including the required foundation ( 13 hours*), other required courses ( 9 hours), and electives ( 12 hours).

## Required Foundation

- EC231, Principles of Microeconomics
- EC232, Principles of Macroeconomics
- MA125, Business Calculus or MA106, Calculus and Analytical Geometry I (either course also satisfies the University Core Curriculum under Analytic Reasoning)
- MS100, Basic Excel Skills
- MS264, Statistics
- MS265, Information Technology
* Not counting MA125 or MA106, and with MS101 being one hour.


## Other Required

- EC332, Intermediate Macroeconomics
- EC354, Intermediate Microeconomics
- EC464, Quantitative MethodsEconometrics

Electives: any four courses numbered 300 or 400 level

## Requirements for the Minor

The minor consists of 18 hours:

- EC231, Principles of Microeconomics
- EC232, Principles of Macroeconomics
- Either EC332, Intermediate Macroeconomics or EC354, Intermediate Macroeconomics
- 3 courses numbered 300 or 400 level


## Core Courses Offered by Economics

SW220-EC, The Economy and Society:
This course examines important concepts of microeconomics and macroeconomics and analyzes issues such as energy prices, prescription drug costs, pollution, and globalization of markets using these concepts. It explores how economic life is intertwined with a society's culture, politics, values, and history. Further, it considers the limitations of the economic methodology to place economics in a context with the other social sciences. (U)(3) Fall and spring.

SW221-COB, Sustainability in Institutions: There is an emerging body of thought that argues that, in order to be successful in the long run, institutions of all sorts-including but not limited to businesses-need to take into account economic performance, environmental impacts, and social justice. The course will explore what these concepts mean and the challenge of implementing a workable integration of these concepts. The course is crossdisciplinary and will get into issues of science, social science, ethics, and economics. Historically, environmental and social impacts have been considered, if at all, as costs to be ignored, minimized, or externalized as much as possible. This new body of thought argues that environmental quality and social performance should be integrated into institutional strategy. This course will introduce students to economic and ethical analysis in order to help them to have appropriate bases for making judgments. The course will then explore the challenge of minimizing environmental and social impacts. (U)(3) Occasionally.

## Economics Courses

EC231, Principles of Microeconomics: This course examines the economic behavior of individuals, firms, and markets. The course provides basic concepts of economics and the analytical tools for students to understand how and why people make economic choices. Prerequisites: Sophomore standing, or 15 hours and MA106 or MA125. (U)(3) Fall, spring, and summer.

EC232, Principles of Macroeconomics: This course studies aggregate output, employment, trade, government fiscal and monetary policies, and other national and international economic issues. It provides a framework for understanding and evaluating economic policy choices made by political leaders throughout the world. Prerequisite: EC231. (U)(3) Fall, spring, and summer.

## EC332, Intermediate Macroeconomics:

 Discusses measures of national income; it also examines causes of growth and fluctuations in national income. Prerequisites: EC231 and EC232. (U)(3) Annually, term varies.
## EC336, Comparative Economic Systems:

An inquiry into the underlying principles and operational methods of national economic systems throughout the world. Focuses on the transition of the former socialist countries to market economies, and reviews the alternative models of central planning, market socialism, and market capitalism. Compares the economic policy choices (and consequences) that countries adopt to further national objectives. Prerequisite: SW220 or EC231. (U)(3) Occasionally.

## EC339, Economic History of the United

States: Study of the economic development of the United States, emphasizing both theoretical and quantitative tools of analysis. Prerequisite: SW220 or EC231 (U)(3) Occasionally.

EC342, Law and Economics: This course looks at law and crime from an economic perspective. Topics include property law, contract law, torts, and crime. The course examines theory as well as many actual cases. It also explores the evolution and economic impacts of our laws and legal structure. Prerequisite: EC 101 or SW220 or EC 231 and EC232. (U)(3) Occasionally.

EC346, Health Care Economics: The course will apply economic tools and methods to better understand the current health care system and possible reform policy initiatives. It is intended to be discussion-based and should be attractive to students with a diverse academic background. Prerequisite: EC231 (U)(3) Fall and spring.

EC351, Urban Economics: The application of economic analysis to urban affairs, e.g., ghetto redevelopment, growth, and fiscal management. Theory and policy both are considered in analyzing urban economic problems. Prerequisite: SW220 or EC231. (U)(3) Occasionally.

EC352, Personnel Economics: This course presents an economic approach to a variety of human resource issues, including recruitment and hiring, turnover, motivating workers to high levels of productivity, and job assignment. Basic microeconomic theory is applied to these topics to gain a better understanding of how to successfully manage people. Prerequisites: EC231 and EC232. (U)(3) Spring.

EC354, Intermediate Microeconomics:
Economic theory and management decisionmaking. Specific topics include demand determinants, cost-output functions, and pricing theory. Credit will not be given for both EC350 and EC354. Prerequisites: EC231, EC232, and MA125 or MA106. (U)(3) Annually, term varies.

EC355, Money and Banking: The study of the U.S. monetary system, including the role of the Federal Reserve System. The functions and operations of commercial banks and other depository institutions also are examined. Credit will not be given to both EC355 and FN371. Prerequisites: EC231, EC232. (U)(3) Occasionally.

## EC391, Environmental and Natural

Resources: The economics of externalities and their relation to property rights. Alternative strategies for dealing with environmental problems. Analysis of problems of allocating natural resources over time. Prerequisite: SW220 or EC231. (U)(3) Occasionally.

EC401, Independent Study. (U)(1)
Occasionally.
EC402, Independent Study. (U)(2)
Occasionally.
EC403, Independent Study. (U)(3)
Occasionally.
EC433, International Economics: Examines theories of international trade, tariffs, and regional economics integration; also examines foreign trade financing, international investment, and balance of payments adjustment. Prerequisites: EC231, EC232. (U)(3) Fall, spring, and summer.

EC434, Public Finance: Systems of expenditure, taxation, borrowing, and budgeting of national, state, and local governments. Theories and
principles of taxation. Prerequisite: EC101 or EC231. (U)(3) Occasionally.

EC438, Economic History of Europe: A study of the economic development of selected European states since 1500. Emphasis on economic, demographic, political, social, and cultural forces affecting production and distribution. Prerequisite: SW220 or EC231. (U) (3) Occasionally.

EC462, Mathematical Economics: This course is an introductory exploration of mathematical economics. It examines economics through mathematical models and operations and explores basic issues in economics-supply and demand, profit and utility maximization, monetary and fiscal policy-using formal mathematical models. Students will not simply go over mathematical economic models but will develop an appreciation for how formal economic models are constructed. Prerequisite: EC231, EC232, MA106 or equivalent. (U)(3) Occasionally.

## EC464, Quantitative Methods-

Econometrics: Applications of statistical methods to economic analysis and forecasting. Examines methods of hypothesis testing, linear regression, and time-series analysis, and applies these to issues of micro- and macroeconomics. Prerequisites: EC231, EC232, and MS264 or MA260. (U)(3) Spring.

EC495, Special Topics in Economics: Seminar in selected economics topics. Course content will vary from semester to semester. Prerequisite: SW220 or EC231. (U)(3) Occasionally.

EC499, Honors Thesis. (U)(3) Occasionally.

## Engineering Dual Degree Program

## Administration

Joseph L. Kirsch, PhD, Program Director; Jessica R. McCormick, MST, Academic Program Coordinator and Advisor

## Program Website

www.butler.edu/engineering
The Engineering Dual Degree Program (EDDP) is a partnership between the College of Liberal Arts and Sciences at Butler University and the Purdue School of Engineering and Technology at Indianapolis. Through this five-year undergraduate program, students can earn two degrees: a degree in engineering from Purdue University along with a degree from Butler University in one or more of the following disciplines: sciences; mathematics; economics;
or science, technology, and society. Application for the EDDP is through Butler University, as well as student enrollment and residence for the duration of the program.

## Why Study Engineering at Butler?

Two universities. Two degrees. One program.

- The EDDP provides a student with the opportunity for a diverse, creative, professional, technical, and liberal educational experience occurring through two quality, neighboring universities.
- Students have access to engineering degrees that are ABET (Accreditation Board for Engineering and Technology) accredited and Butler University majors that rest upon a strong tradition of professional and liberal education.
- Our curriculum is integrated throughout the entire program. Most engineering courses are taught at Butler for the first three years of the program with courses taken at both campuses (a five-mile commute) during the last two years.
- Students receive individualized academic support and regularly graduate with their two degrees in five years.
- Career services are available to EDDP students through Butler University, the Purdue School of Engineering and Technology at Indianapolis, and Purdue University at West Lafayette.
- One internship is required, which is typically completed during the summer; however, many students complete more than one or complement their internship with a research experience.
- Students have diverse educational experiences that lead to a wide range of career opportunities with a highly successful placement rate for graduates.

EDDP students select a major from both institutions.

## Major Options at Butler University

- Biology
- Chemistry
- Computer Science
- Economics
- Mathematics
- Physics
- Science, Technology, and Society


## Major Options at the Purdue School of Engineering and Technology at Indianapolis (IUPUI)

- Biomedical Engineering
- Computer Engineering
- Electrical Engineering
- Energy Engineering
- Mechanical Engineering
- Motorsports Engineering

The EDDP curriculum can be viewed at the program website. Engineering courses are noted on the Butler University transcript with a departmental designation of DD.

## English

Administration
Andrew G. Levy, PhD, Department Chair Professors
Dan Barden, MFA: Joseph R. Colavito, PhD; Hilene Flanzbaum, PhD; Andrew G. Levy, PhD; Susan Neville, MFA; Carol Reeves, PhD; William P. Walsh, PhD

## Associate Professors

Chris Forhan, MFA: Lee Garver, PhD; Jason
Goldsmith, PhD; Ania Spyra, PhD: William
Watts, PhD
Assistant Professors
Michael Dahlie, MFA; Brynnar Swenson, PhD
Instructors
Barbara Campbell, PhD; Natalie Carter, PhD; Bryan Furuness, MFA; Angela Hofstetter, PhD; Jim Keating, MBA, EdD; Alessandra Lynch, MFA; Nicholas Reading, MFA; Robert Stapleton, MFA; Susan Sutherlin, MA

Department Website
www.butler.edu/english

## Why Study English?

The English major offers students the tools to master close reading, formal analysis, literary history, critical theory, research strategies, and creative expression. English majors enjoy the beauty of great works of art as they simultaneously ask important questions about the relationship between language and the production of meaning and value. Our students learn to discuss and write critically about the many ways literature and language have influenced the values and lived experiences of societies over centuries, among genders and classes, races and ethnicities, and across geographical boundaries. When English majors head out into the world, we expect that they will carry with them a passion for reading and writing, and a commitment to use language clearly, purposefully, and with sophistication and elegance.

## Why Study English at Butler?

The English Department at Butler University balances the study of traditional fields of English and American literature with a commitment to
interdisciplinary work, involving contemporary fields such as gender and sexuality, film studies, comparative literature, cultural studies, rhetoric of science, and creative writing. Our full-time faculty includes formalists and theorists, cultural historians and rhetoricians, and novelists and poets. Our course offerings reflect diversity: students can choose a traditional English Literature major, or a major with a concentration in Creative Writing; Literary Theory, Culture, and Criticism; or Public and Professional Writing.

In each case, students will find small classes, dedicated teachers, and an active and engaged group of fellow students.

Butler's English Department is home to one of the country's most important Visiting Writers Series, which encourages a sense of literary and creative community that goes beyond the classroom. Recent visitors to the series have included Joyce Carol Oates, Richard Russo, Yusef Kumonyaaka, Elmore Leonard, Jorie Graham, and Junot Diaz. The popular Visiting Writers Series course offers students the chance to meet and talk to many of these writers. The department's secondary programs also extend the opportunities for our majors, including a city-wide creative writing camp, a large peertutoring program where students help students across the University, an award-winning Writing in the Schools service-learning initiative, and an internship program where students gain experience in classrooms, pressrooms, and in small and large businesses.

## English Student Learning Objectives

Our students graduate as incisive readers, cogent thinkers, and powerful writers, well prepared for any profession requiring a rigorous understanding and mastery of language. Because of their exposure to a vast array of human experiences in literature, English majors are more likely to be able to listen to the voices of opposition and disagreement; to accept the persistence in the world of ambiguity and complexity without resorting to facile simplification, cliché, or stereotypes; to consider evidence rather than rush to judgment; and to react to human dilemmas and suffering with compassion. English majors also carry with them a lasting ability to take informed pleasure in all forms of literature and creative production. We believe that the education our majors gain as readers and writers is invaluable whether they work in education, the legal field, the arts, electronic communication, publishing, business, the nonprofit sector, government, or other careers.

## Degree Programs

- Major in English (BA)

Concentrations in Creative Writing;
Literary Theory, Culture, and Criticism; Literature; and Public and Professional Writing

- Master of Arts in English (MA)
- Master of Fine Arts in Creative Writing (MFA)
- Minor in English Literature
- Minor in Creative Writing
- Minor in Public and Professional Writing


## Requirements for the Major

- Minimum of 36 hours beyond first-year English
- Sophomore Requirements: EN185 and three of the four courses in the Literary and Cultural History Sequence (EN245, EN246, EN265, and EN266), EN321 or EN322.
- Junior/Senior Requirements: EN390, Research Seminar; one 300-400-level course in language, rhetoric, or literary criticism; two 300-level literature courses; one 300-400-level course in subject area not covered in the Literary and Cultural History Sequence; for seniors, one 400-level seminar and one 450-level senior essay with emphasis in writing.


## With Creative Writing

Through the concentration in creative writing, English majors have the opportunity to study the art and craft of creative writing. Students are given the opportunity to take workshops in poetry, fiction, and nonfiction. Recent independent-study projects have included screenplays, memoirs, and graphic novels. Each year, through the nationally recognized Vivian S. Delbrook Visiting Writers Series, students have the opportunity to meet and work one-on-one with writers such as Jonathan Lethem, Jean Valentine, and Lorrie Moore. Students who enroll in the creative writing concentration will take:

- Minimum of 48 hours beyond first-year English
- Sophomore Requirements: EN185, EN218, EN219, three of the four courses in the Literary and Cultural History Sequence (EN245, EN246, EN265, and EN266); EN321 or EN322
- Junior/Senior Requirements: EN390: Research Seminar; one 300-400-level course in language, rhetoric, or literary criticism; two 300-level literature courses; one 300-400-level course in subject area not covered in the Literary and Cultural

History Sequence; two 300-level writing courses; for seniors, EN410, Senior Creative Writing Seminar, one creative writing portfolio, and one EN450 senior essay course

## With Literary Theory, Culture, and Criticism

Students will take additional courses in cultural studies, comparative literature, literary criticism, and critical theory in order to study literary texts in a global cultural context. LTCC courses will look at diverse cultural objects-novels, plays, films, visual arts, and media-through the lens of the literary and cultural theories, with the goal of producing sophisticated readers of the contemporary world. This concentration is highly recommended for those planning to pursue advanced degrees in the humanities.

- Minimum of 48 hours beyond first-year English
- Sophomore Requirements: EN185, three of the four courses in the Literary and Cultural History Sequence (EN245, EN246, EN265, and EN266); EN287, Literary Theory, Culture, and Criticism; EN321 and EN322
- Junior/Senior Requirements: EN390, Research Seminar; one 300-400-level course in language or rhetoric; EN385, Studies in Literary Criticism or EN387, Studies in Literary Theory; two 300-level literature courses; two 300-400-level Literary Theory, Culture, and Criticismapproved electives, including at least one EN394/EN494 Special Topics in Film; for seniors, one 400-level seminar and one EN450-level senior essay


## With Public and Professional Writing

Public and Professional Writing courses will prepare you for writing in the world-outside of college and literature classes. PPW courses teach about how to write for a specific audience, and how to use verbal and visual styles to write, design, and edit documents. Course contexts include writing in the workplace, writing in nonprofit settings, writing in the arts, writing in the health sciences, writing about law and public policy, editing and publishing, and grant writing. PPW students also learn effective collaborative skills in internships with community clients, and learn how to build a professional writing portfolio.

- Minimum of 48 hours beyond first-year English
- Sophomore Requirements: EN185, EN218, EN219, three of the four courses in the

Literary and Cultural History Sequence (EN245, EN246, EN265, and EN266); EN321 or EN322; and EN203, Intro to Professional Writing

- Junior/Senior Requirements: EN390, Research Seminar; one 300-400-level course in language, rhetoric, or literary criticism; two 300-level literature courses; one 300-400-level course in subject area not covered in the Literary and Cultural History Sequence; two 300-level professional writing courses; EN386, Studies in Rhetoric, or ST330, Social and Rhetorical Study of Science and Technology; for seniors, EN403, Senior Seminar and Internship in Professional Writing, and one EN450 senior essay


## Requirements for the English Literature Minor

- Minimum of 18 hours beyond first-year English
- EN185, 3-6 hours of 200-level literature courses, and 9-12 hours of 300- and 400-level literature courses


## Requirements for the Creative Writing Minor

- Minimum of 21 hours beyond first-year English
- EN185, EN218, or EN219; 9 additional hours in writing courses and 6 hours of literature courses, including at least one course at the 300 level or above


## Requirements for the Public and Professional Writing Minor

- Minimum of 21 hours beyond first-year English
- EN185, EN203, and EN303; 6 additional hours in writing courses and 6 hours of literature courses, including at least one course at the 300 level or above


## Core Courses Offered by English

PCA218-EN, Visual Literature: The 20thcentury collision of postmodern and digital cultures has given rise to visual narratives in increasingly diverse forms. This course will take inventory of classic story structures, then survey the cultural landscape for dynamic examples of visual literatures. Our investigations are likely to include video games, infographics, sequential art, maps, diagrams, iPhone apps, and more. (U) (3) Summer.

PCA232-EN, Seeing the World and the
Self: When you look out the window, do you
see a tree or the rhythmic sway of dark line and bright color? Do you see a field of grass or waves of innumerable greens? This course will encourage you to see the world through the eyes of an artist by focusing on the natural world. To achieve this we will examine a variety of formats including poetry, the personal essay, painting, and photography in relation to key aesthetic concepts such as the sublime, the beautiful, and the picturesque. We will juxtapose contemporary writers and artists with those from earlier periods to demonstrate how the way we see the world is culturally determined. We will complement our readings with trips to nearby museums (e.g., Indianapolis Museum of Art), galleries, and the studios of local artists. In addition, we will take advantage of such local natural resources as the grounds of the IMA, the canal walk, and Holcomb Gardens, where you will find the raw material for your own reflection and creative expression. (U)(3). Fall and spring.

PCA233-EN, Storycraft: In this course we'll blend the study of craft-the tools and techniques of storytelling-with creation. You'll engage with published stories in addition to writing your own, all to learn how stories work, and how you work best as a writer. (U)(3)

PCA234-EN, Bring the Noise-Spoken Word Between the Lines: Students will explore the dynamism of spoken word evidenced in the resurgence of performance-based art and poetry venues. Study the creative techniques involved in bringing written words to life. Examine past and present performers' stylistic approaches to captivating an audience. Discover how to develop and enhance poetry from the page to the stage. (U)(3) Fall.

TI210-EN, Inquiries in American Literature and History I: This course will be organized around a theme in early American literature, and thereby seek to increase students' understanding of major works, authors, and literary movements of the period. Texts for the course will come primarily from the period up to the American Civil War, and both the texts and the authors studied will be placed within their larger literary and cultural contexts. Particular themes for the course will be published each semester in the schedule of classes. (U)(3) Fall.

TI211-EN, Inquiries in American Literature and History II: This course will be organized around later American literature, and thereby seek to increase students' understanding of major works, authors, and literary movements of the period. Texts for the course will come primarily from the period after the American Civil War, and both the texts and the authors
studied will be placed within their larger literary and cultural contexts. Particular themes for the course will be published each semester in the schedule of classes. (U)(3) Spring.

TI212-EN, Inquiries in British Literature and History I: This course will be organized around early British literature, and thereby seek to increase students' understanding of major works, authors, and literary movements of the period. Texts for the course will come primarily from the period up to 1800 , and both the texts and the authors studied will be placed within their larger literary and cultural contexts. Particular themes for the course will be published each semester in the schedule of classes. (U)(3) Fall.

TI213-EN, Inquiries in British Literature and History II: This course will be organized around later British literature, and thereby seek to increase students' understanding of major works, authors, and literary movements of the period. Texts for the course will come primarily from the period after 1800, and both the texts and the authors studied will be placed within their larger literary and cultural contexts. Particular themes for the course will be published each semester in the schedule of classes. (U)(3) Spring.

TI214-EN, Shakespeare: Introduces Shakespeare's themes, stagecraft, language, and moral vision with special attention to the varieties of human experience portrayed in the plays. (U)(3) Fall and spring.

## TI215-EN, Theory, Culture, Criticism:

This course is an introduction to cultural studies: a critical, theoretical, interpretive, and interdisciplinary way to understand our world and our place in it. This course will look at diverse cultural objects-novels, plays, films, visual arts, and media-through the lens of the literary and cultural theories, with the goal of producing sophisticated readers of the contemporary world. (U)(3) Fall and spring.

## English Courses

EN101, Writing Tutorial: Intensive practice in discovering, shaping, and communicating meaning through writing. Individualized instruction for students who need additional critical reading and writing development to perform satisfactorily in the First Year Seminar. Students will meet during the first week of classes at the published time, but, thereafter, students will arrange a weekly tutorial time with the professor as well as arrange weekly or biweekly tutorials with a peer tutor from the Writers' Studio. Students are assigned to the course on the basis of tests and writing samples. Pass/fail credit. (U)(3) Fall.

## EN185, Introduction to the Discipline of

English: Introduces students to the methods of critical reading and writing and helps them to develop the skills necessary for the study of literature. Required of all English majors. Prerequisite: EN102. (U)(3) Fall and spring.

EN201, Advanced Composition: Studies the craft of expository prose. Emphasizes the construction of well-developed and wellsupported arguments. Prerequisites: FYS101 and FYS102 (U)(3) Annually, term varies.

EN203, Intro Professional Writing: This course introduces students to the opportunities available and the skills needed to write in a variety of professional settings, including businesses, nonprofit organizations, and publications. Students in the course will learn to write for a variety of audiences and a variety of purposes. Prerequisites: FYS101 and FYS102. (U) (3) Fall and spring.

## EN218, Intro Creative Writing-Poetry:

Focuses on the connection between reading and writing. Emphasis on techniques of writing poetry. (U)(3) Fall and spring.

## EN219, Intro Creative Writing-Prose:

Focuses on the connection between reading and writing. Emphasis on techniques of prose writing, fiction, and nonfiction. Prerequisites: FYS101 and FYS102 (U)(3) Fall and spring.

EN245, Inquiries in American Literary and Cultural History 1: This course will be organized around a theme in early American literature, and thereby seek to increase students' understanding of major works, authors, and literary movements of the period. Texts for the course will come primarily from the period up to the American Civil War, and both the texts and the authors studied will be placed within their larger literary and cultural contexts. Particular themes for the course will be published each semester in the schedule of classes. (U)(3) Fall.

## EN246, Inquiries in American Literary

 and Cultural History 2: This course will be organized around a theme in later American literature, and thereby seek to increase students' understanding of major works, authors, and literary movements of the period. Texts for the course will come primarily from the period after the American Civil War, and both the texts and the authors studied will be placed within their larger literary and cultural contexts. Particular themes for the course will be published each semester in the schedule of classes. (U)(3) Spring.
## EN265, Inquiries in British Literary and

Cultural History 1: This course will be organized around a theme in early British literature, and thereby seek to increase students' understanding of major works, authors, and literary movements of the period. Texts for the course will come primarily from the period up to 1800 , and both the texts and the authors studied will be placed within their larger literary and cultural contexts. Particular themes for the course will be published each semester in the schedule of classes. (U)(3) Fall.

EN266, Inquiries in British Literary and Cultural History 2: This course will be organized around a theme in later British literature, and thereby seek to increase students' understanding of major works, authors, and literary movements of the period. Texts for the course will come primarily from the period after 1800, and both the texts and the authors studied will be placed within their larger literary and cultural contexts. Particular themes for the course will be published each semester in the schedule of classes. (U)(3) Spring.

## EN287, Literary Theory, Culture, and

Criticism: This course is an introduction to cultural studies: a critical, theoretical, interpretive, and interdisciplinary way to understand our world and our place in it. This course will look at diverse cultural objectsnovels, plays, films, visual arts, and mediathrough the lens of the literacy and cultural theories, with the goal of producing sophisticated readers of the contemporary world. (U)(3) Fall and spring.

## EN301, Topics in Advanced Composition:

 Studies specific prose methods or styles of writing. Recent offerings include review writing, stylistic analysis, classical rhetoric, and peer tutoring. Open to juniors and seniors. (U/G)(3) Spring.EN303, Studies in Professional Writing: You will learn some basic forms of professional writing as well as some of its special purposes such as public education and outreach, argument and advocacy, reporting, reviewing, or entertaining. You will learn to write within such areas as the environment, health and medicine, science, and technology. (U/G)(3) Annually, term varies.

## EN310, Intermediate Writing Workshop:

Students will have the opportunity to work on their own writing in a workshop setting, which includes the participation and critique of all other students in the course. Students will read extensively in the specified genre and
attend Butler's Visiting Writers' Series events. Prerequisites: EN218 and EN219 or permission of the director of creative writing. (U/G)(3) Fall and spring.

## EN319, History of the English Language:

Studies changes in our language from IndoEuropean and Old English through Middle English to modern American and British English. Open to juniors and seniors. (U/G)(3) Occasionally.

EN321, Comparative Literature 1: Studies world literature in historical, aesthetic, and cultural context. Prerequisite: EN185. (U/G)(3) Fall and spring.

EN322, Comparative Literature 2: Studies world literature in historical, aesthetic, and cultural context with special attention paid to issues in literary and translation theory. Prerequisite: EN321 or junior/senior status. (U/G)(3) Occasionally.

EN341, Topics in 19th Century A: Studies major writers within the context of 19th-century American culture. (U/G)(3) Annually, term varies.

EN362, Renaissance Literature: Studies English poetry, prose, and drama of the 16th and early 17 th centuries. Open to juniors and seniors. (U/G)(3) Occasionally.

EN363, Shakespeare: Studies representative comedies, tragedies, and histories in both their historical and intellectual contexts and their adaptations to modern performance. Open to juniors and seniors. (U/G)(3) Fall and spring.

EN366, Romanticism: Studies British poetry and prose of the late 18th through the mid-19th century. Examines the aesthetic, historical, and intellectual issues of the Romantic Revolution. Particular themes will be published each semester in the schedule of classes (U/G)(3) Occasionally.

EN367, Victorian Literature: Studies English poetry and prose from 1832 to the death of Queen Victoria in 1901. Examines the aesthetic, historical, and intellectual issues of the period and shows how late-Victorian literature provides a bridge to 20th-century aesthetics. Open to juniors and seniors. (U/G)(3) Occasionally.

## EN368, 20th Century British Literature:

Studies modern and postmodern British poetry and prose in historical, aesthetic, and cultural context. Open to juniors and seniors. (U/G)(3) Occasionally.

EN370, Literature and Public Problems: This course explores how literary works capture, contextualize, and imagine past, present, or future public problems such as environmental health, economic issues, and other social issues that impact locally, nationally, and/or internationally. (U)(3) Annually, term varies.

EN381, Studies in Major Authors: Specific courses focusing on extensive study of one or two major writers, their lives, their art, and their development. Open to juniors and seniors. (U/G) (3) Annually, term varies.

EN382, Studies in Poetry: Specific courses on important groups of poets, historical periods of poetry, or bodies of national poetry. Current offerings include modern American poetry, modern British poetry, and contemporary international poetry. Open to juniors and seniors. (U/G)(3) Annually, term varies.

EN384, Studies in Drama: Specific courses on genres of drama, historical periods of drama, or bodies of national drama. Current offerings include Elizabethan and Jacobean drama, modern American drama, and modern European drama. Open to juniors and seniors. (U/G)(3) Annually, term varies.

EN385, Studies in Literary Criticism: Specific courses in the history of literary criticism, important groups of critics, or the application of literary critical methods. (U/G)(3) Annually, term varies.

EN386, Studies in Rhetoric: Offers general and specialized study of the history, criticism, theory, literature, and application of the rhetorical arts. (U/G)(3) Annually, term varies.

EN38'7, Studies in Literary Theory: Specific courses in the history of literary and critical theory, important groups of theorists, or the application of critical methodologies. (U/G)(3) Annually, term varies.

EN390, Research Seminar: Focusing on a single text, or a set of texts by a single author, this course is designed to equip students with the research and writing skills necessary for advanced work in English. This course is required of all English majors, and should be taken during the junior year. Prerequisites: EN185 and two of the following: EN245, EN246, EN265, and EN266. (U/G)(3) Fall and spring.

EN391, Special Topics in Literature: Specific short courses on topics of interest. Prerequisites: Open to juniors, seniors, and graduate students (first-year students and sophomore with permission). (U/G)(1)

EN392, Special Topics in Literature: Specific short courses on topics of interest. Open to juniors, seniors, and graduate students (first-year students and sophomore with permission). (U/G) (2) Occasionally.

EN393, Special Topics in Literature: Specific courses on topics of interest. Open to juniors and seniors. (U/G)(3) Fall and spring.

EN394, Special Topics in Film: Specific courses on topics of interest. Open to juniors and seniors. (U/G)(3)

EN396, Internship: Directed experience in a career setting. Students apply through the head of the department. Open to junior and senior majors. (U)(6) Fall and spring.

EN39'7, Writing Fellows: Writing Fellows work with a designated core class (usually FYS, but other core courses with similar writing requirements may qualify) and instructor throughout the semester, attending class meetings, completing reading assignments, and serving as writing consultants. Students will meet on a regularly scheduled basis with the fellows director, complete assigned pedagogical readings, and complete an end-of-semester report. Must be taken in conjunction with a two-hour independent study with the designated instructor, and with permission of both fellows director and designated instructor. Prerequisites: Completion of FYS, graduate status, and permission of instructor. (U/G)(3) Fall and spring.

## EN403, Senior Seminar in Professional

Writing: In this advanced course in professional writing, students will undertake a major project in the community, and they will also compose a portfolio of their professional writing. (U)(3) Fall and spring.

## EN410, Senior Creative Writing Seminar:

Students will participate in an advanced writing workshop, critique other students' work, attend Butler Visiting Writers' Series events, and complete a substantial writing project. Prerequisites: Senior standing and pre-approval of course project by director of creative writing. (U)(3) Spring.

EN422, Comparative Literature 2: Surveys major periods and texts in non-Western world literature. (U/G)(3) Occasionally.

EN450, The Senior Essay: In this course, students will work towards completing their Senior Essay, a 20-25-page literary, researchbased paper that is a requirement for graduation in the English major. Students will master
professional writing and research methods in their field, as well as techniques for revising prose. (U)(3) Fall and spring.

EN455S, Writing in Schools: This class will rotate classroom discussion sessions where students examine various modes of age-appropriate creative and expository writing pedagogy, and an active experience where students guide and teach elementary or secondary school students to express themselves in literary genres. (U/G)(3) Fall and spring.

EN463, Shakespeare: Studies representative comedies, tragedies, and histories in both their historical and intellectual contexts and their adaptations to modern performance. Open to juniors and seniors. (U/G)(3) Occasionally.

EN466, Romanticism: Studies British poetry and prose of the late 18th through the mid-19th century. Examines the aesthetic, historical, and intellectual issues of the Romantic Revolution. Particular themes will be published each semester in the schedule of classes (U/G)(3) Occasionally.

EN482, Studies in Poetry: Specific courses on important groups of poets, historical periods of poetry, or bodies of national poetry. Current offerings include modern American poetry, modern British poetry, and contemporary international poetry. Open to juniors and seniors. (U/G)(3) Occasionally.

EN493, Special Topics in Literature: Specific courses on topics of interest. Open to juniors and seniors. (U/G)(3) Occasionally.

EN494, Special Topics in Film: Specific courses on topics of interest. Open to juniors and seniors. (U/G)(3)

EN495, Independent Study. (U/G)(1) Fall and spring.

EN496, Independent Study. (U/G)(2) Fall and spring.

EN499, Honors Thesis: Senior majors. (U)(3)
Fall and spring.

## MA Program

The English MA program offers graduate students the opportunity to pursue one of two possible advanced paths of study. In the thesis track, MA students complete 24 semester hours of coursework and six semester hours of MA thesis work. In the non-thesis track, students complete 36 semester hours of coursework. Individuals who complete this degree should expect to acquire a rigorous grounding in the
fundamentals of professional literary analysis, criticism, and research.

## MFA in Creative Writing

Butler's MFA in Creative Writing is a 36 -hour studio program designed for students seeking to enhance their creative and professional proficiency in the literary arts. The program features 10 three-credit courses and six hours of formal thesis work with an advisor. We offer workshops in poetry, fiction, nonfiction, electives in screenwriting, teaching creative writing, alternative forms, graphic novel, young adult fiction, poetic craft, and literary editing and publishing. Students can also take upper-level courses in English, or in other departments, as part of their education.

The program features access to a combination of top-flight, full-time faculty and prominent visiting faculty, including the Booth Tarkington Writer-in-Residence. Through the Vivian S. Delbrook Visiting Writers Series, students attend readings and small question-and-answer sessions with nationally and internationally recognized writers. The program also operates a literary magazine, Booth (booth.butler.edu), which offers students a variety of editorial and teaching mentorship opportunities, and sponsors a rich variety of community programs through the Efroymson Center for Creative Writing.

## MFA Courses

EN501, Graduate Seminar Special Topic: (G)
(3) Fall and spring.

EN502, Graduate Prose Workshop: Graduatelevel creative writing workshop in one of the following prose forms: fiction (novel, short story, or mixed); creative nonfiction; children's/young adult; screenwriting; graphic novel; or open genre. Open to MFA in Creative Writing students only (G)(3) Fall and spring.

EN503, Graduate Poetry Workshop: Graduatelevel creative writing workshop in poetry. Open to MFA in Creative Writing students only. (G)(3) Fall and spring.

EN504, Project Workshop: Required of all MFA students pre-thesis. Thesis preparation and long-form study in one or more of the following genres: fiction, creative nonfiction, poetry, screenwriting, young adult, digital forms, and/or other literary genres. (G)(3) Fall and spring.

EN505, Literary Editing and Publishing: This course introduces students to the production of literary publications. Through lectures and discussions, we will examine everything from the evaluation of manuscripts to the marketing of a
finished product. We will also survey the evolving field of literary magazines and related ethical concerns. (G)(3) Annually, term varies.

EN506, Reading for Writers: Required of all MFA students. Reading practice and pedagogy in one or more of the following genres: fiction, creative nonfiction, poetry, screenwriting, young adult, digital forms, or other literary genres. (G) (3) Occasionally.

EN595, Independent Study. (G)(1) Fall and spring.

EN596, Independent Study. (G)(2) Fall and spring.

EN'\%10, Research Problems. (G)(3) Fall and spring.

EN1711, Thesis. (G)(3) Fall and spring.

## Gender, Women, and Sexuality Studies

Administration

Irune del Río Gabiola, PhD, Program Director Assistant Professor
Brooke Beloso, PhD
Program Website
www.butler.edu/gender-studies
Gender, Women, and Sexuality Studies provides an interdisciplinary setting in which students can examine gender-the social meaning of the distinction between the sexes-and sexualitysexual identities, discourses, and institutionsas they intersect with race, class, ethnicity, nationality, and transnational movements.

In required courses, students analyze gender and sexuality from a variety of academic fields, and they explore the theoretical and historical basis of such study. Upper-division electives are chosen from at least three disciplines, allowing students to pursue their inquiries in more depth without narrowing their focus to a single field. Internships provide students with the option to apply theoretical knowledge to work and/or community-based learning opportunities.

Gender, Women, and Sexuality Studies is an excellent complement to all majors at Butler University, regardless of whether the student plans to attend graduate school or seek employment immediately after graduation. For students interested in graduate school, Gender, Women, and Sexuality Studies provides a strong foundation in women's and gender studies, as well as for advanced work in any academic discipline that lends itself to gender
critique. For students interested in entering the workforce, Gender, Women, and Sexuality Studies students are well equipped to work in a diverse and multicultural world, an attribute today's employers are seeking in a variety of professions and occupations, including public administration, social services, business, the arts, law, medicine, social work, anthropology, journalism, media, and criminology.

## Degree Programs

- Major in Gender, Women, and Sexuality Studies (BA)
- Minor in Gender, Women, and Sexuality Studies


## Requirements for the Major

GWS100, Perspectives in Gender, Women, and Sexuality Studies
Category 1: "Inquiry into Identity." Select one of the following:

- GWS201, Intersections of Identity: Gender, Race, Class, and Sexuality
- TI242-PL, Marginalized in America: Gender at the Intersection of Race and Class
- HST342, Working Women in the Modern City

Category 2: "Activism for Social Change."
Select one of the following:

- GWS202, Resistance for Social Change
- CCM482, Voices of Dissent and Social Change
- PO375, The Role of Protest in U.S. Politics

Transnational Requirement. Select two of the following:

- GWS303, Special Topics: sex\&thecity.org
- AN315, Gender and Colonialism
- AN320, Gender and Sexuality in Globalization
- AN322, Sex, Gender, and Sexuality in Japan
- EN393, Special Topics: Gender, Language, and Globalization
- HST366, Gender, Sex, and Sexuality in Latin America
- HST367, Geographies of Desire: Space, Gender, Sexuality
- JR418, Gender and Media: Global Views
- PO351, African Gender and Sexuality Politics
- RL3'77, Religion, Gender, and the Goddess in Asia

Twelve credit hours of GWSS-approved electives with no more than six credit hours in any one discipline.

## Requirements for the Minor

GWS100, Perspectives in Gender, Women, and Sexuality Studies
Category 1: "Inquiry into Identity." Select one of the following:

- GWS201, Intersections of Identity: Gender, Race, Class, and Sexuality
- TI242-PL, Marginalized in America: Gender at the Intersection of Race and Class
- HST342, Working Women in the Modern City


## Category 2: "Activism for Social Change."

Select one of the following:

- GWS202, Resistance for Social Change
- CCM482, Voices of Dissent and Social Change
- PO375, The Role of Protest in U.S. Politics

GWS304, Feminist and Queer Theory
Transnational Requirement. Select one of the following:

- GWS303, Special Topics: sex\&thecity.org
- AN315, Gender and Colonialism
- AN320, Gender and Sexuality in Globalization
- AN322, Sex, Gender, and Sexuality in Japan
- EN393, Special Topics: Gender, Language, and Globalization
- HST366, Gender, Sex, and Sexuality in Latin America
- HST367, Geographies of Desire: Space, Gender, Sexuality
- JR418, Gender and Media: Global Views
- PO351, African Gender and Sexuality Politics
- RL377, Religion, Gender, and the Goddess in Asia

Six credit hours of GWSS-approved electives.

## Electives

A separate list of GWSS-approved electives will be published each semester, but examples of courses students have taken for GWSS credit in the past include the following:

- GWS300/PL348, Philosophy of Feminism
- GWS303, Special Topics: Love for Sale: Intimate Labor and the Commodification of Love
- GWS303, Special Topics: Ransom Notes and Radical Chic
- GWS303, Special Topics: Written Out of Wedlock
- GWS303, Special Topics: Health Disparities
- GWS303, Special Topics: 50 Shades of Sex
- AN342, Science, Technology, and Society
- AN380/HST305, Special Topics: Witchcraft, Shamanism, and the Paranormal
- AN380, Special Topics: From Peasant to Princess
- AN380, Special Topics: Sex Education across Cultures
- ART315, Postmodernism in the Arts
- ART382, Special Topics: Gender in Art
- CCM330, Representations of Race and Difference
- CCM354, Gender and Communication
- CCM376, Film, Culture, and Criticism
- CCM390, Special Topics: Virginity and Sexual Politics of Film
- CCM420, Queering Film
- CCM468, Women and Rock
- CCM470, Sports, Media, and Culture
- CCM481, Technologies of the Body
- CCM482, Voices of Dissent and Social Change
- EN341, Topics: American Gothic
- EN393, Special Topics: Fin-de-Siècle Literature
- EN393, Special Topics: Gender, Language, and Globalization
- EN394, Special Topics: Gender and Migration in Transnational Cinema
- EN493, Special Topics: Sex, Suffrage, and Empire: Modernism and the New Woman
- HST212/TI235-HST, American Visions: Dialogues on Diversity
- HST338, The Era of Jim and Jane Crow
- HST341, U.S. Women's History
- HST342, Topics in Women's History: Working Women and Modern City
- JR418 Gender and Media: Global Views
- PL375, Topics: Feminist Jurisprudence
- PO380, Special Topics: Gender and Generation in War and Peace
- PO386, Black Political Thought
- PS305, Psychology of Gender
- PS333, Human Sexuality
- RX644, Women's Health Issues
- SO317, Gender and Society
- SO326, Gender, Race, and Crime
- SP490, Sports, Gender, National Identities
- SW200-SO, Understanding Society: Gender from a Sociological Perspective
- SW240-PO, Gender and Generations: War and Peace
- TI231-HST, Mad Women in America
- TI234-HST, Reel America: Film and the American Experience
- TI242-PL, Marginalized in America
- TI255-PO, Politics of Alice Walker


## Core Courses Offered by Gender, Women, and Sexuality Studies

SW223-GWS, Resistance for Social Change:
Civil rights, social movements, resistance, and liberation are the subjects of this course. We will examine the ways in which such minoritized populations as people of color, women, the LBGT-identified, and the poor have demanded rights and responsibilities. (U)(3) Fall and spring.

SW232-GWS, Intersections of Identity: This course will explore the social construction of difference and inequality with particular focus on gender, race, sexuality, and class. Students will interrogate dominant ideologies and develop an understanding of how systems of inequality impact everyone's daily lives. (U)(3) Fall and spring.

## Gender, Women, and Sexuality Studies Courses

GWS100, Perspectives in Gender, Women, and Sexuality Studies: Designed to introduce students to the wide range of topics addressed in gender, women's, and sexuality studies. The course is largely made up of guest lectures given by faculty from a variety of disciplines across campus. Open to non-minors. Pass-fail credit. (U)(1)

GWS201, Intersections of Identity: This course will explore the social construction of difference and inequality with particular focus on gender, race, sexuality, and class. Students will interrogate dominant ideologies and develop an understanding of how systems of inequality impact everyone's daily lives. (U)(3)

GWS202, Resistance for Social Change: This course will examine social justice movements both within and beyond the United States. Taking an interdisciplinary, intersectional approach, students will investigate how marginalized groups, such as people of color, gays, women, and workers, have demanded greater rights and responsibilities. (U)(3) Fall and spring.

GWS300, Philosophy of Feminism: Introduces students to the philosophical method of thinking out issues that confront women in contemporary American society and which challenge all of us. The course's primary focus is the study of feminist responses to issues such as gender socialization, reproductive rights, affirmative action, pornography, beauty, ecofeminism, alternative families, and others. (U)(3) Occasionally.

GWS302, Topics in Gender Studies: Selected topics of significance in gender studies. (U)(2) Annually, term varies.

GWS303, Topics in Gender Studies: Selected topics of significance in gender studies. (U)(3) Annually, term varies.

GWS304, Feminist and Queer Studies: This course investigates the central concepts of critical theory through the exploration of the overlapping terrains of women's and gender studies, feminist and queer theory. Prerequisites: GWS102 and GWS202 or junior/senior status. (U)(3) Annually, term varies.

GWS398, Internship/Practicum in Gender Studies: Designed to give students the opportunity to apply theoretical knowledge to everyday experience through a volunteer position, internship, or employment in a setting where they can explore gender issues. The student will work in conjunction with a faculty member; gender studies director must approve the project. Prerequisites: GS100, GS300, or GS301; junior or senior standing; and completion of six hours of electives. (U)(1) Annually, term varies.

GWS399, Internship/Practicum in Gender Studies: Designed to give students the opportunity to apply theoretical knowledge to everyday experience through a volunteer position, internship, or employment in a setting where they can explore gender issues. The student will work in conjunction with a faculty member; the project must be approved by the gender studies director. Prerequisites: GS100, GS300, or GS301; junior or senior standing; and completion of six hours of electives. (U)(2) Annually, term varies.

GWS400, Internship/Practicum in Gender Studies: Designed to give students the opportunity to apply theoretical knowledge to everyday experience through a volunteer position, internship, or employment in a setting where they can explore gender issues. The student will work in conjunction with a faculty member; the project must be approved by the gender studies director. Prerequisites: GS100, GS300, or GS301; junior or senior standing; and completion of six hours of electives. (U)(3) Annually, term varies.

GWS401, Independent Study: Offers
the qualified student of gender studies the opportunity to pursue a topic of individual interest. Open only to seniors, by permission of the instructor. (U)(1) Annually, term varies.

GWS402, Independent Study: Offers
the qualified student of gender studies the opportunity to pursue a topic of individual interest. Open only to seniors, by permission of the instructor. (U)(2) Annually, term varies.

GWS403, Independent Study: Offers the qualified student of gender studies the opportunity to pursue a topic of individual interest. Open only to seniors, by permission of instructor. (U)(3) Annually, term varies.

GWS405, GWSS Senior Capstone: All GWSS majors must complete the senior capstone course taught or supervised by a GWSS faculty member. The course is designed to enable upper-level students, and especially GWSS majors and minors, to integrate the knowledge and experience gained in GWSS courses, bridge academic scholarship and praxis in our community, and use that knowledge and experience as a springboard for future work. Topics will vary. Prerequisite: Junior standing or permission of instructor. (U)(3) Occasionally.

GWS490, Internship. (U)(3)

## History and AnthropologyIncluding Geography

Administration

Elise Edwards, PhD, Department Chair Professors
Bruce Bigelow, PhD; Paul Hanson, PhD Thomas Paradis, PhD
Associate Professors
John Cornell, PhD; Vivian Deno, PhD; Elise Edwards, PhD; Scott Swanson, PhD; Sholeh Shahrokhi, PhD; Ageeth Sluis, PhD; Scott Swanson, PhD

## Assistant Professors

Antwain Hunter, PhD; Zachary Scarlett, PhD
Instructor
Elizabeth Pfeiffer, PhD
Department Website
www.butler.edu/history-anthropology
The disciplines of history, anthropology, and geography share the same home because they address the same fundamental questions about life from different perspectives, the interplay among which enlarges our students' minds and lives. Butler is singular among American universities in knitting these three disciplines into a working organism. Prospective majors in both history and anthropology take a first-year course together, introducing them to each other and to the disciplines in their departments, thus offering all the advantages of self-standing disciplines and interdisciplinary approaches.

Members of the department offer expertise in wide-ranging areas of the world: the United States, Latin America, East Asia, the Middle East, and Europe. Within these areas we offer courses on the fundamental conditions that shape human life past and present: citizenship, politics, peace and war, gender, race, class, sexuality, language, economics, religion, and thought. The department offers a small studentfaculty ratio, individual attention, and abundant opportunities for undergraduate research. Most of our students also study away from Butler, either abroad or in Washington, DC, offering them a taste of this increasingly global world we inhabit.

## Why Study Anthropology?

Anthropology explores the human condition, appreciating humans and human practices holistically. The primary focus of our program is cultural anthropology, which studies the ways that humans create meaning, forge alliances, assert differences, reinforce social and political hierarchies, and expose vectors of inequality. Students are trained to read critically and understand the complexities of ethnographythe research method and product that defines the discipline. They also have the opportunity to produce their own original ethnographic work in course research assignments as well as larger honors thesis projects, which may be the outgrowth of study abroad, field school, or internship experiences. The ability to analyze different cultures, figure out how they work, and step into them-applying the characteristic methods and theories of our discipline-readily prepares students for a variety of careers: health care, education, NGOs, and, increasingly, various forms of business. Anthropology majors are also well prepared for advanced study in anthropology and archaeology, public health and medicine, social and nonprofit work, law, and business.

## Why Study History?

History explores the human condition throughout the world from earliest time to the present moment. It investigates what happened in the world and how it was understood in order to comprehend why people think what they think and do what they do. There is no question or problem of human life foreign to history. One age-old purpose of history is to ready people as citizens to care for the common good and public life. Another, equally venerable, is moral: history trained people to consider carefully the possibilities of good life or better life together. Not so long ago historians focused most of their attention on the politics, wars, and thought of
elites. In recent years, history has broadened its scope to encompass the lives of all people. History as a discipline characteristically teaches its students to read and analyze texts and artifacts of every sort. Its search for meaning requires of its students creative intelligence to develop from their findings hypotheses and theories that seek an ever better, often changing, understanding of the patterns of human life. History is perforce a conversation, since it takes many eyes, ears, and minds to fathom the complexities of life on this planet, so historians offer their own thoughts and listen carefully to the thoughts of others to refine both. It is uncommonly fun. Students of history take these skills and habits of thought in every imaginable direction, to graduate and professional study, often to teaching, law, government, civil service, and business, frequently to vocations that care for people, and finally to building communities and raising children.

## Why Study Geography?

Cultural geography brings together history, culture, and spatial patterning, and reinforces the message of both history and anthropology in a common department. Geography at Butler starts by studying Indianapolis, then moves outward to Indiana, the United States, and the world. These courses are generally valuable but particularly so to students preparing to teach social studies in secondary school.

## Why Study Anthropology and History at Butler?

We are one of just a few joint undergraduate history and anthropology departments in the country, and we're the only one that approaches the disciplines in an integrated way. So you can be a history major, an anthropology major, or both. While ultimately you will decide your focus and course of study, your basic grounding in both of these closely related disciplines will deepen your understanding of how we work to understand humans and their worlds and make you a better historian or anthropologist.

Both programs work together to train students to read with acuity, attend carefully to detail, write clearly, listen carefully, say well what they have to say, think both imaginatively and analytically, and work fruitfully with other people. We ask students to pose their own questions, seek answers to their questions in archival research or ethnographic investigation, develop their own ideas and opinions and address the ideas and opinions of other people throughout time and across the world, and grapple with the fundamental moral questions that life poses for
us. We seek to give students practice in thinking for themselves and good company in which to do so.

Our small class size and student-to-faculty ratio guarantee one-on-one attention, mentoring, and guidance to all majors and minors. We know our students well. Because our students graduate with well-developed reading, writing, and critical-thinking skills, there's no limit to what they can do career-wise. Our graduates have become teachers and social workers, lawyers and doctors, business owners and consultants, museum curators and Teach for America alums, and even scientists and public health officials.

During the past few years, students in the department have undertaken internships in circumstances as varied as the Indiana State House, the Indiana State Archives, the Indiana Historical Society, the U.S. Attorney General's Office, the Center for American Progress, archaeological fieldsites in Kenya, the Indianapolis Museum of Art, the Legal Aid Society of Indianapolis, the Kinsey Institute, a Tibetan refugee camp in India, Father and Families Inc. of Indianapolis, the Monroe County Historical Society, a women's domestic violence organization in Buenos Aires, Earth House in Indianapolis, and humanitarian organizations in Palestine.

## Anthropology Student Learning Objectives

The anthropology program seeks to teach students to think for themselves, appreciate human and cultural differences, and master the basic tools necessary for understanding those differences. They learn to employ the ethnographic method, understand issues from a diversity of viewpoints, and ready themselves for responsible citizenship. More specifically, we seek to teach students the characteristic methods of anthropology and the basic range of anthropological theories, to analyze evidence and develop arguments, incorporate the views of other people into their projects, understand issues in all their complexity rather than oversimplify them, and share their ideas and research effectively.

## History Student Learning Objectives

The history program seeks to teach students to think for themselves independently and critically, master the history of one part of the world, apply the past to understand the present, appreciate those who are different from themselves, appreciate academic and civil discourse, and ready themselves for responsible
citizenship. More specifically, we seek to teach students the characteristic methods of history and the basic range of historical theories, to analyze evidence and develop arguments, conduct historical research, incorporate the views of other people into their projects, look at problems from a variety of perspectives, and share their ideas and research in proper form.

## Degree Programs

- Major in Anthropology (BA)
- Major in History (BA)
- Master of Arts in History (MA)
- Combined Major in Anthropology and Psychology (BA) (see Combined Majors)
- Combined Major in History and Anthropology (BA) (see Combined Majors)
- Combined Major in History and Political Science (BA) (see Combined Majors)
- Minor in Anthropology
- Minor in Geography
- Minor in History


## Requirements for the Anthropology Major

- 36 credits
- AN101, SW215, and GE109
- 3 hours in a subfield of anthropology (200400 level)
- 3 hours of methodology (AN350, AN354, AN356, or course approved by advisor)
- 3 hours of theory (AN390)
- 12 hours of elective courses
- 3 hours capstone: AN460 or other advisorapproved course or honors thesis
- 3 hours internship, field school, or advisorapproved elective

All students are also encouraged to participate in recommended anthropological field schools during their program at Butler.

## Requirements for the Anthropology Minor

The minor in anthropology consists of 18 hours: SW215; AN101, GE109, or 200-level anthropology course; and 12 hours of electives at the 300 level or above.

## Core Courses Offered by Anthropology

SW210-AN, Sex, Gender, and Sexuality in Japan: This course explores the socio-historical constructions of sex, gender, and sexuality in modern Japan from the Meiji Restoration (1868) to the present. Students will study the roles of various agents, including the state, medical science, and the media, in the production of
sexual knowledge and the shaping of gendered practices. (U)(3)

SW215-AN, Being Human: Anthropological Approaches to Life and Meaning: Cultural anthropology is a discipline focused on how humans create meaning, forge alliances, and assert differences. This course allows students to explore conceptual, theoretical, methodological, and ethical issues central to the anthropological study of what it means to be human and make meaning in the world. (U)(3) Fall and spring.

## Anthropology Courses

AN101, First Year Seminar: This course will introduce students to basic theories and methods in the disciplines of anthropology and history through the exploration of past and present cultural encounters and exchanges, and the diverse responses they engendered. Topics will range across time and space and focus on exploration, trade, colonialism, imperialism, and current cross-cultural interactions. (U)(3) Fall.

## AN280, Sub-Fields in Anthropology:

Introductory courses in the various sub-fields of anthropology such as biological anthropology, archaeology, primate behavior, language, and culture are offered on an occasional basis. This may be repeated for credit if subject matter is different. (U)(3) Annually, term varies.

AN302, The Body and Society: This course explores symbolism, ideologies, and treatments of the body cross-culturally. Topics considered include imageries of the human body, ideas about bodily aesthetics and bodily health, physical treatments of the body, the relationship of body ideologies and identity, and the body and power dynamics. (U/G)(3) Occasionally.

## AN304, Medical Anthropology: An

introduction to the field of medical anthropology, which explores the links between culture, society, disease, and illness. Topics include discussion of biomedical, epidemiological, and other models of disease; knowledge and practice of healers cross-culturally; the relationship between religion and healing; and occupational health issues. (U/G)(3) Occasionally.

AN311, Anthropology of Difference: This course is about exclusions and inclusions. All around us, there are walls and fences erected to keep people out and hold "others" in. Some partitions are concrete-harsh and visible; the rest remain fluid and negotiable. This is a course on power and the social life of contemporary humans. (U)(3) Occasionally.

AN312, Political Anthropology: Utilizes the comparative perspective to study authority, organization, and power. Topics include the ways in which authority is acquired and accepted as legitimate, issues of comparative political systems, local-level politics, the connections between local and wider political systems, and the cultural and symbolic aspects of power and legitimacy. Subject matter includes political communities in various cultural contexts. (U/G) (3) Occasionally.

## AN313, Nation-States and Nationalisms:

This course looks at nation-making projects and nationalist movements in a variety of historical and geographical contexts. Students study and then work to apply theories of nationalism to a range of case studies from Asia, the Middle East, Latin America, and Europe. (U/G)(3) Occasionally.

AN315, Gender and Colonialism: This course will explore conflicts between the moral claims of liberty, equality, culture, and gendered discourse in the face of colonial legacies and the global politics of the contemporary. It examines gendered construction of the "other" from the 19th century to the contemporary rhetorics of liberation. (U/G)(3) Occasionally.

## AN320, Gender and Sexuality in

Globalization: This course examines how gender is culturally constructed; the relationships between power, sexuality, and social roles; and the key theoretical debates on gender in anthropology. (U/G)(3) Occasionally.
AN322, Sex, Gender, and Sexuality in Modern Japan: This course explores the socio-historical constructions of sex, gender, and sexuality in modern Japan from the Meiji Restoration (1868) to the present. Students will study the roles of various agents, including the state, medical science, and the media, in the production of sexual knowledge and the shaping of gendered practices. (U/G)(3) Occasionally.

AN326, Youth Conflict Global Cinema: Will explore teenage life across different cultural boundaries and social realities that inform global inter-connections of our time. Examines the cinematic image of youth in the United States/ world by exploring everyday life practices and problems that shape the desires of youth. (U)(3) Occasionally.

AN328, Popular Culture: This course examines the role and function of popular culture in different social and cultural settings throughout the world. Students will compare the impact of popular culture in different regions, examining
the cultural importance of such media as films, television, sporting events, music, and the internet. (U/G)(3) Occasionally.

AN329, Japanese Popular Culture: This course will examine Japanese popular culture, including comics (manga), fashion magazines, feature films, anime, music, sports, and even children's games, to understand the social pervasiveness and cultural force of the mediums. While focusing on Japan, the course will introduce students to critical theoretical perspectives about popular culture that can be applied more broadly. (U/G)(3) Occasionally.

AN340, Ethnographic Arts: This course examines the cultural and social significance of art in non-Western contexts, paying particular attention to expressive forms found in Africa, the Americas, and the Pacific. Relevant media include sculpture and masking, architecture, body ornamentation, dance, and music. (U/G)(3) Occasionally.

AN342, Science, Technology, and Society: This course explores the cultural aspects of scientific knowledge and its effects, as well as the socio-cultural consequences of scientific and technological innovation. Students will examine issues including the power of scientific "truth" claims, the social dynamics of laboratory settings, and science's effect on what it means to be human. (U/G)(3) Occasionally.

AN345, Conflict Resolution Through Arts:
Introducing the notion of conflict, we will consider a diverse use/reach of the concept by studying a range of contemporary global situations, mapped as distinct conflict zones. Later readings are designed to introduce students to creative and imaginative approaches to conflict resolution. (U/G)(3) Occasionally.

## AN346, The Anthropology of Sport:

This course will look at sport as a topic of anthropological study. We will explore (1) the cultural and political values produced and reaffirmed through sports training and competition, (2) the ritualistic and symbolic aspects of sporting events and spectacles, and (3) the messages transmitted through mediaproduced images of sport. (U/G)(3) Occasionally.

AN349, African Musics: This course provides an ethnomusicological examination of traditional and contemporary African musics. Topics include the history of the musics of Africa and the Diaspora, the analysis of music as sound and behavior, and the role of music in daily life. The course includes hands-on drumming; nonmusicians are welcome. (U/G)(3) Occasionally.

## AN350, Anthropological Methods: An

introduction to the research process in cultural anthropology, with an emphasis on qualitative methods. Students also are prepared to conduct research, including fieldwork, to evaluate and present research, and to critically evaluate the research of others. (U/G)(3) Occasionally.

AN352, Ethnography: Ethnography is most generally a qualitative research approach focused on providing detailed, in-depth description. We will approach ethnography from two angles in this course: (1) as a topic of intellectual analysis and critique, and (2) as a methodology that we will employ in a research project at a specific field site. (U/G)(3) Occasionally.

AN366, East Asia Through Ethnography: An introduction to selected topics in the society and cultures of East Asia (China, Japan, and Korea), Southeast Asia (Indonesia, Malaysia, Thailand, and the Philippines), and South Asia (the Indian sub-continent). Topics include post-colonialism, transnational processes, family and kinship, world and local religious traditions and ritual practices, economic development, and gender issues. (U/G)(3) Occasionally.

## AN368, Coming of Age in the Middle East:

This course explores life in an enigmatic geopolitical region called the Middle East. Issues of religiosity, Islam, gender, sexuality, urbanization of life, revolution, war, and global politics are considered in the context of local diversity and global political economy. (U/G)(3) Occasionally.

AN370, Peoples and Cultures of Europe: A survey of the peoples, societies, and cultures of Western and Eastern Europe. In light of globalization and movements unifying Europe such as the European Union, the course will pay special attention to demographic features, cultural practices, and major social institutions. (U/G)(3) Occasionally.

AN380, Selected Topics in Anthropology: An in-depth analysis of the theory, methodology, and subject matter in an area not provided for in the current offerings of the department. (U/G)(3) Occasionally.

## AN390, Development of Anthropological

 Thought: This course inquires into the emergence and development of anthropological thought, theories, methods, and generalizations in the context of Western social and cultural milieu. The particular emphasis is on the changing shape of the academic discipline of anthropology, from the late 19th century to the present. Prerequisites: SW215-AN and junior standing. (U/G)(3) Occasionally.AN460, Culture and History: This course explores anthropologists' use of historical methods, and historians' employment of cultural analysis. Students will examine the history of the rapprochement between the disciplines, the fields' most influential interlocutors, significant debates, and some of the scholarly work emerging from this disciplinary pairing. (U/G)(3) Occasionally.

AN481, Independent Study: An opportunity for qualified students to pursue a topic of individual interest. With permission of the director. (U/G)
(1) Occasionally.

AN482, Independent Study: An opportunity for qualified students to pursue a topic of individual interest. With permission of the director. (U/G) (2) Occasionally.

AN483, Independent Study: An opportunity for qualified students to pursue a topic of individual interest. With permission of the director. (U/G) (3) Occasionally.

AN484, Internship: A program offering the superior student the opportunity to participate in a closely supervised work experience in a setting pertinent to the major area of study. Majors are strongly encouraged to engage in the internship experience. Prerequisites: SW215AN and permission of the director. (U)(3) Occasionally.

AN485, Internship: A program offering the superior student the opportunity to participate in a closely supervised work experience in a setting pertinent to the major area of study. Majors are strongly encouraged to engage in the internship experience. Prerequisites: SW215AN and permission of the director. (U)(6) Occasionally.

AN486, Seminar in Anthropology: Intensive reading with problems for investigation in some special field. Prerequisites: SW215-AN and permission of the director. (U)(3) Occasionally.

AN499, Honors Thesis. (U)(3) Occasionally.

## Requirements for the Geography Minor

A minor in geography consists of 18 hours, with at least 12 hours at the upper-division level.

## Geography Courses

SW205-GE, Cultural Geography: Regions of the World: Cultural geography introduces students to the immense cultural diversity of the world. Students will explore diversity of regions with regard to environmental influence,
historical origin and diffusion, and contemporary political, cultural, and ecological problems. The course concludes by analyzing contemporary globalization, especially with regard to cultural identity. (U)(3)

GE305, Topics in Geography: Regional and thematic study of contemporary issues in geography not treated in traditional courses. (U/G)(3) Occasionally.

## GE310, Historical Geography of United

States: The creation and persistence of regional variations of culture in the United States from the colonial era to the present. (U/G)(3) Occasionally.

GE400, Independent Study. (U)(1)
Occasionally.
GE401, Independent Study. (U)(2)
Occasionally.
GE402, Independent Study. (U)(3)
Occasionally.

## Requirements for the History Major

- 33 credits. Note: geography courses automatically count toward the history major. Specific anthropology and other University courses may be applied to the history major when approved by the department chair.
- HST101
- 6 additional hours of lower-division (100-200-level) courses, one of which must be focused on Asia, Latin America, Middle East/Africa, or World/Transnational History
- HST301, Historiography, typically offered once a year in the fall semester
- HST302, Junior Research Project, typically offered in the spring
- HST401, Seminar in History
- Additional 15 hours of elective courses at the 300 level or above. Students must take courses from at least three of the following areas: Asia, Europe, Latin America, United States, Africa and the Middle East, or World/Transnational History.


## Requirements for the History Minor

A minor in history consists of 18 hours, with at least 12 hours at the upper- division level.

## Requirements for the Master of Arts in History

Students in the master of arts in history program may select either a 30-hour program of courses with a master's thesis or a 36-hour program
of courses without a thesis. Those in the 36hour track must complete at least two HST401 seminars.

## Core Courses Offered by History

PCA267-HST, Experiencing the City:
Indianapolis through Public Art, Architecture, and Performance: This course uses public art, architecture, and performance in Indianapolis to study the politics and aesthetics inherent in "staging" cities. It aims to enhance understanding of how art informs both the history of how urban environments have been imagined, planned, and built as well as how we experience these spaces today. (U)(3) Annually, term varies.

SW265-HST, Revolutionary Cultures in Latin America: Through specific case studies, this course provides the students with the opportunity to study movements in Latin America as they were shaped through the disciplines of anthropology and history. In analyzing revolutionary cultures, students examine relationships between social science and nation building, historiography and national identity, and knowledge and power. (U)(3) Occasionally.

TI229-HST, Themes in World History: This course emphasizes the increasing connectivity of regional cultures, especially from the rise of the Silk Road civilizations 2000 years ago to the present. Specific topics include the diffusion of cultural innovations, immigration, long-distance trade, the spread of diseases, and empirebuilding. (U)(3) Fall.

TI230-HST, Imagined World: This course will examine, through an array of literary, historical, and philosophical texts, some of the ways in which people have tried to understand their own world and their own lives through the creation of "imagined worlds." Some of those worlds are exterior-a map of the world created by a 16th-century Venetian monk living on an island in the harbor of Venice, listening to the tales of travelers who visit him; while some are interior-a fictional character trying to come to terms with the death of his wife, and his own impending mortality, by revisiting (reinventing?) the site of his childhood summer vacations. Having explored, discussed, and written about the imagined worlds of others, toward semester's end class participants will have the opportunity to create their own imagined world. (U)(3) Occasionally.

TI231-HST, Mad Women in America: Mother. Daughter. Wife. For generations those titles were assumed to contain the hopes and dreams
of all women, and any woman who denied this was "mad"-angry or crazy. In this course, we will examine the lives and experiences of actual and fictional women designated as "mad" and consider how they have been represented in the arts and in history texts. We will start with readings of cross-cultural examples of mad women Lilith, Medea, and La Lllorna, and then narrow our focus to consider such women in U.S. history and culture. Course sources include music, film, art, poetry, and traditional history accounts. (U)(3) Occasionally.

TI233-HST, Hidden History: Gender/Sex in Latin Am: "A "traitor" sleeping with the enemy. Cross-dressing nuns. Slave mistress. The seventh muse. A bisexual painter. The "(Night)Mare" of Argentina. Guerrilla woman. Nobel Prizewinning Indian. The history of Latin America abounds with examples of illustrious and controversial women, yet the general perception of Latin America is of lands populated by machos. The history of the area-as elsewhereusually concentrates on the actions of men without examining why, and forgets the feats of women as well as the importance of gender and sexuality, which has remained a "hidden history." In this course we will uncover that hidden history by examining changing ideas of both femininity and masculinity in Latin America from the start of colonialism until recent times. (U)(3) Occasionally.

## TI234-HST, Reel America-Film and the

 American Experience, 1890-1965: Famed film director Sydney Pollack said of film, "It's the 20th century's real art form." This has been particularly true in the United States, where film has been an important means of transmitting definitions about American values and identity. This course examines the role of film in depicting the American experience in the 20th century and does so with a particular emphasis upon the interpretation of film within a community of other texts drawn from the period. Occasionally.
## TI235-HST, American Visions-American Visions? American Dreams? American

Nightmares?: What does it mean to be an American? Are there connective cultural/ historical threads across time that help to form a national identity? These and other questions are at the heart of a raucous, multifaceted exploration of American history, identity, and culture. (U)(3) Fall and spring.

## TI237-HST, Themes in European History:

 This course will survey formative periods in European societies from the 12th century to the present. Emphasis throughout will be on the evolution of the nation-state, the emergence ofindustrial, capitalist, and socialist economies, and transformations in thought. (U)(3) Occasionally.

TI238-HST, Major Themes in Asian History: Through analyzing sacred, historical, and literary texts, this course offers a survey of major themes in Asian history from the ancient times to present, with a focus on the interactions among cultures and states in modern period. The themes explored can vary from semester to semester. (U)(3) Occasionally.

TI239-HST, Exploring Latin America: This course presents a different vision of America, that is, the America situated south of the border from the United States. Using an array of primary sources (including literary texts and visual materials), it introduces the students to the history of Latin America since its independence. (U)(3) Annually, term varies.

## History Courses

HST101, First Year Seminar: This course will introduce students to basic theories and methods in the disciplines of anthropology and history through the exploration of past and present cultural encounters and exchanges and the diverse responses they engendered. Topics will range across time and space and focus on exploration, trade, colonialism, imperialism, and current cross-cultural interactions. (U)(3) Fall.

HST111, Introductory Seminar: Exploration of selected topics in history. (U)(3) Occasionally.

HST205, Questions in History: This course examines questions in history with a focus on issues of social, political, scientific, and/ or economic concern. Topics to vary by instructor. May be repeated once for credit towards the major. (U)(3) Annually, term varies.

## HST211, Major Themes in European History:

This course will survey formative periods in European societies from the late Middle Ages to the present. Emphasis throughout will be on the development of capitalist/industrialist economies, state-building and nationalism, and major transformations in European thought. (U) (3) Occasionally.

HST212, American Visions: America's past from the perspective of important, representative individuals and groups, showing changing perceptions of the American experience. Developments in thought from Puritan times to the present. (U)(3) Fall and spring.

HST213, Exploring Latin America: This course presents a different vision of America, that is, the

America situated south of the border from the United States. Using an array of primary sources (including literary texts and visual materials), it introduces the students to the history of Latin America since its independence. (U)(3) Annually, term varies.

## HST214, Major Themes in Asian History: A

 survey of major themes in South, Southeast, and East Asian history from ancient times to the present, with a focus on the modern period. It examines such processes as the formation of classical civilizations, rise and fall of empires, cultural encounters, transformations of societies, and such themes as imperialism, nationalism, and Communism. (U)(3) Occasionally.HST215, Themes in World History: This course emphasizes the increasing connectivity of regional cultures, especially from the rise of the Silk Road civilizations 2000 years ago to the present. Specific topics include the diffusion of cultural innovations, immigration, long-distance trade, the spread of diseases, and empirebuilding. (U)(3)

## HST301, Historical Method and

Historiography: This course examines important methods and approaches to the study of the past and prepares students to undertake significant research projects. Prerequisite: Junior standing. Nondepartmental students only by permission of the department. (U/G)(3) Fall.

HST302, Junior Research Project: This course is a hands-on class with students identifying and undertaking a significant research project with community presentation at the end of the course. Common readings and assignments help to develop student skills. Prerequisite: HST301. (U)(3) Spring.

HST303, Intro to Public History: This course provides a hands-on introduction to public history, as a vocation and as a discipline. In this class we explore the origins of the field, consider the ethics of the practice of public history, and examine various approaches to the field through readings, exercises, guest lectures, and more. (U) (3) Occasionally.

HST305, Topics in History: Selected topics of significance in contemporary historical scholarship. First-year students admitted only by permission of the department. (U/G)(3) Fall and spring.

## HST306, Topics in the History of Science:

This class will explore the many connections between periods of geographical expansion and the expansion of scientific knowledge. While beginning with earlier examples of empire,
the readings will mainly focus on the Age of Exploration and the Scientific Revolution, and 19th-century imperialism and a second "revolution" in science. Topics will include the use of technology in empire building, the impact of cross-cultural contact on the expansion of knowledge, and the connections between applications of science and imperial politics. First-year students admitted only by permission of the department. (U/G)(3) Occasionally.

HST308, The Greek World: First-year students admitted only by permission of the department. (U)(3) Occasionally.

HST309, History of Rome: First-year students admitted only by permission of the department. (U)(3) Occasionally.

HST310, Sex, Gender, Love, Friendship in the Classical World: Examines classical Mediterranean culture from the inside out. Course focuses upon dimensions of private life and interplay between private and public worlds. Discussion/seminar format. First-year students admitted only by permission of the department. (U/G)(3) Occasionally.

HST311, Europe in the Middle Ages: A study of Western European history from the decline of the Roman empire until the beginning of the modern period. First-year students admitted only by permission of the department. (U/G)(3) Occasionally.

HST312, Medieval England: History of Great Britain from Alfred of Wessex to the accession of the Tudors in 1485. Social, political, and constitutional development of England, and comparable developments in Scotland and Ireland. First-year students admitted only by permission of the department. (U/G)(3) Occasionally.

HST313, Medieval France: France was the crown jewel of medieval civilization. This course will examine French life from its emergence out of Charlemagne's empire until about 1500 and focus above all on the political, social, religious, and cultural aspects of medieval French life at its zenith during the 12th and 13th centuries. (U)(3) Occasionally.

HST314, Sex, Gender, Love, and Friendship in Medieval World: A continuation of HST310. Focuses upon dimensions of private life and interplay between private and public worlds in European society during the Middle Ages. Discussion/seminar format. First-year students admitted only by permission of the department. (U/G)(3) Occasionally.

HST315, Europe in the Renaissance 13001600: A study of politics, society, and culture in Renaissance Europe. First-year students admitted only by permission of the department. (U/G)(3) Occasionally.

HST316, Early Modern England: England in the Tudor/Stuart Era. First-year students admitted only by permission of the department. (U/G)(3) Occasionally.
HST317, Early Modern Europe: A general history of the major changes in Europe from 1500 to ${ }^{17} 15$. First-year students admitted only by permission of the department. (U/G)(3) Occasionally.

HST318, Individual and Society in Europe 1600-1850: Society and culture in modern Europe, focusing on the experience of common people in an era of rapid economic and political change. First-year students admitted only by permission of the department. (U/G)(3) Occasionally.

## HST319, French Revolution and Napoleon:

An intensive study of the political, social, and cultural currents in France during the revolutionary era. First-year students admitted only by permission of the department. (U/G)(3) Occasionally.

## HST320, Enlightenment and Romanticism:

Explores the history of two seminal social/ intellectual movements of the modern era. Major figures include Voltaire, Rousseau, Mozart, Byron, Goethe, Beethoven, and J. S. Mill. Discussion/seminar format. First-year students admitted only by permission of the department. (U/G)(3) Occasionally.
HST321, 19th Century Europe: A study of European history from 1815 to 1914. First-year students admitted only by permission of the department. (U/G)(3) Occasionally.

## HST322, 20th Century Europe: An

 examination of European politics and society from 1900 to the present. Topics include the outbreak of the Great War, the Russian Revolution, Nazism and Fascism, World War II, the Holocaust, the reconstruction of Europe, the Cold War, European integration, and Europe today. First-year students admitted only by permission of the department. (U/G)(3) Occasionally.HST323, Modern France: Examines themes in the political, social, and cultural history of France from the defeat of Napoleon in 1815 to the presidency of Francois Mitterrand. First-year students admitted only by permission of the department. (U/G)(3) Occasionally.

HST324, Modern Germany: A survey of German culture, society, and the state from the Napoleonic Era to the founding of the post-war Germanies. First-year students admitted only by permission of the department. (U/G)(3) Occasionally.

HST325, Contemporary Germany-Division and Reunification: Examines German politics, culture, and society from the end of World War II to the present. Topics include denazification, the Cold War, the Berlin Wall, socialism and capitalism in the two Germanies, protest movements, and reunification. First-year students admitted only by permission of the department. (U/G)(3) Occasionally.

HST326, Modern to Postmodern: Explores major developments in modern thought and culture from the mid-19th century to the present. Topics include the social and intellectual history of Liberalism, Marxism, Darwinism, Modernism in art and music, Existentialism, Post-Modernism, and more. Discussion/ seminar format. First-year students admitted only by permission of the department. (U/G)(3) Occasionally.

HST32'7, The History of Human Rights: This course examines the origins of human rights and their development in the Western world, human rights in non-European regions of the world, the antithesis or denial of human rights in the 20th century, and concludes with readings focused on contemporary human rights issues. (U/G)(3) Annually, term varies.

HST331, Colonial America: The first British empire in comparative global perspective. Firstyear students admitted only by permission of the department. (U/G)(3) Occasionally.

HST332, The American Revolution: An intensive study of the revolt from Great Britain, 1754-1789. First-year students admitted only by permission of the department. (U/G)(3) Occasionally.

HST333, The Early American Republic: The United States between 1789 and 1850. First-year students admitted only by permission of the department. (U/G)(3) Occasionally.

HST334, The Age of Jackson: The United States between 1815 and 1850; the transportation revolution, Romanticism, the second-party system, and the rise of nationalism. First-year students admitted only by permission of the department. (U/G)(3) Occasionally.

HST335, The Civil War: A study of the causes, conduct, and consequences of the American

Civil War. First-year students admitted only by permission of the department. (U/G)(3) Occasionally.

HST33'7, Emergence of Modern U.S.: The United States from the end of the Civil War to the start of the Great Depression. Examines the new urban industrial culture; shifting patterns of race, class, and gender relations; the relationship between science, technology, and government; and emerging tensions between religion and U.S. culture. First-year students admitted only by permission of the department. (U/G)(3) Occasionally.

## HST338, The Era of Jim and Jane Crow:

Explores the racial and gender logic of statesanctioned segregation, Jim and Jane Crow, and the struggle that eventually overthrew the system. Multifocal in approach, the class examines Crow from both a raced and gendered perspective and draws on the diverse ethnic and racial history of the nation. First-year students admitted only by permission of the department. (U)(3) Occasionally.

HST339, Recent U.S. History: The United States from the Great Depression to the present, with an emphasis on contemporary cultural, social, and political issues. First-year students admitted only by permission of the department. (U/G)(3) Occasionally.

HST341, U.S. Women's History: This course examines the history of U.S. women through an exploration of the political, social, and cultural contribution of women to the nation. The course focuses on the experiences of U.S. women from a variety of vantage points: as workers, reformers, political activists, artists, and more. At the discretion of the instructor, the course either covers from the colonial period to the present or from 1848 to the present. First-year students admitted only by permission of the department. (U/G)(3) Occasionally.

HST342, Topics in Women's History: Topics vary by semester and by instructor. Each class will take as its central focus the experience of women either in particular geographic locales, historical time periods, or thematic concentrations. Class may be repeated for credit with a different topic. First-year students admitted only by permission of the department. (U/G)(3) Occasionally.

## HST343, Race and Ethnicity in the U.S.:

Examines the histories of race and ethnicity in the United States and the ways in which racial and ethnic identities have been deployed as tools of marginalization, assimilation, and group
identity. Class explores race and ethnicity as legal, medical, historical, and gendered concepts and lived experiences. First-year students admitted only by permission of the department. (U/G)(3) Occasionally.

HST345, History of the American Midwest:
Emergence of the Midwest from the old Northwest Territory of the early American republic through the Civil War and the 20th century; emphasis on the development of a distinctive regional culture and interaction of various religious, ethnic, and racial groups. (U) (3) Occasionally.

HST350, History of Children and Youth: This course examines the experience of children in history. Topics include changing conceptions of childhood, social/historical settings, parenting practices, gender roles, schooling, and the emergence of youth culture. Readings feature the history of children in America. Writing includes student autobiography and projects on contemporary children/youth. First-year students admitted only by permission of the department. (U/G)(3) Occasionally.

HST351, American Constitutional History: A study of the origins and development of Constitutional concepts that have served as the basis for the growth of the federal government. Recent trends are emphasized. First-year students admitted only by permission of the department. (U/G)(3) Occasionally.

HST353, The American Empire since 1945:
American foreign policy and imperial ambitions since 1945. (U/G)(3) Fall and spring.

HST360, Modern Mexico: In covering the history of Mexico from independence in 1821 through the early 2000s, the course aims to explain the race, gender, and class dimensions of Mexico as a postcolonial nation, its search for modernity, struggle for economic independence, issues of social justice, and relationship with the United States. (U)(3) Occasionally.

HST361, The History of Brazil: This course surveys the political, economic, and cultural themes in Brazilian history and covers both the colonial and national periods, tracing the country's history from colonization to the emergence of a "modern" nation in the 19th and 20th centuries. (U)(3) Occasionally.

HST363, Revolutions and Guerrilla Move: This course uses revolution as a window to better understand Latin America today and explain the region's turbulent history during the 20th century. We will study the causes, processes, and results of revolutions in the region, especially
their impacts on a diverse population. (U)(3) Occasionally.

HST365, Latin America Through Film: This course explores how film has engaged with the history of Latin America and shaped the perception of its people, societies, and cultures. Students will analyze various forms of motion pictures as visual narratives to understand the region's turbulent history and deconstruct persistent stereotypes. (U)(3) Occasionally.

## HST366, Gender, Sex, and Sexuality in Latin

America: This course covers the history of gender and sexuality in Latin America from the start of colonialism until the recent times. Through the analysis of changing ideas of both femininity and masculinity, students will learn about the politics of gender in Latin America and how gender influences historical production. First-year students admitted only by permission of the department. (U)(3) Occasionally.

HST367, Geographies of Desire: This seminar examines the relationship between gender and place from a comparative perspectiveranging from ancient cities to modern tourist destinations-to understand how ideas about gender, race, and sexuality have influenced civilization, colonization, modernity, and cosmopolitanism. (U)(3) Occasionally.

## HST369, Imagining Latin American

Culture: This course provides students with the opportunity to study the discipline of anthropology of Latin America from a historical perspective. Through case studies, students examine how both U.S. and Latin American anthropologists have shaped general perceptions of race, gender, and class in the area. (U)(3) Occasionally.

HST371, Modern China: Political and social history of China since the Opium War (1839) with emphasis on the revolutionary upheavals of the 20th century. First-year students admitted only by permission of the department. (U/G)(3) Occasionally.

HST373, China and the World: This seminar course focuses on China's changing position in the world, China's changing relations with the world, and China's changing perceptions of the world from ancient times to the present. It examines China's contact with the major regions of the world in different historical periods and the impact of such contacts on both China and the world. First-year students admitted only by permission of the department. (U/G)(3) Occasionally.

HST395, War and Peace in the Middle Ages:
Violence is one of the enduring aspects of human life, and peace one of its eternal hopes. It is often easier to examine what people are doing, and so we will be studying Medieval forms of violence and Medieval means of keeping or restoring peace. (U)(3) Occasionally.

HST401, Seminar in History: A particular phase or period of history will be studied each semester. First-year students admitted only by permission of the department. (U/G)(3) Occasionally.

HST411, Independent Study: Offers the qualified student of history the opportunity to pursue a topic of individual interest. Open only to juniors, seniors, and graduate students by permission of the instructor. (U/G)(1) Occasionally.

HST412, Independent Study: Offers the qualified student of history the opportunity to pursue a topic of individual interest. Open only to juniors, seniors, and graduate students by permission of the instructor. (U/G)(2) Occasionally.

HST413, Independent Study: Offers the qualified student of history the opportunity to pursue a topic of individual interest. Open only to juniors, seniors, and graduate students by permission of the instructor. (U/G)(3) Occasionally.

HST421, Internship: Offers the qualified student the opportunity for supervised work experience in a setting pertinent to the major area of study. Permission of the department chair. (U)(3) Occasionally.

HST422, Internship: Offers the qualified student the opportunity for supervised work experience in a setting pertinent to the major area of study. Permission of the department chair. (U)(6) Occasionally.

HST499, Honors Thesis. (U)(3) Occasionally.

## HST518, Summer Workshop for Advanced

 Placement History Teachers: This course is open to new and experienced AP history teachers. Participants will discuss the themes, habits of mind, and periodization of the Advanced Placement history course, integrating content with AP history best practices. We will also review and score past AP history exams. (G) (3) Summer.HST52'\%, The History of Human Rights: This course examines the origins of human rights and their development in the Western world, human rights in non-European regions of the world, the
antithesis or denial of human rights in the 20th century, and concludes with readings focused on contemporary human rights issues. (G)(3)

HST701, Research: For graduate students researching a master's thesis. By permission of instructor. (G)(3) Fall, spring, and summer.

HST"11, Thesis: For graduate students writing a master's thesis. By permission of instructor. (G)(3)

# Individualized Major Program 

Administration

Stuart Glennan, PhD, Chairperson, LAS
Individualized Majors Program Committee

## Program Website

www.butler.edu/individualized-majors
Individualized majors meet the needs of students whose primary academic interests cut across traditional academic disciplines. This program allows students who have shown interest in crossdisciplinary work to design their own majors. The purpose of the individualized major program (IMP) is to provide an option to study a crossdisciplinary topic in depth, not to constitute a general-studies option or to replace a double major. The IMP may appeal to nontraditional and returning students as well as to students who have completed an associate degree and wish to complete a bachelor's degree with a different focus than their associate degree. Recent IMP students have graduated in Chinese language and culture, ancient Egyptian language and culture (Egyptology), music business, and medical illustration.

## Requirements

The IMP consists of at least 36 hours of coursework, which must form a coherent whole. This may include work taken at other colleges, including work taken through the Consortium for Urban Education interchange in Indianapolis. All normal Core Curriculum and LAS College requirements must be met. In LAS, the same course cannot be counted toward two different majors. The proposed program should include an experience beyond the normal classroombased course, such as an internship, a semester of study abroad, an honors or departmental thesis, a senior seminar in a relevant department, or a service-learning project in the junior or senior year. Because each IMP is unique, there is no fixed list or sequence of courses for the major.

## Admission

A student should submit to the IMP committee through its chairperson a proposal for an IMP anytime between the beginning of the sophomore year and the end of the fall semester of the junior year. In general, this application will include a general statement that describes the nature of the proposed IMP, how this IMP relates to the student's goals, and why these goals can better be pursued as an IMP rather than within a traditional major or double major. The proposal also should demonstrate the coherence and integrity of the proposed IMP, show that course resources are available to support the IMP (including courses to be taken outside of Butler), and provide evidence that the student has the motivation and initiative to carry out the IMP. The student should also recruit an advisor for the IMP and provide a detailed list of courses, which will constitute the major (subject to revision each year due to changes in available courses relevant to the IMP). The IMP committee will evaluate the proposal and decide whether to approve it. More information and the proposal application can be found at the program website.

## Degree Program

- Individualized Major (BA, BS)


## International Studies

## Administration

Eloise Sureau-Hale, PhD, Program Director
The major cuts across traditional barriers between intellectual disciplines and draws on the resources of the departments of English; History and Anthropology; Modern Languages, Literatures \& Cultures; Philosophy and Religion, Political Science; and Sociology in the College of Liberal Arts and Sciences; the Departments of Economics, Finance, and Management in the College of Business; and the College of Communication. Faculty members most directly affiliated with the program are:

## Professors

Kwado Anowka, PhD; Robert B. Bennett Jr., JD; Bruce Bigelow, PhD; Terri Carney, PhD; Roberto Curci, PhD; Peter Grossman, PhD; Paul Hanson, PhD; Siobhán McEvoy-Levy, PhD; Antonio V. Menéndez-Alarcón, PhD; Gregory Osland, PhD; Katherine B. Novak, PhD; William Rieber, PhD; Paul Valliere, PhD; Harry van der Linden, PhD; Sylvie Vanbaelen, PhD; Linda Willem, PhD

## Associate Professors

Craig Auchter, PhD; Chad Bauman, PhD; Krista Cline, PhD; John Cornell, PhD; Elise Edwards, PhD; Irune Gabiola, PhD; Margaretha Geertsema Sligh, PhD; Gabriela Muñiz, PhD; Sholeh

Shahrokhi, PhD; Ageeth Sluis, PhD; Ania Spyra, PhD; Eloise Sureau-Hale, PhD; Robin Turner, PhD

## Assistant Professors

Fait Muedini, PhD; Su-Mei Ooi, PhD; Zachary Scarlett, PhD

Program Website
www.butler.edu/international-studies

## Why Study International Studies?

The international studies major is an interdisciplinary program designed to give students an awareness of the diversity, complexity, and interdependence of the world community, and to provide them with the necessary background to understand and analyze the political, economic, social, and cultural aspects of current world problems and issues. The international studies major offers students the cultural competency necessary to be successful in an increasingly complex and global job market. It prepares students for careers in government, international organizations, journalism, international consulting, business, education, community development, and human rights work with nongovernmental organizations. It also provides a foundation for graduate work in such disciplines and programs of study as law, international studies, international relations, area studies, social sciences (anthropology, history, political science, sociology, etc.), comparative literature, religious studies, public policy, and public administration.

## Why Study International Studies at Butler?

The curriculum of the international studies program at Butler is flexible; it can be adapted to meet the student's individual interests and career plan. The following outlines some of the key characteristics and advantages of studying international studies at Butler University.

- Student-oriented program.
- Large number of full-time faculty from various departments and areas of studies, rendering the curriculum truly comprehensive and global, and offering students a great variety of perspectives.
- Curriculum that prepares students to work and be successful in an increasingly multicultural environment.
- Curriculum that prepares students for interdisciplinary research.
- Well-structured curriculum that gives students the fundamental knowledge in the field, while allowing students to concentrate in regional foci and subfields of their interest.
- Washington, DC, internship: Students can intern in many government agencies and in Congress, nongovernmental organizations, foreign embassies, think-tanks, and international organizations such as the OAE, IMF, etc.
- International internships, where students can acquire hands-on knowledge of many countries around the world.
- Comprehensive study-abroad program with opportunities for study in nearly every country of the world.
- Concrete experiences in diplomacy by participating at the Model European Union, Model United Nations, and/or Model Arab League (cost of travel and lodging is covered by the program).
- Financial support for students conducting thesis research.
- Financial support for travel for students presenting papers at conferences.
- Active student-run International Studies clubs.


## International Studies Student Learning Objectives

This program provides students with the opportunities to acquire, develop, and demonstrate knowledge and understanding on a range of skills and abilities in relation to the international system and the process of globalization. When completing this degree, students will be able to:

- Demonstrate knowledge of the major dimensions of globalization, such as economic, political, and cultural globalization
- Describe the major functions of international organizations, such as the United Nations, the World Bank, the International Monetary Fund, and the World Trade Organization
- Draw connections between social issues in their local community and the larger national and global context for such issues.
- Describe and assess the main aspects of international relations, including the main aspects of U.S. foreign policy, colonialism, and nationalism
- Demonstrate knowledge of appropriate social scientific methods to compile and interpret data in assigned research projects or papers
- Understand the complexity of the contemporary world and demonstrate familiarity with the variety and relativity of cultures within one major region


## Degree Programs

- International Studies (BA)
- Minor in International Studies


## Requirements for the Major

The major consists of 42 hours, 33 of which must be fulfilled at the 300 level or above.
I. Core (21 hours)
A. Introduction. IS101 and one of the following courses:

- IS101, Introduction to International Studies
- PO141, Introduction to International Politics
- PO151, Introduction to Comparative Politics
- SW205-GE, Cultural Geography, Regions of the World
- SW220-EC, The Economy and Society
- TI250-RL, Religions of the World


## B. International Arrangements and

Interactions. IS390, United Nations and Other International Organizations, plus one of the following courses:

- AN326, Youth Conflict, Global Cinema
- JR417, International Communications
- IB320, International Business Environment (additional prerequisite: permission of the instructor)
- PO322, International Conflict and Peace Building
- SO355, International Crime
C. Research Methods. One of the following:
- PO201, Research and Analysis
- SO393, Research Methods Seminar


## D. International Relations and Diplomacy. One of the following:

- HST353, The American Empire
- PL364, Ethics and International Relations
- PO320, International Relations
- PO355, U.S. Foreign Policy
E. Capstone Course (to be taken in the junior or senior year). IS410W, The Global Society (Prerequisites: IS101, another course from A, and at least one 300-level course. This course is cross-listed with SO355 and AN335.)


## II. International Studies Area Courses

A. 18 hours from two of the following areas (9 hours in each area; two disciplines must be represented).

1. Africa

- FR334, Introduction to Francophone Cultures
- FR485, Topics in Francophone Studies
- PO350, African Politics

2. Asia

- AN322, Sex, Gender, and Sexuality in Japan
- AN329, Japanese Popular Culture
- AN366, East Asia Through Ethnography
- AN368, Coming of Age in the Middle East
- FL320, Chinese Civilization
- HST305, Topics in History: Youth and Revolution Modern China
- HST305, Topics in History: Mao's China
- HST371, Modern China
- RL353, Buddhism

3. Europe

- FR320, Topics in French and Francophone Cultures
- FR345, France and the Francophone World: 1900 to the Present
- FR465, 20th Century French Novel
- FR475, 20th Century French Drama
- GR340, Germany: 1871 to the Present
- GR342, Major Trends in Modern German Literature
- GR475, Seminar in 20th Century German Literature
- HST322, 20th Century Europe
- IS301, Model European Union
- SO333, European Societies
- SP340, Spain: 1700 to the Present
- SP440: Contemporary Spanish Studies

4. Latin America

- AN362, Peoples and Cultures of Latin America
- PO360, Political Regimes in Latin America
- SO331. Latin American Societies
- SP345. Hispanic Masterpieces
- SP355, Spanish-American Culture: South America
- SP360, Hispanic Film (will count when at least three-quarters of content focuses on Latin America)
- SP365, Hispanic Short Story (will count when at least three-quarters of content focuses on Latin America)
- SP370, Topics in Contemporary Hispanic Societies
- SP450, Topics in Spanish-American Studies
- SP460, Topics in 20th Century SpanishAmerican Studies

5. Foreign Languages. Nine hours at the 300-400 level in one modern foreign language. Classes in French, German, Spanish, and Chinese are offered at Butler University. Classes in other languages such as Arabic, Italian, and Japanese can be taken at other universities in the area.

## B. One elective to be chosen from the

following or any course in I or II-A above:

- AN320, Gender and Sexuality in Globalization
- EC433, International Economics (prerequisite or permission of the instructor)
- EN321, EN322, EN421, and EN422, Comparative World Literature
- IB367, Legal Aspects of International Business (additional prerequisite: permission of instructor)
- MK491, International Marketing (additional prerequisite: permission of instructor)
- SO323, Racial and Ethnic Relations
- SO343, Popular Culture: A Comparative Study


## III. Special International Studies Courses,

which may include:

- IS401, IS402, and IS403: Independent Study in International Studies
- IS404 and IS405, Internship in International Studies
- IS470, Selected Topics in International Studies (prerequisite: permission of instructor)
- IS499, Honors Thesis
IV. Study Abroad (highly recommended).

Experience abroad may be in the form of attendance at a foreign college or university, an international internship, independent travel connected with an approved independent study project, or participation in an approved foreign study tour. Credits from those experiences abroad usually count toward fulfilling the requirements of the major or minor.

## V. Model United Nations, Model Arab

League, and Model European Union (highly recommended). International studies majors can participate in these three events, which play a very important role in the formation of students interested in international issues, because they learn the rules of negotiation and diplomacy as well as the workings of the United Nations, Arab League, and European Union. The cost for participating in these events (registration, airfare, and lodging) is covered by the International Studies budget.

## Requirements for the Minor

The minor consists of 21 hours, 15 of which must be fulfilled at the 300 level or above.
I. Core (12 hours)
A. Introduction. IS101, Introduction to

International Studies

## B. International Arrangements and

Interactions. One of the following:

- AN326, Youth Conflict, Global Cinema
- JR417, International Communications
- IB320, International Business Environment (additional prerequisite: permission of the instructor)
- IS390, United Nations and Other International Organizations
- PO322, International Conflict and Peace Building
- SO355, International Crime


## C. International Relations and Diplomacy.

One of the following:

- HST353, The American Empire
- PL364, Ethics and International Relations
- PO320, International Relations
- PO355, U.S. Foreign Policy
D. Capstone Course (to be taken in the junior or senior year). IS410W, The Global Society (Prerequisites: IS101, another course from A, and at least one 300-level course. This course is cross-listed with SO355 and AN335.)
II. International Studies Area Courses (9 hours; take courses from at least two different areas)

1. Africa

- FR334, Introduction to Francophone Cultures
- FR485, Topics in Francophone Studies
- PO350, African Politics

2. Asia

- AN322, Sex, Gender, and Sexuality in Japan
- AN329, Japanese Popular Culture
- AN366, East Asia Through Ethnography
- AN368, Coming of Age in the Middle East
- FL320, Chinese Civilization
- HST305, Topics in History: Youth and Revolution Modern China
- HST305, Topics in History: Mao's China
- HST371, Modern China
- RL353, Buddhism


## 3. Europe

- FR320, Topics in French and Francophone Cultures
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- AN362, Peoples and Cultures of Latin America
- PO360, Political Regimes in Latin America
- SO331, Latin American Societies
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5. Foreign Languages. Courses at the 300-400
level in one modern foreign language. Classes in French, German, Spanish, and Chinese are offered at Butler University. Classes in other languages such as Arabic, Italian, and Japanese can be taken at other universities in the area.

## III. Special International Studies Courses,

which may include:

- IS401, IS402, and IS403, Independent Study in International Studies
- IS404 and IS405, Internship in International Studies
- IS470, Selected Topics in International Studies (prerequisite: permission of instructor)
- IS499, Honors Thesis
IV. Study Abroad (highly recommended). Experience abroad may be in the form of attendance at a foreign college or university, an international internship, independent travel connected with an approved independent study project, or participation in an approved foreign study tour. Credits from those experiences abroad usually count toward fulfilling the requirements of the major or minor.


## V. Model United Nations, Model Arab

 League, and Model European Union (highly recommended). International Studies minors can participate in these three events, which play a very important role in the formation of students interested in international issues, because they learn the rules of negotiationand diplomacy as well as the workings of the United Nations, Arab League, and European Union. The cost for participating in these events (registration, airfare, and lodging) is covered by the International Studies budget.

## Core Course Offered by International Studies

SW2'70-IS, Understanding Global Issues: The course addresses the intensification of globalization during the first decade of the 21st century. It introduces students to contemporary issues related to globalization. (U)(3) Fall.

## International Studies Courses

IS101, Introduction to International Studies:
The course is designed to help students to understand and critically reflect on issues that affect both the United States and the international community. The issues addressed in this course are key pieces of the larger and interrelated set of the international system. (U) (3) Fall and spring.

IS301, European Union Model: This course introduces the student to the organization and functioning of the different institutions of the European Union and prepares them to participate in the Midwest Model European Union, which takes place every April for three days. The major topics we will address include: the history of the European integration, government and politics of the European Union and its institutions. Prerequisite: Any 100-level course in the social sciences or permission of the instructor. (U)(1) Annually, term varies.

IS390, The United Nations and Other International Organizations: This course introduces students to several international organizations, with a focus on the United Nations. The broader theoretical and experiential focus of the class will help students understand international institutions and to become more effective global citizens, while developing proficiency in policy formulation, parliamentary procedure, negotiation, and conflict resolution. (U)(3) Fall.

IS401, Independent Study: Offers the qualified student in International Studies the opportunity to pursue a topic of individual interest.
Prerequisites: junior or senior standing, consent of the director of the project, and approval of the director of the International Studies Program. (U)(1) Fall and spring.

IS402, Independent Study: Offers the qualified student in International Studies the opportunity to pursue a topic of individual interest.

Prerequisites: junior or senior standing, consent of the director of the project, and approval of the director of the International Studies Program. (U)(2) Fall and spring.

IS403, Independent Study: Offers the qualified student in International Studies the opportunity to pursue a topic of individual interest.
Prerequisites: junior or senior standing, consent of the director of the project, and approval of the director of the International Studies Program. (U)(3) Fall and spring.

IS404, Internship in International Studies: Offers the qualified student the opportunity for supervised experience in internationally oriented jobs in U.S. or foreign governments, business, or international organizations. A popular and very useful internship for international studies majors is the Washington internship. (U)(3) Fall and spring.

IS405, Internship in International Studies:
Offers the qualified student the opportunity for supervised experience in internationally oriented jobs in U.S. or foreign governments, business, or international organizations. A popular and very useful internship for international studies majors is the Washington internship. (U)(6) Fall and spring.

IS410, The Global Society: This course is about the constitution of the global system, and the processes reproducing and transforming the structures of globalization. The course acquaints the student with the process of worldwide economic, cultural, and political flows and provides an introduction to the organization and functioning of the global society. Prerequisite: IS101. (U/G) Spring.

IS4 ${ }^{\prime}$ 0, Selected Topics in International Studies: In-depth study of selected topics not covered in traditional courses. Prerequisite: Consent of instructor. (U)(3) Fall and spring.

IS499, Honors Thesis. (U)(3) Fall and spring.

## Disciplinary Courses

The descriptions for the other courses listed in the program are available in the corresponding discipline of the catalog (i.e., history, political science, sociology, etc.). A complete list and description of new courses or topic courses will be published every semester.

# Mathematics and Actuarial Science 

Administration
William W. Johnston, PhD, Department

Chair; Lacey P. Echols, MAT, Coordinator of Mathematics Support Services

## Professors

William W. Johnston, PhD; Prem L. Sharma, PhD

## Associate Professors

Duane Leatherman, MA; Rebecca G. Wahl, PhD

## Assistant Professors

Rasitha R. Jayasekare, PhD; Scott Kaschner, PhD; Amber C. Russell, PhD; Jonathan E.
Webster, PhD; Christopher J. Wilson, PhD
Instructors
Lacey P. Echols, MAT; Kathie J. Freed, MS; Karen Holmes, PhD; Mary Z. Krohn, PhD

## Department Website

www.butler.edu/math
The department offers both majors and minors in each of the disciplines of mathematics and actuarial science. In addition to the departmental requirements listed below, a student must complete the Core Curriculum requirement, the College of Liberal Arts and Sciences language requirement, and other general requirements listed in this Bulletin. A bachelor of science degree is also available in natural science and mathematics or in natural science and actuarial science for majors who complete a total of at least 60 credits combined from the two chosen areas.

## Why Study Mathematics?

The mathematics major is well suited to and designed for students who are interested in gaining employment in government or industry jobs that require problem-solving skills, attending graduate or professional school, or teaching in secondary schools.

## Why Study Mathematics at Butler?

- The department faculty provides a personal education in a close-knit community. Students and faculty members know one another in supportive, professional relationships, and faculty members care about their students and their success and know every student by name. All of the department's classes are small-fewer than 30 students in each one, including introductory-level courses. Every course is taught by faculty members with advanced degrees and with a wide range of specialties in the different mathematical subfields, and there are no graduate students teaching departmental classes. In these ways, the department offers a consistently studentoriented education.
- The department's curriculum is top-rated in quality. It adheres to the Committee for Undergraduate Program in Mathematics
guidelines-one of the few collegiate mathematics departments in the United States to commit enough teaching resources to do so. The Butler mathematics major is a wonderful choice for a strong investment in any student's future.
- Department professors are available to students. Each one maintains office hours-no appointment necessary. The department's office doors are open every single workday. Faculty members support each other, and students may talk with any faculty member to get help needed.
- The department's Mathematics Tutoring Lab hires mathematics and mathematics education majors to provide support to students enrolled in lower-level and core mathematics classes-at no charge.
- Mathematics faculty members are always open to sponsoring student/professor collaborative research for the department's majors, such as in the Butler Summer Institute.
- Dual degrees are available in engineering through a partnership with the Purdue School of Engineering and Technology at Indianapolis (IUPUI). One dual-degree option is that a student can earn degrees in two majors-for example, mathematics (from Butler) and engineering (from Purdue). (See Engineering Dual Degree Program-EDDP.)


## Degree Programs

- Actuarial Science (BA, BS)
- Mathematics (BA, BS)
- Minor in Actuarial Science
- Minor in Mathematics


## Mathematics Student Learning Outcomes

Our graduates are problem solvers with a broad knowledge of mathematical subfields. They are extraordinarily strong at thinking about and proving abstract mathematical statements, and they communicate mathematical solutions and concepts clearly and effectively. Butler mathematics majors carry with them an ability to understand mathematical arguments and assess their validity. They can identify the fundamental concepts in the main areas of mathematics, including set theory, logic, calculus, discrete mathematics, linear and modern algebra, and real and complex analysis. They can construct mathematical proofs using standard techniques such as induction, contradiction, and contraposition, and they can solve mathematical problems by applying abstract theory and/or mathematical models as
appropriate. Our graduates communicate well to various audiences-to individuals who might be trained in mathematics and to those who are not. This ability includes the use of mathematical word processing systems to write mathematics. In these many ways, our majors understand various interconnections among the branches of mathematics, the discipline's breadth and depth, and its beauty.

## Requirements for the Major

- MA106, MA107, MA208, Calculus and Analytic Geometry I, II, III
- MA200, Basics of Advanced Mathematics
- MA205, Discrete Mathematics
- MA215, Linear Algebra
- MA312, Modern Algebra I
- MA326, Real Analysis I
- MA330, Complex Analysis
- MA490, Senior Seminar
- Choice of either MA313, Modern Algebra II, or MA327, Real Analysis II
- Programming course numbered CS142 or higher
- Three upper-division electives to be chosen from MA301, MA305, courses numbered between MA310 and MA399, or MA473


## Requirements for the Minor

- MA106, MA107, Calculus and Analytic Geometry I, II
- MA200, Basics of Advanced Mathematics
- MA205, Discrete Mathematics
- Choice of either MA305, Graph Theory, or MA208, Calculus and Analytic Geometry III
- MA215, Linear Algebra
- One additional upper-division elective to be chosen from MA301, MA305, courses numbered between MA310 and MA399, or MA473


## Why Study Actuarial Science?

An actuary is a mathematician responsible for estimating risks, primarily in the insurance and financial security industries. The Butler program prepares each major for a successful career as an actuary, as well as for the professional SOA (Society of Actuaries) Examinations in Probability (P), Financial Mathematics (FM), Actuarial Models (MLC and MFE), and Construction and Evaluation of Actuarial Models (C).

## Why Study Actuarial Science at Butler?

- Butler is one of only a few institutions in Indiana to offer an undergraduate degree
in actuarial science. The department additionally offers a combined actuarial science/management curricular option, in which students can earn both an actuarial science undergraduate degree and an MBA degree.
- The department has a very active student club in actuarial science. It also works with a departmental board of advisors for actuarial science, whose members are alumni who work with the department faculty and student majors. For example, they often offer advice for the program and support departmental efforts to help students find internships and jobs.
- Each year, upper-level actuarial science major courses give students a chance to see, from a faculty member who can provide an industry point of view, how classroom ideas and issues arise naturally in the workplace.
- The actuarial science curriculum prepares students to take as many as three or four actuarial science examinations while still a student at Butler, giving them a jump-start on their career.


## Actuarial Science Student Learning Outcomes

Our graduates enter the job market with a strong working knowledge of the basic concepts and theories of actuarial science. They are qualified to sit for the first five exams given by the Society of Actuaries (as listed above: examinations P, FM, MLC, MFE, and C). These actuarial science majors can solve insurance and financial problems related to risk assessment, and they know how to perform related calculations in applications of standard actuarial methods. Finally, they are able to communicate sophisticated quantitative analysis clearly and correctly to various audiences in both written and spoken presentations. In this way, our actuarial science majors are well prepared to take leadership roles in businesses that require risk-management services.

## Requirements for the Major

- MA106, MA107, MA208, Calculus and Analytic Geometry I, II, III
- MA215, Linear Algebra
- MA360, Probability Theory I
- MA361, Statistical Theory
- MA362, Applied Statistical Methods
- MA363, Probability Theory II
- MA372, Loss Models
- MA395, Financial Mathematics
- MA397, Actuarial Mathematics I
- MA398, Actuarial Mathematics II
- MA399, Financial Derivatives


## Requirements for the Minor

- MA106, MA107, Calculus and Analytic Geometry I, II
- MA360, Probability Theory I
- MA395, Financial Mathematics
- Two of the following courses:
- MA363, Probability Theory II
- MA372, Loss Models
- MA39r, Actuarial Mathematics I
- MA398, Actuarial Mathematics II
- MA399, Financial Derivatives


## Actuarial Science/Management Program

The insurance and financial service industries have a strong need for management prospects who combine analytic and technical skills (related to the department's actuarial science curriculum) with the leadership capabilities, people skills, and understanding of business practices (which come from advanced education in management). The actuarial science/ management program gives its enrolled students capability in this blend of skills and training. Our graduates are able to command excellent entry-level positions and are strong candidates for fast advancement to upper-level management positions. The actuarial science/management program includes an undergraduate major in actuarial science with a strong component of business theory, followed by a 33-hour MBA program. Enrolled students may choose their graduate courses to gain a concentration in either organizational leadership or finance.

## Phase I-Undergraduate Curriculum

 Requirements for the Major- MA106, MA107, MA208, Calculus and Analytic Geometry I, II, III
- MA215, Linear Algebra
- MA360, Probability Theory I
- MA361, Statistical Theory
- MA362, Applied Statistical Methods
- MA363, Probability Theory II
- MA372, Loss Models
- MA395, Financial Mathematics
- MA39r, Actuarial Mathematics I
- MA398, Actuarial Mathematics II
- MA399, Financial Derivatives

In addition, the following business courses are recommended:

- AC203, AC204, Introduction to Accounting I, II
- MS265, Information Technology (prerequisite: MS100)
- EC231, EC232, Principles of Micro/ Macroeconomics
- FN340, Corporate Finance
- MK380, Introduction to Marketing Management
- MG360, Organizational Behavior

A student must achieve a minimum grade of $B$ in a given business course to waive the comparable prerequisite (400-level) course in the MBA program.

## Phase II-Graduate Curriculum

Upon successful completion of Phase I, and after meeting the MBA program admission requirements, students can complete the College of Business MBA program with a minimum of 33 hours of MBA coursework ( 500 level). To qualify for full admission into the MBA program, the following requirements must be satisfied: students must obtain an appropriate score on the GMAT test; and students must submit to the graduate admission office a graduate admission application, two letters of recommendation, an official transcript, and a résumé.

## Core Courses Offered by Mathematics and Actuarial Science

AR210-MA, Statistically Speaking: Who needs statistics in the 21st century? Anyone looking critically at numerical information who does not want to be misled by incorrect or inappropriate calculations or anyone dealing with issues in their environment, state/nation, or career would benefit from studying the methodology of statistics. These problems include finding ways to improve our environment and living standards or studies conducted in an effort to fight diseases. This course is an introduction to applied statistics in the natural, social, and managerial sciences through the use of current environmental and global issues. Topics include sampling, data analysis, experimental design, and the use of computer-based statistical software. (U)(3) Fall and spring.

## AR211-MA, Codes and Secret Messages:

How can sensitive information such as credit card numbers or military strategy be exchanged between two people without being intercepted by a third party? Are there ways to detect and correct errors resulting from a mistyped identification number or a scratched CD? Can information be exchanged securely among multiple individuals without anyone revealing his or her own decryption scheme? In this course, students will investigate various strategies for storing and transmitting information accurately, efficiently, and securely. Students will design several types of ciphers for sending secret messages, construct various error-detecting and error-correcting codes, and
implement secure public-key cryptosystems for exchanging messages with classmates. As these issues are explored, students will discover the need for mathematical notions such as modular arithmetic, permutations and combinations, probability and statistics, vectors and matrices, and formal logic. Students will also become aware of the central role played by cryptology and coding throughout history and modern society. (U)(3) Fall and spring.

AR212-MA, Win, Lose or Draw: Why do we play games? Whatever the reason, games are a big piece of life. The world has played games for a long, long time-every time period, every culture. We will study games and gambling in our culture as well as those in other cultures. To better understand games, students will study probability theory and its application to gaming. Applications include casino games, lotteries, racing, wagering systems, as well as other games. Some analytical tools that will arise during the course are counting methods, expected value, trees, gambler's ruin, and distributions. (U)(3) Fall and spring.

AR213-MA, Infinity and Beyond: Is infinity a knowable concept? The ability to wrestle with the infinite remains one of the pinnacles of human thought. Many of the big ideas of ancient and modern mathematics are related to this notion. With infinity as a unifying theme, this course aims to engage students in exploratory investigations and mathematical ways of thinking in topics like estimation, rigorous proof of universal statements, iterative limits, resolution of paradoxes, inherent limitations of computer calculations, and the extension of ideas to new settings. Practical outcomes include improved numeracy and sense of scale, appreciation for the application of abstract mathematics, awareness of limits in computational models, insights in philosophy and aesthetics, novel techniques of thought, and a general emphasis on careful reasoning. (U)(3) Fall and spring.

## Mathematics and Actuarial Science Courses

MA101, Algebra: Provides students with the necessary background to continue in mathematics. Topics include the number system, equations, inequalities, graphs, polynomials, algebraic functions, and exponents. Students who have successfully completed any other mathematics course will not be given credit for MA101. Does not satisfy Core Curriculum requirement. Must not be taken pass/fail. (U)(3) Fall and spring.

MA102, Precalculus: This course provides students with the necessary mathematical background to successfully complete a calculus course or a course that has calculus as a major topic. Topics include solving equations and inequalities, exponents, factoring, complex numbers, and functions-linear, quadratic, polynomial, rational, exponential, logarithmic, and trigonometric. Students who have successfully completed any other mathematics course (MA106 or above) will not be given credit for MA102. Does not satisfy Core Curriculum requirement. Must not be taken pass/fail. Prerequisite: Appropriate score on the Butler math placement test. (U)(3) Fall and spring.

## MA106, Calculus and Analytic Geometry

1: The beginning calculus course for properly prepared students. Topics include differentiation, integration, elementary differential equations, and exponential, logarithmic, and trigonometric functions. Applications are emphasized. The Analytic Reasoning core course is waived for students who successfully complete this course. Prerequisite: Placement, or C- in MA102. (U)(5) Fall, spring, and summer.

## MA107, Calculus and Analytic Geometry 2:

 Continuation of MA106. Topics include methods of integration, improper integrals, infinite series, conic sections, and polar coordinates. Prerequisite: MA106. (U)(4) Fall, spring, and summer.MA108, First Year Problem Solving: This onecredit course gathers together first-year students to practice and learn about effective techniques to solve problems and think about proofs in mathematics. Students work together with faculty in a team-oriented spirit and approach to problem solving. (Note: This course does not satisfy the Core Curriculum FYS requirement.) Must be a first year student to enroll in MA108. (U)(1) Fall.

MA125, Business Calculus: This course introduces students to the concepts and methods of calculus by studying differentiation and integration with applications to business. Additionally, the mathematics of finance, including simple and compound interest, future and present annuity values, and amortization, is developed. Other topics may include a brief introduction to probability and counting techniques. Prerequisite: C- in MA101. (U)(3) Fall and spring.

MA162, Elementary Statistics: An introduction to inferential statistics with applications in the natural, social, and managerial sciences. This
course is especially designed to meet the needs of students who will later pursue postgraduate studies in social and natural sciences or professional programs in medicine. The course introduces elementary probability and uses it to develop a sound understanding of confidence intervals and hypothesis testing. Topics include data analysis, descriptive statistics, linear regression, chi-square tests, analysis of variance, and tests and confidence intervals for means and proportions. The Analytic Reasoning core requirement is waived for students who successfully complete MA162. Credit will not be awarded for both AR 210-MA and MA162. Prerequisite: MA101 or equivalent. (U)(3) Fall and spring.

MA200, Basics of Advanced Mathematics:
Introduces students to the concepts and methods of higher mathematics with an emphasis on techniques of mathematical proof. Topics include foundations of logic, set theory, relations, partial orders, well-ordering, isomorphisms, induction, equivalence relations, and functions. Corequisite or prerequisite: MA106 or equivalent. (U)(3) Fall and spring.

MA205, Discrete Mathematics: Proofs by induction, simple diagonalization proofs, combinatorial theory, relations and functions, inclusion/exclusion principle, derangements, recurrence relations, and generating functions. Prerequisite: MA106 (U)(3) Fall.

## MA208, Calculus and Analytical Geometry

3: Continuation of MA107. Topics include vector calculus, multivariable calculus, partial differentiation, multiple integration, line integrals, and Green's Theorem. Prerequisite: MA107. (U)(3) Fall and spring.

MA215, Linear Algebra: Systems of linear equations, matrices, determinants, vector spaces, linear transformations, and the eigenvalue problem. Prerequisite: MA107. (U)(3) Fall, spring, and summer.

MA301, History of Mathematics: Historical development of number systems, including contributions from Egypt, Greece, China, India, and medieval to early modern Europe. Topics may include arithmetic, algebra, theory of equations, geometry, trigonometry, number theory, combinatorics, probability, and the beginnings of calculus. Prerequisites: MA107 and MA205. (U/G)(3) Fall.

MA305, Graph Theory: Graphs and subgraphs, planar graphs, graph coloring and chromatic polynominals, trees, weighted trees and prefix codes, transport networks, matching theory. Prerequisite: MA205. (U)(3) Spring.

MA308, Problem Seminar: A course emphasizing the process of solving mathematical problems. Problems will be drawn from various sources. Students and faculty will meet weekly to exchange ideas and present solutions. Students may earn up to three credits by repeated registrations. Prerequisite: MA10\%. (U/G)(1) Fall and spring.

MA311, Number Theory: Divisibility, the Euclidean algorithm, prime numbers, unique factorization, linear congruences, the Chinese Remainder Theorem, and applications to publickey cryptography. Additional topics may include primitive roots, quadratic residues, factorization algorithms, Diophantine equations, continued fractions, and the distribution of primes. Prerequisite: MA205. (U/G)(3) Occasionally.

MA312, Modern Algebra: Relations and graphs, groups, subgroups, normal subgroups, homomorphism theorems, rings, and fields. Prerequisites: MA200, MA205, MA215. (U/G) (3) Spring.

MA313, Modern Algebra II: This course is a continuation of MA312. Topics include Euclidean rings, principal ideal domains, unique factorization domains, field extensions, and Galois theory. Prerequisite: MA312. (U)(3) Fall.

MA326, Real Analysis 1: A rigorous study of the principles underlying real-variable calculus. Topics include limits, continuity, differentiation and Riemann integration. Prerequisites: MA107, MA200, MA205. (U/G)(3) Fall.

MA327, Real Analysis 2: Continuation of MA326. A variety of topics, such as sequences, series, uniform convergence, introduction to Lebesgue measure and integration, line and surface integrals. Prerequisite: MA326. (U/G)(3) Spring.

MA330, Complex Analysis: Complex numbers, analytic functions, complex integration, Cauchy's Theorem, Taylor and Laurent series, contour integrals, and the residue theorem. Prerequisite: MA208. (U/G)(3) Spring.

MA334, Differential Equations: Analytical, numerical, and qualitative approaches to differential equations, including linear equations and systems, and nonlinear equations. Prerequisite: MA10\%. (U/G)(3) Fall and spring.

MA351, Geometry: Various topics from Euclidean, projective, and non-Euclidean geometry. Prerequisite: MA107. (U/G)(3) Spring.

MA360, Probability Theory 1: Combinatorics, general probability, conditioning, discrete/ continuous random variables, transformed
random variables. Joint, marginal, conditional continuous densities. Covariance. The central limit theorem. Topics may include order statistics, conditional expectation. Prerequisite: MA107 or permission. (U)(3) Fall.

MA361, Statistical Theory: Tests of statistical hypotheses, linear models, nonparametric methods, multivariate distributions, and theory of statistical inference. Prerequisite: MA360. (U/G)(3) Spring.

## MA362, Applied Statistical Methods:

Simple linear regression, correlation, multiple regression, and time series. Regression topics to be discussed include dummy variables, transformations of data, and multicollinearity. Time series topics cover model identification, parameter estimation, diagnostic checking, and forecasting. Prerequisite: MA361. (U)(3) Occasionally.

MA363, Probability Theory 2: Topics include Poisson processes, mixed continuous-discrete distributions (including expectation and cumulative distribution), moment generating functions, order statistics, conditional densities, conditional expectation, and a brief introduction to simple linear regression of a single variable. The course emphasizes actuarial applications, such as net benefit calculations. Prerequisite: MA360 (U/G)(3) Spring.

MA365, Numerical Analysis: Solutions of equations and systems, error analysis, numerical differentiation and integration, interpolation, least squares approximation, numerical solution of ordinary differential equations. Prerequisite: MA10\%. (U/G)(3) Occasionally.

MA3'2, Loss Models: Models for the amount of a single payment, models for the number of payments, aggregate loss models. Prerequisite: MA361. (U/G)(3) Occasionally.

MA395, Financial Mathematics: Time value of money, annuities, loans, bonds, general cash flows, immunization, and introduction to financial derivatives. Prerequisite: MA107 (U) (4) Fall.

MA397, Actuarial Mathematics 1: Survival distributions and life tables; the mathematics of life insurance, life annuities, net premiums, and net premium reserves. Prerequisites: MA360, MA395 (MA395 may be taken concurrently). (U/G)(3) Occasionally.

MA398, Actuarial Mathematics 2: Multiple life functions, multiple decrement models, valuation theory for pension plans, ruin models. Prerequisite: MA397. (U/G)(3) Occasionally.

MA399, Financial Derivatives: Put-call parity, binomial options, Black-Scholes formula, deltahedging, lognormal distribution, Brownian motion and Ito's lemma. (U)(3) Occasionally.

MA401, Independent Study: Provides an opportunity for qualified students to pursue special topics under the guidance of a department staff member. Prerequisite: Permission of department. (U/G)(1) Fall and spring.

MA402, Independent Study: Provides an opportunity for qualified students to pursue special topics under the guidance of a department staff member. Prerequisite: Permission of department. (U/G)(2) Fall and spring.

MA403, Independent Study: Provides an opportunity for qualified students to pursue special topics under the guidance of a department staff member. Prerequisite: Permission of department. (U/G)(3) Fall and spring.

MA411, Internship: Supervised work experience directly related to the major area of study. Prerequisites: Junior or senior standing and permission of department. (U)(3) Fall and spring.

MA471, Topics in Mathematics: In-depth study of special topics not covered in regular courses. Prerequisite: Permission of department. (U/G) (1) Fall and spring.

MA490, Senior Seminar: Intended for seniors majoring in mathematics, this seminar features student presentations on mathematical topics and selected readings. Prerequisites: Fifteen hours of mathematics and junior standing or permission of department. (U)(1) Spring.

MA499, Honors Thesis. (U)(3) Fall and spring.

## Modern Languages, Literatures \& Cultures

Administration<br>Terri Carney, PhD, Department Chair<br>Professors

Terri Carney, PhD; Larry W. Riggs, PhD; Sylvie Vanbaelen, PhD; Linda M. Willem, PhD

## Associate Professors

Irune del Río Gabiola, PhD; Xiaoqing Liu, PhD; Gabriela Muniz, PhD; José Roberto Álexander Quintanilla Aguilar, PhD; Eloise Sureau-Hale, PhD
Assistant Professors
Sarah Painitz, PhD (visiting); Juan Pablo
Rodríguez Prieto, PhD

## Instructors

Melissa Etzler, PhD; Liliana Goens, MA, MS; Elisa Lucchi-Riester, MAT; Amina Butoyi Shabani, PhD; Michelle Stigter, MA, MS

Department Website
www.butler.edu/mllc

## Why Study Modern Languages, Literatures \& Cultures?

The study of languages, literatures, and cultures gives students access to a broader global community, invites them to deepen their engagement with other linguistic and cultural traditions, and teaches them to be sensitive and critical readers of cultural texts. Becoming proficient or fluent in another language also enhances self-reflection, increases self-knowledge, and heightens awareness of one's own community and place in the world. Furthermore, a modern languages degree increases opportunities for employment because Butler students provide companies, nonprofits, and governmental entities with communicative and cultural analytical advantages in an increasingly shrinking world.

## Why Study Modern Languages, Literatures \& Cultures at Butler?

Small classes are led by internationally recognized and published faculty members hailing from such countries as Argentina, Austria, Belgium, Brazil, China, Colombia, El Salvador, France, Italy, Mexico, Puerto Rico, Senegal, Spain, the United States, and Uruguay. Our faculty members' wide variety of linguistic and cultural expertise enriches the curriculum and keeps students connected to the global communities they represent. Also, modern languages students consistently complete in-depth research with faculty and present at conferences both at Butler and around the country.

Students who study with us find they are wellsupported by the resources we have available in the Modern Language Center (Jordan Hall, room 391), where they receive tutoring, watch foreign language films, and work on group projects with our state-of-the-art media and computer stations.

Modern languages students choose from a wide variety of well-established study-abroad options, including a three-week, faculty-led program in Costa Rica; a semester-long, faculty-led program in Spain; summer programs in China coordinated with the Confucius Institute at Indiana University-Purdue University Indianapolis; and
more than 100 other programs offered by Butler's Center for Global Education, IFSA-Butler (Institute for Study Abroad), ISEP (International Student Exchange Program), and The Alliance for Global Education. Students receive credit for courses abroad with approval from the department chair.

Students can take advantage of the Indianapolis community by completing a service-learning course and/or independent study that connects them with local language communities-in which they can use their language skills to communicate with native speakers-as well as by completing internships with governmental entities, educational institutions, nonprofits, and businesses.

Modern languages studies can lead to these
University course fulfillments and exemptions:

- If a student completes nine or more approved hours abroad, he or she can be exempted from one required Global and Historical Studies core course.
- If a student completes three eligible modern languages courses, he or she can be exempted from the Texts and Ideas core course requirement.
- Students can fulfill the Speaking across the Curriculum (SAC) and Writing across the Curriculum (WAC) University requirements by completing approved courses during eligible semesters.

Given the interdisciplinarity of our programs, students often find creative and productive ways to combine our majors and minors with other areas, preparing them well for both employment and graduate studies.

## Modern Languages Student Learning Outcomes

Students will be able to do the following, in the target language:

- Clearly communicate in conversation and written form on a variety of topics
- Articulate a cogent interpretation of a cultural text by applying concepts and terminology pertaining to artistic, cultural studies, linguistic, or literary theories
- Demonstrate pluralist values, global awareness, and diversity-mindedness


## Degree Programs

- Majors in French, German, Spanish, and Individualized (e.g., Chinese Language and Culture) (BA)
- Minors in Chinese, French, German, and Spanish


## Requirements for the Major

A French, German, Individualized, or Spanish major consists of 33 hours in the language, at least 24 of these hours being at the 300 level or above. All language majors must take at least one 300 -level skills course and two 400-level courses. Specific area minimum requirements are listed below by language.

## French

- FR300, Oral and Written Communication (SAC)

At least one of the following culture/literature courses:

- FR316, Survey of French Civilization (formerly FR342)
- FR318, Introduction to Francophone Cultures (formerly FR334)


## German

At least one of the following 300-level skills courses:

- GR305, Germany Today (SAC)
- GR310, German for Writing


## Spanish

At least one of the following 300-level skills courses:

- SP300, Spanish Grammar in Context
- SP305, Spanish for Oral Communication (SAC)
- SP310, Spanish for Written Communication
- SP315, Spanish for Business
- SP320S, Service Learning in Spanish (WAC)

At least two culture/literature courses at the 300 level or above:

- SP330, Themes in Hispanic Studies
- SP335, Spain: Middle Ages to 1700
- SP340, Spain: 1700 to the Present
- SP345, Analysis of Literary Genres
- SP350, Spanish American Culture: Mexico, Central America, Caribbean
- SP355, Spanish American Culture: Southern Cone, Andean Countries
- SP360, Hispanic Film
- SP365, Hispanic Short Story
- SP370, Topics: Contemporary Hispanic Societies
- SP420, Topics: Golden Age of Spain
- SP430, Topics: 18th- and 19th-Century Spain
- SP440, Topics: Contemporary Spanish Studies
- SP450, Topics: Spanish-American Studies
- SP460, Topics: 20th-Century SpanishAmerican Studies
- SP470, Topics: Hispanic Culture in the United States
- SP490, Seminar (may be taken multiple times)
- SP499, Honors Thesis
- FL390, Seminar (in English, counts only toward major)

At least one linguistics course at the 300 level or above:

- SP325, Introduction to Hispanic Linguistics
- SP375, Spanish Pronunciation
- SP380, Structure of Spanish
- SP385, Intro to Varieties of Spanish
- SP405, Spanish Sociolinguistics
- SP410, Topics: Communication Skills in Spanish
- SP415, Spanish in the U.S.A.
- SP425, Phonetics of the Spanish Language
- SP435, Spanish Dialectology
- SP445, Topics: Hispanic Linguistics
- SP455, Spanish Second Language Acquisition
- SP465, Bilingualism in the Hispanic World
- SP485, History of the Spanish Language


## Requirements for the Minor

A minor in Chinese, French, German, or Spanish consists of 21 hours in the language, at least 12 of these hours being at the 300 and 400 levels. The Spanish minor, in addition, requires at least one course from SP325 through SP499.

## Placement and Earned Credits

At Butler we recognize the language accomplishments of incoming students. Whether you took regular high school courses, dual-enrollment courses, or AP/IB language courses, we will help place you in the appropriate Butler University course and assign the correct number of credits for your previous work. For proper placement and credit assignment, take the placement exam and visit the departmental website for detailed information.

## Modern Language Center

The Modern Language Center (Jordan Hall, room 391) is a multilingual space focused on second language and culture acquisition. The MLC includes a comprehensive foreign feature and instructional film collection, a large group viewing area, film viewing stations for individuals, computers, a Smart Board, and gaming systems with games in a variety of languages. In addition to state-of-the-art facilities, the MLC hosts a number of activities designed to promote language and culture learning, including tutor tables, movie nights, and karaoke club. Events, information sessions, and lectures focusing on language, culture, and
social issues are also sponsored by the language center. The MLC staff is trained in academic technology and research methodology to support all facets of language learning and teaching at Butler.

## Courses Taught in English

Language majors can count one of the following general foreign language (FL) courses toward a major (as a 300-level culture/literature course). Courses taught in English do not satisfy the foreign language requirement for College of Liberal Arts and Sciences students, College of Communication students, or International Business majors.

FL320, Chinese Civilization: An overview of Chinese civilization from the early dynasties through the present. This course is taught in English and does not count toward the language requirement. (U)(3) Occasionally.

FL380, Methods Teaching Foreign Language: Acquaints students with current methods of teaching foreign languages. Provides opportunities for use of the latest technologies, practical work, and discussion of problems encountered when teaching foreign languages and cultures. Also applicable for teacher certification. (U)(3) Occasionally.

FL390, Seminar: Study in depth of a selected topic in European, French, German, or Hispanic culture, such as historical or social conditions, individual writers, artists, political figures, or literary genres. (U)(3) Occasionally.

FL401, Internship in Foreign Language: A faculty-supervised work experience in schools, hospitals, not-for-profits, government, media, business, or other institutions. Primary language must be a foreign language. May be completed abroad or in the United States. Prerequisites: Acceptance into the internship program and permission of the department chair. (U)(1) Occasionally.

FL402, Internship in Foreign Language: A faculty-supervised work experience in schools, hospitals, not-for-profits, government, media, business, or other institutions. Primary language must be a foreign language. May be completed abroad or in the United States. Prerequisites: Acceptance into the internship program and permission of the department chair. (U)(2) Occasionally.

FL403, Internship in Foreign Language: A faculty-supervised work experience in schools, hospitals, not-for-profits, government, media, business, or other institutions. Primary language
must be a foreign language. May be completed abroad or in the United States. Prerequisites: Acceptance into the internship program and permission of the department chair. (U)(3) Occasionally.

FL480, Topics: Chinese Studies: Study of a selected topic in the culture of China. Themes may deal with literary, social, political, economic, and/or ethical concerns. Course may be repeated with each different topic. This course is taught in English and does not count toward the language requirement. (U)(3) Occasionally.

FL490, Seminar: Study in depth of a selected topic in European, French, German, or Hispanic culture such as historical or social conditions, individual writers, artists, political figures, or literary genres. (U/G)(3) Occasionally.

## FL499, Modern Languages Keystone:

Integrate. Prepare. Evolve. Completing a modern language degree and not sure what to do with it? In this capstone course, you will polish your online presence (including your foreign language ePortfolio and profiles on professional networking sites), complete an official language assessment, and work with campus resources to create a plan for continued language proficiency while leveraging those language skills in the marketplace. Modern languages majors and minors with senior standing are strongly encouraged to enroll in this capstone course. Prerequisites: Senior standing in a French, German, Individualized (with language focus), or Spanish major, or senior standing in a Chinese, French, German, or Spanish minor. (U)(1) Fall and spring.

## Courses Taught in Foreign Languages

To help students gain fluency, the target language is used extensively from the first day. Courses at the 300 and 400 levels are conducted completely in the target language.

## Core Courses Offered by the Department of Modern Languages, Literatures \& Cultures

PCA260-MFL, Love and Marriage: 17th Cen Spanish Drama: We will read six plays from the Spanish Golden Age that take place in the capital city of Madrid. We will study these dramas in the context of 1 'th-century Spain, a society marked by rapid urbanization, increased social mobility, and seismic shifts in cultural norms and personal identities and lifestyles. Theater played a central role in this society, mirroring the confusing and disorienting aspects of urban life, such as
mishaps, mistaken identities, love triangles, and miscommunications. Our course will focus on the theme of love and marriage as sites of cultural anxiety at this critical juncture in the history of Spain. Students will write their own version of a Spanish "comedia" and work in groups to perform a scene from one of the plays we read in class. Additionally, they will keep a journal on how the theme of the class, "love and marriage," is present is contemporary artistic expressions. (U)(3) Occasionally.

PCA264-SP, Nature, Art, and Craft in Peru. (U)
(3) Occasionally.

TI225-GR, Literary Responses to Two World
Wars: Our investigation of British, German, French, Italian, and Russian literature will be structured around the two world wars, arguably the most defining catastrophes to befall modern Europe. We will consider how writers such as Virginia Woolf, Franz Kafka, George Orwell, Paul Celan, Heinrich Boll, Gunter Grass, and Vladimir Nabokov responded to the violence of the wars as well as to the far-reaching social changes they brought about. (U)(3) Occasionally.

TI226-GR, Oppression and Revolution-The German Democratic Republic: This course explores oppression and revolution in the German "Democratic" Republic (GDR). (U)(3) Occasionally.

TI227, Manifestos: Persuading Unbelievers and Inciting Revolutions: The manifesto is a powerful literary genre that proposes novel ideas, and seeks to persuade non-believers and incite revolutions. We will investigate both the destructive and constructive/innovative qualities of these texts. (U)(3) Summer.

T228-SP, Cityscapes: Argentinean culture through representations of urban space: (U)(3) Occasionally.

## Chinese Courses

CN101, Beginning Chinese 1: Emphasis on spoken Chinese. Development of speaking, listening, and writing skills, along with insights into Chinese culture. Regular practice in the language center. (U)(4) Annually, term varies.

CN102, Beginning Chinese 2: Emphasis on spoken Chinese. Development of speaking, listening, reading, and writing skills, along with insights into Chinese culture. Regular practice in the language center. (U)(4) Annually, term varies.

CN203, Intermediate Chinese 1: Practice in listening, speaking, reading, and writing for communication skills. Review of fundamentals. Use of the Modern Language Center.

Prerequisite: One year of college Chinese or placement by evaluation. (U)(4) Annually, term varies.

CN204, Intermediate Chinese 2: Continuing practice in listening, speaking, reading, and writing for communicative skills. Further review of fundamentals. Use of the Modern Language Center. Prerequisite: CN203, placement by evaluation or the equivalent. (U)(4) Annually, term varies.

CN300, Chinese for Oral Communication: Oral Mandarin Chinese class to improve students' spoken language fluency. Intensive class activities include learning audio materials, watching movies, reading texts, class discussion, and presentation. Prerequisite: Two years of college Chinese or placement on the 300 level. (U)(3) Annually, term varies.

CN305, Advanced Chinese 1: Further develop students' overall language proficiency and emphasize vocabulary building, consolidation of essential grammatical patterns, and insights into Chinese culture. Use of the language laboratory and videos. Prerequisite: Two years of college Chinese or placement on the 300 level. (U)(3) Annually, term varies.

CN306, Advanced Chinese 2: Continue to develop students' overall language proficiency and emphasize vocabulary building, consolidation of essential grammatical patterns, and insights into Chinese culture. Use of the language laboratory and videos. Prerequisite: CN305, placement by evaluation, or the equivalent. (U)(3) Annually, term varies.

## CN3'3, Summer Chinese Language and

Culture Program: Develop students' language proficiency and verbal skills, and consolidate grammatical patterns and insights into Chinese culture through classroom instruction and daily one-on-one tutoring and excursions in other cities. Use of the language laboratory and videos. Prerequisite: Two years of college Mandarin Chinese or placement on the 300 level. (U)(6) Occasionally.

CN401, Internship in Chinese: A facultysupervised work experience in schools, hospitals, not-for-profits, government, media, business, or other institutions. Primary language must be Chinese. May be completed abroad or in the United States. Prerequisites: Acceptance into the internship program, completion of at least two 300-level Chinese courses, and/or permission of the department chair. (U)(1) Occasionally.

CN402, Internship in Chinese: A facultysupervised work experience in schools, hospitals,
not-for-profits, government, media, business, or other institutions. Primary language must be Chinese. May be completed abroad or in the United States. Prerequisites: Acceptance into the internship program, completion of at least two 300-level Chinese courses, and/or permission of the department chair. (U)(2) Occasionally.

CN403, Internship in Chinese: A facultysupervised work experience in schools, hospitals, not-for-profits, government, media, business, or other institutions. Primary language must be Chinese. May be completed abroad or in the United States. Prerequisites: Acceptance into the internship program, completion of at least two 300-level Chinese courses, and/or permission of the department chair. (U)(3) Occasionally.

CN491, Independent Study: Independent study of Chinese culture, literature, and language. (U) (1) Annually, term varies.

CN492, Independent Study: Independent study of Chinese culture, literature, and language. (U) (2) Annually, term varies.

CN493, Independent Study: Independent study of Chinese culture, literature, and language. (U)
(3) Annually, term varies.

## French Courses

FR101, Beginning French 1: Development of speaking, listening, reading, and writing skills, along with insights into French and Francophone cultures. Prerequisite: No previous formal French instruction. (U)(4) Annually, term varies.

FR102, Beginning French 2: Continuation of FR101. Development of speaking, listening, reading, and writing skills, along with insights into French and Francophone cultures. Prerequisite: FR101 or placement test authorization. (U)(4) Annually, term varies.

FR203, Intermediate French I: Review of basics and new grammatical structures and vocabulary. Continued practice in listening, speaking, reading, and writing to develop competence in French. Study of cultural texts. Prerequisite: FR102 or placement test authorization. (U)(3) Annually, term varies.

FR204, Intermediate French II: Continuation of FR203. Further review of basics and new grammatical structures and vocabulary. Continued practice in listening, speaking, reading, and writing to develop competence in French. Study of cultural texts. Prerequisite: FR203 or placement by evaluation or the equivalent. (U)(3) Annually, term varies.

FR300, Oral and Written Communication: Intensive work on oral and written skills through
grammar review, readings, films. Discussions, oral presentations, short essays, rewriting, work on pronunciation. Prerequisites: Two years of college French or placement on the 300 level. (U) (3) Annually, term varies.

FR316, Survey of French Civilization: Study of French civilization from its origins to the present time. Focus will be on the people, the cultural processes, and ideas that have shaped the country. Prerequisite FR300, or by permission of the instructor and department chair. (U)(3) Occasionally.

FR318, Intro to Francophone Cultures: This course is an in-depth introduction to the cultures of the Francophone world. It will introduce students to the historical background, the linguistic characteristics, the literature, music, and cinema of areas with a strong Francophone presence. Prerequisite: FR300, or by permission of the instructor and department chair. (U)(3) Occasionally.

FR320, Contemporary French Culture: Study of contemporary French culture using news media, films, interviews, online newspapers, TV programs in the French language, etc. Prerequisite: FR334 or FR342. (U)(3) Annually, term varies.

FR325, Intro to French Linguistics: Basic elements of French linguistics, phonetics, phonology, and stylistics. Prerequisite: FR334 or FR342, or permission of instructor. (U)(3) Occasionally.

FR335, France: Middle Ages to 1700: A survey of the evolution of France from the Middle Ages to 1700 through the study of literature and other cultural material. Prerequisites: FR334 or FR342. (U)(3) Occasionally.

FR340, France: 18th and 19th Century: Survey of the evolution of France in the 18th and 19th centuries through the study of literature and other cultural material. Prerequisite: FR334 or FR342, or permission of the instructor. (U)(3) Occasionally.

FR345, France and Francophone World-1900 to Present: A survey of France and the Francophone world in the 20th and 21st centuries through the study of literature and other cultural material. Prerequisites: FR310 and either FR334 or FR342 or permission of instructor. (U)(3) Occasionally.

FR401, Internship in French: A facultysupervised work experience in schools, hospitals, not-for-profits, government, media, business, or other institutions. Primary language must be a French. May be completed abroad or in the

United States. Prerequisites: Acceptance into the internship program and permission of the department chair. (U)(1) Occasionally.

FR402, Internship in French: A facultysupervised work experience in schools, hospitals, not-for-profits, government, media, business, or other institutions. Primary language must be a French. May be completed abroad or in the United States. Prerequisites: Acceptance into the internship program and permission of the department chair. (U)(2) Occasionally.

FR403, Internship in French: A facultysupervised work experience in schools, hospitals, not-for-profits, government, media, business, or other institutions. Primary language must be a French. May be completed abroad or in the United States. Prerequisites: Acceptance into the internship program and permission of the department chair. (U)(3) Occasionally.

FR415, The French Renaissance: Study of the French Renaissance as the beginning of modernity. Focus on prose and poetry. Emphasis on writing, rewriting, and discussion. Also emphasizes continued development of the four language skills: listening, speaking, reading, and writing. Prerequisite: FR334 or FR342. (U/G)(3) Occasionally.

FR425, $1^{\text {r'th }}$ th-Century France: Study of 17thcentury France in the context of early modernity. Focus on prose and theatre. Emphasis on writing, rewriting, and discussion. Also emphasizes continued development of listening, speaking, reading, and writing skills. Prerequisite: FR334 or FR342 or permission. (U/G)(3) Occasionally.

FR435, Representation of Women in 18th-
Century French Literature: Overall view of the French Enlightenment and study of the literary works of the period. Prerequisite: FR334 or FR342. (U)(3) Occasionally.

FR450, 19th-Century France: Overall view of the French culture and literature of the 19th century. Study of the significant literary works of the period. Prerequisite: FR334 or FR342. (U)(3) Occasionally.

FR465, 20th- and 21st-Century French:
Study of selected important French and Francophone novels of the 20th and 21st centuries. Lectures, reading assignments, and films. Emphasis on class discussion, writing, and rewriting. Prerequisite: FR334 or FR342. (U)(3) Occasionally.

FR475, 20th and 21st-Century French: Study of selected important French and Francophone plays of the 20th and 21st centuries. Lectures,
reading assignments, and films. Emphasis on class discussion, writing, and rewriting. Prerequisite: FR334 or FR342. (U)(3) Occasionally.

FR485, Topics in Francophone Studies: Study of the literatures and/or cultures of Frenchspeaking countries. Use of literary texts, social documents, and movies. Emphasis on class discussion, writing, and rewriting. Course may be repeated with each different topic. Prerequisite: FR334 or FR342. (U/G)(3) Occasionally.

FR490, Seminar: Study of a selected topic in the cultures of French-speaking countries. Themes may deal with literary, social, political, and/ or esthetic concerns of these countries, of one nation, or of a region. Course may be repeated with each different topic. Prerequisite: Three years of college French or the equivalent. (U/G) (3) Occasionally.

FR491, Independent Study: An opportunity for qualified students to pursue a topic of special interest. Open to majors and minors in French, by permission of the instructor and department chair. Prerequisite: Three years of college French or equivalent. (U/G)(1) Annually, term varies.

FR492, Independent Study: An opportunity for qualified students to pursue a topic of special interest. Open to majors and minors in French, by permission of the instructor and department chair. Prerequisite: Three years of college French or equivalent. (U/G)(2) Annually, term varies.

FR493, Independent Study: An opportunity for qualified students to pursue a topic of special interest. Open to majors and minors in French, by permission of the instructor and department chair. Prerequisite: Three years of college French or equivalent. (U/G)(1) Annually, term varies.

FR499, Honors Thesis. (U)(3) Annually, term varies.

## German Courses

GR101, Beginning German 1: Development of speaking, listening, reading, and writing skills, along with insights into German-speaking cultures. Prerequisite: No previous formal German instruction or placement in GR101. (U) (4) Annually, term varies.

GR102, Beginning German 2: Development of speaking, listening, reading, and writing skills, along with insights into German-speaking cultures. Prerequisite: GR101 or placement in GR102. (U)(4) Annually, term varies.

GR200, German Conversation: Students will develop their oral proficiency by concentrating
on pronunciation and practical vocabulary. Extensive use of class discussion to increase accuracy and fluency. Course cannot be counted toward the major or minor and does not fulfill the language requirement. Prerequisite: One year of college German or placement in GR203. (U)(1) Fall and spring.

GR203, Intermediate German I: Review of the basic structures of German with an emphasis on active skills. Introduction to German literature through readings, film, and discussion in German. Prerequisite: One year of college German or placement in GR203. (U)(3) Annually, term varies.

GR204, Intermediate German II: Continuation of the review of the basic structures of German with an emphasis on active skills. Practice through readings, films, and discussions in German. Exploration of social, artistic, historical, and/or political topics. Prerequisite: Three semesters of college German or placement in GR204 (U)(3) Annually, term varies.

GR305, Germany Today: This course offers practice in oral German to develop accuracy and fluency through guided conversations, discussions, individual presentations, vocabulary building, and grammar review. Topics deal with contemporary German culture, society, politics, media, and business. Prerequisite: Two years of college German or placement at the 300 level. (U) (3) Annually, term varies.

GR310, German for Writing: This course offers practice in written German to develop accuracy and fluency through the analysis of various writing styles and genres, vocabulary building, and grammar review. Emphasis is on the process of writing, guided corrections, and enhancement of self-evaluation. Prerequisite: Two years of college German or placement in German on the 300 level. (U)(3) Fall.

GR311, Contemporary German Authors: A course providing reading and discussion of selected texts by post-war authors. Oral and written literary analysis. Prerequisite: Two years of college German or placement in 300-level German. (U)(3) Annually, term varies.

GR315, German for Business: This course offers an introduction to the structures, institutions, procedures, and terminology of the German business world. Current business news is explored through a variety of media, such as print, television, and internet. Prerequisite: Two years of college German or placement on the 300 level. (U)(3) Spring.

GR320, Contemporary German Authors:
An introduction to literary studies in German through close readings and critical analysis of selected texts by post-war authors such as Grass, Durrenmatt, and Wolf. Prerequisite: Two years of college German or placement at the 300 level. (U)(3) Spring.

GR322, The German Play: A seminar in textual and performance studies in which students learn about all aspects of theatrical production from costume design, props, lighting, sound design, and stage management to directing and acting. The course will focus on a single dramatic work studied in depth, culminating in the staging of the play. Prerequisite: Two years of college German or placement at the 300 level. (U)(3) Fall and spring.

GR330, Children's Literature: This course in literature for and about children and adolescents offers an introduction to German culture and history from 1800 to the present. Issues considered include social inequality, gender, family, education, and growing up in authoritarian regimes. Prerequisite: Two years of college German or placement at the 300 level. (U) (3) Fall and spring.

GR335, Germany Studies I: Tradition and Innovation: A survey of the evolution of Germany from the Middle Ages to the Enlightenment through the study of literature, art, and other cultural material. Prerequisite: Two years of college German or placement at the 300-level. (U)(3) Occasionally.

GR340, German Studies II: Nation and Identity: A survey of the evolution of Germany from Storm and Stress to Realism through the study of literature, art, and other cultural material. Prerequisite: Two years of college German or placement at the 300 level. (U)(3) Occasionally.

GR341, Romanticism to the Modern Period: Representative works of authors and artists of the 19th century up to Nietzsche's time. Prerequisite: Two years of college German or placement on the 300 level. (U)(3) Occasionally.

GR342, German Studies III: Modernity and Tyranny: A survey of the evolution of Germany from Naturalism to the present through the study of literature, art, and other cultural material. Prerequisite: Two years of college German or placement on the 300 level. (U)(3) Occasionally.

## GR351, German Civilization: Investigation

 of German literature and culture in a historical context. Course may focus on a specific theme or time period. Prerequisite: Two years of collegeGerman or placement in German at the 300 level. (U)(3) Occasionally.

GR360, German Film: Analysis and discussion of German films within their cultural, historical, political, and social contexts. Prerequisite: Two years of college German or equivalent or placement on the 300 level (U)(3) Occasionally.

GR390, Topics in Literature and Culture:
Study of a selected topic in German literature or culture. Course may be repeated with each different topic. Prerequisite: Two years of college German or placement at the 300 level. (U)(3) Occasionally.

GR401, Internship in German: A facultysupervised work experience in schools, hospitals, not-for-profits, government, media, business, or other institutions. Primary language must be a German. May be completed abroad or in the United States. Prerequisites: Acceptance into the internship program and permission of the department chair. (U)(1) Occasionally.

GR402, Internship in German: A facultysupervised work experience in schools, hospitals, not-for-profits, government, media, business, or other institutions. Primary language must be a German. May be completed abroad or in the United States. Prerequisites: Acceptance into the internship program and permission of the department chair. (U)(2) Occasionally.

GR403, Internship in German: A facultysupervised work experience in schools, hospitals, not-for-profits, government, media, business, or other institutions. Primary language must be a German. May be completed abroad or in the United States. Prerequisites: Acceptance into the internship program and permission of the department chair. (U/G)(3) Occasionally.

GR430, German Drama after 1945: An indepth study of selected dramas by authors such as Brecht, Borchert, Durrenmatt, and Jelinek. Discussion in German. Prerequisite: Three years of college German or equivalent. (U)(3) Occasionally.

GR467, Topics in German Studies: Age of Goethe: Study of select writers, genres, or themes within the context of German culture from Enlightenment to Romanticism. Topics may include the Faust theme in literature, art, and music, the rebel and the genius, Goethe and Schiller. Prerequisite: Three years of college German or equivalent. (U)(3) Occasionally.

GR470, Topics in German Studies: The 19th Century: Study of select writers, genres, or themes within the context of 19th-century

German culture. Topics may include the German nation, fairy tales and fantastical literature, the novella. Prerequisite: Three years of college German or equivalent. (U)(3) Occasionally.

GR475, Topics in German Studies: The 20th Century: Study of select writers, genres, or themes within the context of the 20th-century German culture. Topics may include fin-de-siecle literature, Kafka, GDR literature, multicultural Germany. Prerequisite: Three years of college German or equivalent. (U)(3) Occasionally.

GR490, Seminar: Investigation of a selected topic in German such as a genre, time period, writer, artist, or historical figure in its historical and social context. Course may be repeated with each different topic. Prerequisite: Three years of college German or equivalent. (U/G)(3) Occasionally.

GR491, Independent Study: An opportunity for qualified students to pursue a topic of special interest. Open to majors and minors in German, by permission of the instructor and department chair. Prerequisite: Three years of college German or equivalent. (U/G)(1) Annually, term varies.

GR492, Independent Study: An opportunity for qualified students to pursue a topic of special interest. Open to majors and minors in German, by permission of the instructor and department chair. Prerequisite: Three years of college German or equivalent. (U/G)(2) Annually, term varies.

GR493, Independent Study: An opportunity for qualified students to pursue a topic of special interest. Open to majors and minors in German, by permission of the instructor and department chair. Prerequisite: Three years of college German or equivalent. (U/G)(3) Annually, term varies.

GR499, Honors Thesis. (U)(3) Annually, term varies.

## Spanish Courses

SP101, Beginning Spanish I: The first course in Spanish. Focus is on developing the four skills of language acquisition: listening, speaking, reading, and writing production. Although learning grammar is an important part of the process, it will be used around everyday situations and cultural topics. Prerequisites: No previous Spanish instruction. Permission granted upon personal interview with the department chair. (U)(4) Annually, term varies.

SP102, Beginning Spanish II: This is the second course in the basic Spanish language
sequence. The course continues to develop basic communication skills in listening, speaking, reading, and writing at a more complex level. Prerequisite: SP101 or placement test authorization. (U)(4) Annually, term varies.

## SP201, Spanish Conversation and

Pronunciation: Development of oral proficiency. Concentration on pronunciation and practical vocabulary. Review of basic structures. Practice of speaking skills in class discussions. Use of audiovisual materials to increase accuracy and fluency. Prerequisite: One year of college Spanish or placement test authorization. (U)(3) Annually, term varies.

SP203, Intermediate Spanish I: First course in intermediate Spanish. Review of fundamentals, develop intermediate skills in reading, writing, speaking, and listening; building communicative competence; and enhancing social and cultural awareness of Spanish-speaking world. Prerequisite: One year of college Spanish or SP102, or placement exam results. (U)(3) Annually, term varies.

SP204, Intermediate Spanish II: Second course in intermediate Spanish. Further review of fundamentals; continue developing competence; and enhance social and cultural awareness of the Spanish-speaking world. Prerequisite: SP203, or placement exam results. (U)(3) Annually, term varies.

SP300, Grammar in Context: Study of grammatical structures to master language at intermediate/advanced level. Students review, reinforce, and practice grammar within contextual framework so as to build vocabulary, read cultural texts, and create written material to see the interaction of language skills. Prerequisite: SP204 or equivalent course or placement test at 300 level. (U)(3) Annually, term varies.

## SP305, Spanish for Oral Communication:

 Practice in oral Spanish to increase fluency through activities and discussion. Intensive controlled conversation and the facilitation of debates and group discussions in relation to audiovisual materials and cultural readings. Prerequisite: SP204 or equivalent course or placement on the 300 level. (U)(3) Annually, term varies.
## SP310, Spanish for Written Communication:

Writing in Spanish; facilitate expression of ideas; review of grammatical structures. Analysis: writing styles and writing process; guided correction to enhance self-evaluation and improvement of writing skills; developing a good
thesis; adapting content to reader. Prerequisite: SP204 or equivalent course or placement on the 300 level. (U)(3) Annually, term varies.

SP315, Spanish for Business: Introduction to the Hispanic business world and examination of its structures, institutions, procedures, and terminology. Prerequisite: Two years of college Spanish or placement on the 300 level. (U)(3) Occasionally.

SP320S, Service Learning in Spanish: Increase students' fluency in Spanish; encourage them to frame their community experience in meaningful ways. Class components: supervised volunteer tutoring ( 24 hours/semester) and weekly class meetings to discuss Latino immigration. Writing-intensive. Prerequisites: SP204 or equivalent course or placement on 300-level in Spanish. (U)(3) Annually, term varies.

SP325, Intro to Hispanic Linguistics: Overview of the history, phonetics, syntax, acquisition, and language variation of the Spanish language (theories, analysis, and application). Prerequisite: One 300-level skills course in Spanish. (U)(3) Annually, term varies.

SP330, Themes in Hispanic Studies: Selected themes within the literature and culture of one or more Spanish-speaking countries. Course may be repeated with each different topic. Prerequisite: One 300-level skills course in Spanish. (U)(3) Occasionally.

SP335, Spain: Middle Ages to ${ }^{17} 700$ : Use of selected reading and audiovisual materials to study the history, literature, and arts of Spain from the Middle Ages through the 17th century. Prerequisite: One 300-level skills course in Spanish. (U)(3) Occasionally.

SP340, Spain: 1700 to Present: Use of selected reading and audiovisual materials to study the history, literature, and arts of Spain from the 18th century to the present. Prerequisite: One 300-level skills course in Spanish. (U)(3) Occasionally.

SP345, Analysis of Literary Genres: Panoramic view of major and minor literary works of various genres across different time periods and geographical areas of the Hispanic world. Prerequisite: One 300-level skills course in Spanish. (U)(3) Occasionally.

SP350, Spanish American Culture: Mexico, Central America, Caribbean: Geographically oriented approach to the study of the historical events, literary and cultural artifacts, and individual figures that have shaped and defined the countries of Spanish Mexico and selected
countries from Central America and the Caribbean. Prerequisite: One 300-level skills course in Spanish. (U)(3) Occasionally.

SP355, Spanish American Culture: The study of historical events, and the literary and cultural productions of the Southern Cone and Andean countries. Prerequisite: One 300-level skills course in Spanish. (U)(3) Occasionally.

SP360, Hispanic Film: Approach to Hispanic cultures through film and visual representations. Themes for analyses, discussions, and papers vary according to films chosen. Prerequisite: One 300-level skills course in Spanish. (U)(3) Occasionally.

SP365, Hispanic Short Story: Study of selected stories by Spanish and Latin American authors. Prerequisite: One 300-level skills course in Spanish. (U)(3) Occasionally.

SP370, Topics: Contemporary Hispanic Societies: A study of the contemporary societies of one or more countries of Latin America, of Spain, and/or the Latino society of the United States. This course may be repeated with each different area studied. Prerequisite: One 300-level skills course in Spanish. (U)(3) Occasionally.

SP375, Spanish Pronunciation: This course introduces the sounds of Spanish in order to achieve a near native-like pronunciation. It covers theory and practice. Prerequisite: One 300-level skills course in Spanish. (U)(3) Annually, term varies.

SP380, Structure of Spanish: The study of Spanish words and their internal structure as well as an overview of perspectives gained from the X bar theory to study Spanish word order, semantic roles, constituents, clause structure, grammaticality judgements, and so on. Prerequisites: One 300-level skills course in Spanish. (U)(3) Occasionally.

SP385, Intro to Varieties of Spanish: We will study the divergent linguistic features of the largest regions of Spain and Latin America (pronunciation, grammar, idioms, slang, linguistic and cultural stereotypes, etc.). Prerequisite: One 300-level skills course in Spanish. (U)(3) Occasionally.

SP401, Internship in Spanish: A facultysupervised work experience in schools, hospitals, not-for-profits, government, media, business, or other institutions. Primary language must be a Spanish. May be completed abroad or in the United States. Prerequisites: Acceptance into the internship program and permission of the department chair. (U)(1) Occasionally.

SP402, Internship in Spanish: A facultysupervised work experience in schools, hospitals, not-for-profits, government, media, business, or other institutions. Primary language must be a Spanish. May be completed abroad or in the United States. Prerequisites: Acceptance into the internship program and permission of the department chair. (U)(2) Occasionally.

SP403, Internship in Spanish: A facultysupervised work experience in schools, hospitals, not-for-profits, government, media, business, or other institutions. Primary language must be a Spanish. May be completed abroad or in the United States. Prerequisites: Acceptance into the internship program and permission of the department chair. (U/G)(3) Occasionally.

SP405, Spanish Sociolinguistics: This course is an introduction to sociolinguistic variation in the Hispanic world. We will study some of the factors of linguistic maintenance and shift in Spanish (the role of gender, age, education, attitudes, etc.). Prerequisites: Two 300-level courses in Spanish; one must be upper level (SP325 or above). (U/G)
(3) Occasionally.

## SP410, Topics-Communication Skills in

Spanish: Practice in communication in Spanish.
Topics vary. Course may be repeated with a different topic. Prerequisite: Two 300-level courses in Spanish; one must be upper level (SP325 or above). (U/G)(3) Occasionally.

SP415, Spanish in the USA: We will study the history, development, and current state of Spanish and its speakers in the United States, including the linguistic characteristics of the Spanish varieties spoken. Prerequisites: Two 300-level courses in Spanish; one must be upper level (SP325 or above). (U/G)(3) Occasionally.

## SP420, Topics-Golden Age of Spain:

Exploration of the 16th and 17 th centuries through literature, history, and/or artistic expression. Course may be repeated with each different topic. Prerequisites: Two 300-level courses in Spanish; one must be upper level (SP325 or above). (U/G)(3) Occasionally.

SP425, Phonetics of the Spanish Language: Introduction to the sounds of Spanish, native Speaker pronunciation, recognition of Spanish main dialects, and Spanish-English phonetic contrasts. Prerequisites: Two 300-level courses in Spanish; one must be upper level (SP325 or above). (U/G)(3) Occasionally.

## SP430, Topics-18th and 19th Century Spain:

Study of historical, literary, and/or artistic aspects of the period. Course may be repeated with each different topic. Prerequisites: Two

300-level courses in Spanish; one must be upper level (SP325 or above). (U/G)(3) Occasionally.

SP435, Spanish Dialectology: The geography of Spanish in terms of origin, change, dialects, society, contact with other languages, slang, etc. Prerequisites: Two 300-level Spanish courses; one must be upper level (SP325 or above). (U/G) (3) Occasionally.

SP440, Topics-Contemporary Spanish Studies: Analysis of aspects of 20th- and 21st-century Spain through study of literary, historical, artistic works, and/or the media, offering such topics as the transition from dictatorship to democracy or the roles of women and men in contemporary society. Prerequisites: Two 300-level courses in Spanish; one must be upper level (SP325 or above). (U/G)(3) Occasionally.

SP445, Topics in Hispanic Linguistics: Study of a selected topic in the field of linguistics (the study of language) from the perspective of Spanish. Themes may deal with phonetics, syntax, morphology, history, semantics, pragmatics, sociolinguistics, Spanish in context, etc. Prerequisites: Two 300-level Spanish courses; one must be upper level (SP325 or above). (U/G)(3) Occasionally.

## SP450, Topics-Spanish-American Studies:

Literary, historical, social, and/or artistic aspects of Spanish-American culture and civilization. Topics will focus on a historical period, literary genre, social theme, or other cultural phenomenon. Course may be repeated with each different topic. Prerequisites: Two 300-level courses in Spanish; one must be upper level (SP325 or above). (U/G)(3) Occasionally.

SP455, Spanish Second Language Acquisition: Overview of second-language acquisition theories with discussion of empirical studies on the acquisition of Spanish. Practice on research design and the analysis of oral and written production of learners of Spanish. Prerequisites: Two 300-level courses in Spanish; one must be upper level (SP325 or above). (U/G)(3) Annually, term varies.

## SP460, Topics-20th Century Spanish-

American Studies: Emphasis on the contemporary cultures of the nations of Spanish America. Through the use of literary texts, historical and social documents, movies, and other audiovisual media, topics will focus on the dynamics of this rapidly developing cultural region. Course may be repeated with each different topic. Prerequisites: Two 300-level courses in Spanish; one must be upper level (SP325 or above). (U/G)(3) Occasionally.

SP485, History of the Spanish Language: In this course we will study the development of Spanish from its Latin roots to present, including historical, social, cultural, and linguistic events. Prerequisites: Two 300-level Spanish courses; one must be upper level (SP325 or above). (U)(3) Occasionally.

SP490, Seminar: Study of a selected topic in the cultures of Spain and/or Latin America. Themes may deal with literary, social, political, and/or aesthetic concerns of these countries, one nation, or a region. Prerequisites: Two 300-level courses in Spanish; one must be upper level (SP325 or above). (U/G)(3) Occasionally.

SP491, Independent Study: An opportunity for qualified students to pursue a topic of special interest. Open to majors and minors in Spanish, by permission of the instructor and department chair. Prerequisites: Two 300-level courses in Spanish; one must be upper level (SP325 or above). (U/G)(1) Annually, term varies.

SP492, Independent Study: An opportunity for qualified students to pursue a topic of special interest. Open to majors and minors in Spanish, by permission of the instructor and department chair. Prerequisites: Two 300-level courses in Spanish; one must be upper level (SP325 or above). (U/G)(2) Fall, spring, and summer.

SP493, Independent Study: An opportunity for qualified students to pursue a topic of special interest. Open to majors and minors in Spanish, by permission of the instructor and department chair. Prerequisites: Two 300-level courses in Spanish; one must be upper level (SP325 or above). (U/G)(3) Fall, spring, and summer.

SP499, Honors Thesis: As needed. (U/G)(3) Fall, spring, and summer.

## Neuroscience Minor

## Administration

Tara T. Lineweaver, PhD, Program Director

## Program Website

www.butler.edu/las/neuroscience
Neuroscience, an interdisciplinary approach to understanding the nervous system and its impact on behavior, cognition, and emotion, is a relatively new and rapidly expanding scientific field. Neuroscientific research describes the normal functioning of the nervous system, examines how the nervous system develops across the lifespan, and investigates the consequences of and potential interventions for neurological dysfunction due to abnormal development, disease, or injury. However, the implications of neuroscience stretch well beyond
this scope and provide both a cornerstone and important tools for understanding all human behavior. The neuroscience minor at Butler University introduces students to an interdisciplinary viewpoint regarding the science as well as the philosophy of the mind. Students from any major may elect to complete a neuroscience minor by taking courses in the fields of biological science, psychology, and philosophy.

## Requirements for the Minor

The minor consists of 21 hours, including:
Biology: 12 hours

- BI210, Genetics-Fundamentals
- BI220, Cellular and Molecular BiologyFundamentals
- BI460, Cellular and Molecular Neurobiology

Psychology: 6 hours

- PS235, Biological Bases of Behavior
- PS412, Advanced Applied Neuroscience

Philosophy: 3 hours

- PL346, Philosophy of Mind


## Peace and Conflict Studies

## Administration

Craig W. Auchter, PhD, Program Director
Program Website
www.butler.edu/peace-conflict
The Peace and Conflict Studies Program seeks to promote a critical understanding of the nature and dynamics of conflict, violence, and the conditions and practice of peace. It provides a structured program of study for students who wish to make issues of violence and conflict (interpersonal, intergroup, and interstate), social justice, human rights, ecological integrity, and peace at multiple levels more central to their university education. Contemporary peace studies is an arena of interdisciplinary research, study, dialogue, reflection, and action that is supported by a broad disciplinary base drawing on all of the social sciences and courses in the arts and humanities, sciences, education, and business. Through multi- and interdisciplinary study and practice, students in peace studies prepare for graduate study and a wide variety of careers in policy analysis, government, nongovernmental organizations, journalism, teaching, law, and business.

## Peace and Conflict Studies Student Learning Objectives

- Acquire a complex understanding of the nature and origins of violence, its dynamics, and different manifestations and modes of expression
- Better understand why conflict occurs, when and how conflicts become violent, and constructive methods of approaching and processing distinct types of conflicts that occur along a continuum from interpersonal to global settings
- Critically evaluate and devise strategies for peace through reflection on ethical, religious, philosophical, and cultural approaches to peace, the work of leading thinkers and activists in the field, and public policy
- Develop knowledge, analytical skills, and practical training through analysis of theories and theoretical models, case studies, language and value systems, and historical precedents and trends; service learning; practical training in conflict mediation skills; selected internships; and study-abroad experiences.


## Degree Programs

- Peace and Conflict Studies (BA)
- Minor in Peace and Conflict Studies


## Requirements for the Major

The major consists of 36 hours of courses, including six hours of internship or service learning. The following courses ( 21 hours) are required:

- PACS/PO102, Introduction to Peace and Conflict Studies
- PACS/PO220, Community Mediation
- PACS/PO322, International Conflict and Peace Building
- One theory or methods class in a relevant discipline (consult with PACS advisor)*
- One 400-level class or thesis (consult with PACS advisor)**
- Internship (6 hours): Internship requirements are fulfilled at locations in Indianapolis such as Exodus Refugee Center, Peace Learning Center, the Immigrant Welcome Center, Earth Charter Indiana, the Neighborhood Christian Legal Clinic, the Julian Center, or through SP320S, Service Learning in Spanish (up to 3 hours). Students may also fulfill this requirement through Washington, DC, semester internships or as a component of study abroad.
* Students may fulfill this requirement with a research methods or theory class in, for example, political science, sociology, anthropology, or rhetorical criticism.
** Students may opt to take the PO490 Senior Seminar as their capstone course or another 400-level seminar class in anthropology or international studies that addresses issues of conflict, peace, and justice.

Fifteen hours of electives are required, at least 12 of which must be taken at the 300 level or above; three hours may be taken at the 200 level. Elective options are listed below and in the schedule of classes each semester. Relevant courses taken during study abroad may be counted toward the major with permission of the program director.

## Requirements for the Minor

The minor consists of 18 hours of courses, including the following required courses (12 hours):

- PACS/PO102, Introduction to Peace Studies
- One of either PACS/PO220, Community Mediation, or PACS/PO322, International Conflict and Peacebuilding
- Internship (see above, Requirements for the Major, about locations and options, which are equivalent to the major)
- PACS/PO490, Senior Seminar: Special Topics in Peace Studies (such as Cultures of Peace in Latin America; Youth, Violence, and Peace; War in Iraq)

Six hours of electives are required. Elective options are listed below and in the schedule of classes each semester. Relevant courses taken during study abroad may be counted toward the minor with permission of the program director.

## Electives

Examples of courses students have taken for elective credit in the past include the following:

## History and Anthropology

- AN320, Gender and Sexuality in Globalization
- AN326, Youth Conflict Global Cinema
- AN345, Conflict Resolution through Arts
- AN368, Coming of Age in the Middle East
- AN380, Selected Topics: Trespassing: An Anthropology of Our Segmented Lives
- HST205, Questions in History: The Great War, 1914-1918
- HST305, Topics in History: The Cinema of War
- HST305, Topics in History: 1968
- HST327, History of Human Rights
- HST335, The Civil War
- HST338, The Era of Jim and Jane Crow
- HST353, The American Empire
- HST395, War and Peace in the Middle Ages
- HST401, Seminar in History: Radical Histories, Radical Politics


## Modern Languages, Literatures \& Cultures

- SP320S, Service Learning in Spanish


## Philosophy and Religion

- RL354, Islam: Religion, Culture, Society
- RL363, Religion, Politics, and Conflict in South Asia
- RL391, RL392, Seminar on Religion and World
- PL364, Ethics and International Relations


## Political Science

- PO141, Intro International Politics
- PO220, Community Mediation
- PO230, Activism
- PO322, International Conflict and Peace Building
- PO340, The Earth Charter
- PO350, African Politics
- PO351, The Politics of Gender and Sexuality in Africa
- PO355, U.S. Foreign Policy
- PO356, Israel-Palestine Conflict
- PO357, Youth and Conflict
- PO360, Political Regimes in Latin America
- PO362, Popular Participation in Latin America
- PO372, Role of Protest in U.S. Politics
- PO380, Topics in Political Science: Understanding Conflict-Northern Ireland
- PO380, Topics in Political Science: Environmental Justice
- PO380, Topics in Political Science: Humanitarianism-Theory, Politics


## Sociology and Criminology

- SO321, Crime and Society
- SO339, Violence, Media, and Culture
- SO349, Social Movements
- SO355, International Crime


## Communications

- CCM354, Gender and Communication
- JR417, International Communication
- JR418, Gender and Media: Global Views
- ORG253, Interpersonal Communication


## Other

- FL390, Seminar: Fall of the Wall
- GWS201/SW232-GWS, Intersections of Identity
- GWS202/SW223-GWS, Resistance for Social Change
- IS390, The UN and Other International Organizations
- IS410, The Global Society
- ST390, Topics: Environmental Conflict
- SW240-PO, Gender and Generations: War and Peace
- TI240-PL, Ethics of War and Peace
- TI255-PO, The Politics of Alice Walker
- TI261-STS, Science and Society: Hunger and Obesity
- TI262S, Self and Service


## Peace and Conflict Studies Courses

PACS401, Student Apprenticeship: Students work with faculty mentors on their teaching or their research. In teaching apprenticeships, students work with the professor in the development and discussion of the classroom experience. In research apprenticeships, students work with a faculty mentor on his or her current research. Prerequisites: Two PACS courses, submittal of an application, and permission of the PACS Program Director. (U)(3) Fall, spring, and summer.

PACS403, Internship: Offers the qualified student the opportunity for supervised work experience in a setting pertinent to peace and conflict studies. Prerequisites: Permission of the PACS Director. (U)(3) Fall, spring, and summer.

PACS406, Internship: Offers the qualified student the opportunity for supervised work experience in a setting pertinent to peace and conflict studies. Prerequisites: Permission of the PACS Director. (U)(6) Fall, spring, and summer.

## Philosophy and Religion

## Administration

Chad Bauman, PhD, Department Chair

## Professors

Allan Boesak, DTh (visiting); Katharina Dulckeit, PhD; Stuart Glennan, PhD; James F. McGrath, PhD; Paul Valliere, PhD; Harry van der Linden, PhD
Associate Professors
Chad Bauman, PhD; Tiberiu Popa, PhD
Instructor
Brent Hege, PhD
Department Website
www.butler.edu/philosophy-religion

## Philosophy

## Why Study Philosophy?

Philosophy can help you hone some very practical skills. As a philosopher, you learn to distinguish between sound reasoning and empty rhetoric. Philosophy majors learn how to communicate clearly both in speech and in writing. Philosophy helps you to think carefully
about ethical decisions. Collectively, these are skills that will help you in future graduate and professional education. They will also help you to live your life well, and what could be a more practical skill than that?

Philosophy majors regularly outscore other majors on standardized tests such as the LSAT and MCAT, because they do equally well on both the verbal and analytic/quantitative sections. Philosophy is the only liberal arts major that specifically teaches both verbal and logic skills. In addition, the most basic assumptions in law, the sciences, and other disciplines are studied not in those disciplines but in the philosophy of law, philosophy of science, etc.

## Why Study Philosophy at Butler?

Our philosophy classes are fairly small, which further encourages students to participate in class discussion and allows the faculty to devote considerable attention to each of our students. The enrollment limit in our introductory classes is generally 25 , and the number of students enrolled in our upper-level classes is roughly between 10 and 20. Professors teach all courses; there are no teaching assistants at Butler. Many students engage in independent study and write honors theses under the supervision of professors. Additional learning opportunities include the Philosophy Club, which meets regularly for discussion, film viewing, speakers, and social activities. The reasoning skills of our majors are valued by graduate and professional schools as well as by employers. For example, a growing number of our majors have been accepted into reputable medical schools and prestigious law schools.

## Philosophy Student Learning Outcomes

Students majoring in philosophy at Butler University will learn about a wide range of philosophical ideas and outlooks, and will become acquainted with some of the most influential thinkers in Western philosophy. Besides exploring fundamental questions pertaining to knowledge and reality, students will be able to discern and respond to philosophical issues that arise in areas as diverse as religion, science, politics, the arts, and the law. While critical thinking is encouraged and emphasized throughout the liberal arts, it is especially at home in philosophy; our majors are able to read and write clearly, to critically evaluate evidence and arguments, and to determine the quality of their sources of information.

Philosophical training helps deepen our students' reflection on issues in the here and
now. Our professors encourage engagement in the community, including internships or research projects in which students' work can inform and be informed by their philosophical study.

More generally, philosophy majors' ability to examine and question their own and others' values and convictions puts them in a position to make wise choices that will affect the quality and course of their lives and those of the people with whom they interact.

## Degree Programs

- Major in Philosophy (BA)
- Combined Major in Philosophy and Religion (BA)
- Combined Major in Philosophy and Psychology (BA)
- Minor in Ethics
- Minor in Philosophy


## Requirements for the Major

One course in logic: PL310, Logic, or any course so designated

Two courses in history sequence:

- PL311, History of Ancient Philosophy
- PL313, History of Modern Philosophy

One course in analytic philosophy:

- PL320, Theory of Knowledge
- PL323, Introduction to Analytic Philosophy
- PL343, Philosophy of Science
- PL346, Philosophy of Mind
- Or any course designated analytic philosophy

One course in value theory (normative philosophy):

- PL345, Contemporary Social and Political Philosophy
- PL360, Ethics
- Or any course designated value theory

Two offerings (six hours) of PL410, Seminar in Philosophy. Students may request a substitute for three hours of this seminar requirement if PL410 is offered when they are studying abroad. Students may also substitute PL499, Honors Thesis, for three hours of PL410.

Twelve hours of additional philosophy courses will be taken, for a total of 33 hours. No more than 12 hours of 100- or 200-level courses may be applied to the 33 hours required for the major.

## Requirements for the Combined Philosophy and Religion Major

The major requires 42 hours.
Detailed requirements are posted at
www.butler.edu/philosophy-religion or can be obtained at the departmental office.

## Requirements for the Combined Philosophy and Psychology Major

The major requires 51 hours. Detailed requirements are posted at www.butler.edu/philosophy-religion or can be obtained at the departmental office.

## Requirements for the Minor

The minor requires 18 hours in philosophy, which must include the philosophy seminar (PL410) plus six additional hours at the 300 or 400 level. Minors will be strongly advised to create a suitable package of courses in consultation with a philosophy professor appointed by the chair.

## Requirements for the Ethics Minor

The minor requires 18 hours, 12 of which should be philosophy courses and nine of which should be at the 300 or 400 level. Specifically:

- A foundational philosophy course in ethics covering basic moral theories and concepts (3 hours)
- Two additional philosophy courses to be chosen from a wide variety of courses in normative philosophy (6 hours)
- A course in applied ethics showing how moral deliberation is pivotal to some specific profession or field of human activity (3 hours)
- Two electives, to be selected from philosophy courses or courses with an ethical focus from other disciplines (6 hours)

For details, contact program director Harry van der Linden or visit www.butler.edu/philosophy-religion.

## Core Courses Offered by Philosophy

AR231-PL, Principles of Reasoning: A survey of principles of reasoning used in a variety of disciplines, including philosophy, mathematics, statistics, the natural and social sciences, and law. Attention also will be paid to how to recognize and avoid fallacies. (U)(3) Fall and spring.

TI240-PL, Ethics of War and Peace: This course will focus on two normative approaches to war, just war theory and pacifism. We will first examine how soldiers learn to kill and how killing impacts them psychologically and morally. Next, we will explore just-war principles for justly starting and executing war on the basis of case studies, such as the terror bombing
in the Second World War, the Gulf War, the Kosovo intervention, the Afghanistan war, and the second Iraq War. Special attention will be paid to humanitarian intervention, terrorism, and the doctrine of preventive war. During the final weeks of the semester we will discuss the philosophy of nonviolence and antiwar pacifism. (U)(3) Occasionally.

## TI241-PL, Classics of Social and Political

 Thought: A critical study of major texts of the history of Western social and political thought, such as Plato's Republic, Aristotle's Politics, Machiavelli's The Prince, Hobbes' Leviathan, and Marx's Communist Manifesto. Attention will be given to both the historical and contemporary relevance of the texts. (U)(3) Occasionally.TI242-PL, Marginalized in America: Gender at the Intersection of Race and Class:
This course introduces the student to the philosophical method and skills of thinking out problems and issues that confront women in contemporary American society, viewed from the intersection of gender, race, and class. (U)(3) Fall and spring.

## TI243-PL, Knowledge and Reality:

Fundamental philosophical questions about knowledge and reality will be studied through the analysis of classical and contemporary texts. Topics may include skepticism, the relationship between faith and reason, the nature of mind, free will, the nature and existence of the external world, and the nature and existence of God. (U) (3) Fall and spring.

TI244-PL, Ethics, The Good Life, and Society: Fundamental philosophical questions about right conduct, virtues and vices, the good life, and social policy will be examined on the basis of classical and contemporary texts. Topics include issues of personal and social ethics, such as forgiveness, tolerance, and hate speech, abortion, animal rights, and world poverty. Theories of justice, human rights, and meta-ethical topics may also be covered. (U)(3) Fall and spring.

## Philosophy Courses

## PL245, Classics of Social and Political

Philosophy: A critical study of major texts of the history of Western social and political thought, such as Plato's Republic, Aristotle's Politics, Machiavelli's The Prince, Hobbes' Leviathan, and Marx's Communist Manifesto. Attention will be given to both the historical and contemporary relevance of the texts. (U)(3) Occasionally.

PL310, Symbolic Logic: An introduction to symbolic logic. Topics will include systems for
proving logical propositions, the interpretation of symbolic systems, and the relationship between symbolic and natural languages. Consideration will be given to the applications of symbolical logic to problems in philosophy, mathematics, computer science, and the natural sciences. (U) (3) Occasionally.

PL311, History of Ancient Philosophy: A study of important figures of ancient philosophy, with particular emphasis on Plato and Aristotle. Prerequisite: One philosophy course or permission of instructor. (U/G)(3) Occasionally.

## PL313, History of Modern Philosophy:

A study of important figures of modern philosophy, including Descartes, Hume, and Kant. Prerequisite: One philosophy course or permission of instructor. (U/G)(3) Occasionally.

PL339, Philosophy and Literature: This course will explore philosophical problems (ethical dilemmas, self and society, the nature of time, the idea of God, etc.) as they are formulated or suggested in texts belonging to various literary genres. A segment of this course will also analyze the nature of literature itself from a philosophical perspective. (U)(3) Occasionally.

PL340, Philosophy of Art: A study of some of the major topics in the philosophy of art, including the essential nature of artistic representation, the problems entailed by aesthetic perception, and the relation between interpretation and the artist's intention. (U)(3) Occasionally.

PL342, Philosophy of Religion: A study of the logic and function of religious language with special reference to the problem of religious knowledge and the validity of religious claims. Prerequisite: One philosophy course or sophomore standing. (U/G)(3) Occasionally.

PL343, Philosophy of Science: An analysis of some philosophical questions about the natural sciences, including the problem of distinguishing science from pseudoscience, the nature of scientific explanation, the structure and confirmation of scientific theories, scientific revolutions, and the relationship between science and reality. Prerequisite: One philosophy course or permission of instructor. (U/G)(3) Occasionally.

PL344, Philosophy of Law: Consideration of general theories of law and justice; nature of judicial reasoning; topics such as relation of law and morality, punishment, legal rights, and legal liabilities. Prerequisite: One philosophy course or sophomore standing. (U/G)(3) Occasionally.

PL345, Contemporary Social and Political
Philosophy: A critical study of major contemporary social and political philosophies, such as welfare liberalism, libertarianism, communitarianism, democratic socialism, and feminism. Topics include economic justice within the state, global justice, rights, equality, the family, and workplace democracy. Prerequisite: One philosophy course or permission of instructor. (U/G)(3) Occasionally.

PL346, Philosophy of Mind: A study of philosophical questions concerning the mind: the nature of mind, the mind-body problem, the problem of free will, and methodological approaches to the study of mind. Discussion of the power and limits of contemporary cognitive science. Prerequisite: One philosophy course or permission of instructor. (U/G)(3) Occasionally.

PL347, Existentialism: A study of existentialism, one of the most important philosophical movements of the 20th century, focusing on the philosophical essays, novels, and plays of Jean-Paul Sartre, Albert Camus, and Simone de Beauvoir. Prerequisite: One philosophy course or permission of instructor. (U/G)(3) Occasionally.

PL348, Philosophy of Feminism: A study of cultural values, social practices, and policies that shape women's lives, and the philosophical responses to these. Topics include the workplace, the legal system, pornography, art and popular culture, abortion, reproductive rights, sexual practice, alternative families, militarism, and ecofeminism. Prerequisite: One philosophy course or one Gender, Women, and Sexuality Studies course. (U/G)(3) Occasionally.

PL349, Philosophy of Biology: A study of philosophical problems in biology. The course explores both theoretical problems within biology, like the evolution of altruism and problems of taxonomy, and philosophical problems that are influenced by biological theory, including the nature of morality and the status of religious belief. Prerequisite: BI201 or permission of instructor. (U/G)(3) Occasionally.

PL360, Ethics: An examination of the fundamental concepts and problems of morality, facts and values, duty and self-interest, and the logic and justification of moral judgments. Attention to major figures in history of ethical theory such as Aristotle, Butler, Kant, and Mill. Prerequisite: One philosophy course or permission of instructor. (U/G)(3) Occasionally.

PL363, Biomedical Ethics: A study of fundamental ethical problems in medical
practice, health policy, and biomedical research. Topics include patients' rights and professional responsibilities, abortion, physician-assisted suicide, surrogate motherhood, justice in the allocation of medical resources, human genetics, and experimentation on human subjects and animals. Prerequisite: One philosophy course or sophomore standing. (U/G)(3) Annually, term varies.

PL364, Ethics and Int. Relations: A study of foundational and contemporary writings on the ethics of international relations. Key concepts and issues include realism, nationalism, cosmopolitanism, sovereignty, global poverty, immigration, humanitarian intervention, and global warming. Prerequisites: Sophomore standing; IS101 or one PL course. (U)(3) Occasionally.

PL375, Topics in Philosophy: Treats a specific subject area of philosophy that is not the major subject of a regularly scheduled course. (U/G)(3) Occasionally.

PL380, Topics of Ethics: Treats a topic in normative philosophy that is not the major subject of a regularly scheduled course. (U)(3) Occasionally.

PL401, Independent Study: Individual study of a specific topic in philosophy under supervision of a member of the department. Assigned readings, papers, and tutorials. Obtain permission from department chair before enrolling. (U/G)(1) Occasionally.

PL402, Independent Study: Individual study of a specific topic in philosophy under supervision of a member of the department. Assigned readings, papers, and tutorials. Obtain permission from department chair before enrolling. (U/G)(2) Occasionally.

PL403, Independent Study: Individual study of a specific topic in philosophy under supervision of a member of the department. Assigned readings, papers, and tutorials. Obtain permission from department chair before enrolling. (U/G)(3) Occasionally.

PL405, Internship in Philosophy: Offers the qualified student the opportunity for supervised work experience in a setting pertinent to their area of study and their career goals. Contact department chair if interested. Open to juniors and senior philosophy majors. (U)(3) Occasionally.

PL406, Internship in Philosophy: Offers the qualified student the opportunity for supervised work experience in a setting pertinent to their
area of study and their career goals. Contact department chair if interested. Open to juniors and senior philosophy majors. (U)(6) Occasionally.

PL407, Internship in Ethics: Offers students the opportunity for supervised work experience relevant to the study of application of normative philosophy. Open to minors in ethics and philosophy majors. (U)(3) Occasionally.

PL410, Seminar in Philosophy: Advanced course in a major philosophical figure or issue. Non-majors need permission of the instructor. May be repeated for credit. Prerequisites: Two philosophy courses and junior standing. (U/G)
(3) Spring.

PL499, Honors Thesis: Undergraduate honors thesis in philosophy. (U)(3) Occasionally.

## Religion

## Why Study Religion?

For some, the academic study of religion is a way of exploring their own commitment to a particular religious tradition. For others, it is a way of trying to learn about and understand the perspectives, values, and traditions of others. Whatever the student's motivation, the religion major offers the opportunity to engage in a critical and sympathetic study of various religious traditions; to study religious literatures, practices, and beliefs; and to investigate general questions regarding the nature of religion and the scholarly study thereof. A major in religion is a liberal arts major, and as such, exposes students to a wide spectrum of subjects and skills in order to produce broadly educated, sophisticated, and flexible leaders. What can one do with a religion major? Just about anything. Recent graduates of the program have gone on to study religion, law, public policy, medicine, and creative writing at the graduate level. Others have entered the nonprofit sector or religious ministries. Still others have found employment in a range of professions, like teaching, acting, and politics.

## Why Study Religion at Butler?

- Vocational discernment: Butler's religion program offers a close mentoring process designed-through careful advising, experiential learning, and internship opportunities, and in collaboration with Butler's Center for Faith and Vocation-to connect theory and practice and help students discern their vocational direction, integrating who they are (in terms of the values they hold most dear) and what they want to do.
- A big "back yard:" Within a few minutes of the campus are numerous churches, synagogues, mosques, temples, and meditation centers representing all of the world's largest religious traditions. Butler's urban location therefore allows students to explore both traditional and emerging American religious phenomena, and the ways in which these are increasingly intertwined with and inseparable from global religious trends. Butler religion majors also often study abroad sometimes with support from departmental awards.
- Close contact with top-notch faculty: Butler's religion program offers small classes and boasts an unparalleled faculty-to-student ratio. Students therefore get to work closely (whether in class, through independent studies, or as research assistants) with professors who are active and widely recognized scholars.
- Empathetic approach: Whereas religion programs in religiously affiliated colleges and universities sometimes teach religion from a specific doctrinal perspective, Butler's religion major is designed to expose students more broadly to the world's major religious traditions. This approach challenges students to hone their skills of critical thinking, develops the ability to appreciate multiple religious perspectives, and provides an excellent preparation for many professions, including for those who intend to enter seminary or graduate work in religious ministry.
- An education both sound and savvy: The religion program at Butler University grounds its students in the classically broad tradition of the liberal arts, while at the same time providing them with the skills that are most crucial in the digital age.


## Religion Student Learning Outcomes

Students majoring in religion are expected to gain a basic core of factual knowledge about the world's major religious traditions, acquire skills in critical thinking and textual analysis, develop the ability to identify and deploy credible sources of information (digital, print, or otherwise), cultivate understanding of and empathy for people of other faiths (in Indianapolis and beyond), and nurture a collaborative and civil disposition, that is, to work critically, openly, and with humility in the context of academic discussion and dispute.

## Degree Programs

- Major in Religion (BA)
- Combined Major in Philosophy and Religion (BA)
- Minor in Religion


## Requirements for the Major

Majors must fulfill each of the following six requirements. (Courses may fulfill more than one distribution requirement if they appear in more than one category below.)

1. Jewish and Christian Traditions (6 hours required from the list below):

- RL307, The Historical Jesus
- RL308, Paul and the Early Church
- RL346, Heresy
- RL347, History of Christianity
- RL350, Topics in Judaism
- RL366, Topics in Jewish and Christian Traditions (e.g., Theology from the Margins)
- RL370, Modern Religious Thought
- RL372, Mysticism
- RL3'74, Faith and Doubt
- Any approved three-credit internship, field study, or study-abroad opportunity

2. Islam and the Asian Faiths (6 hours required from the list below):

- RL353, Buddhism: Past and Present
- RL354, Islam: Religion, Culture, Society
- RL358, Hinduism: Past and Present
- RL363, Religion, Politics, and Conflict in South Asia
- RL367, Topics in Islam/Asian Faiths
- RL377, Religion, Gender, and the Goddess in Asia
- Any approved three-credit internship, field study, or study-abroad opportunity

3. Texts and Textual Interpretation (3 hours required from the list below):

- TI251-RL, The Bible (formerly RL202)
- RL213, Biblical Hebrew*
- RL304, Psalms
- RL308, Paul and the Early Church
- RL309, The Gospel of John
- RL375, Topics in Texts/Textual Interpretations

4. RL391, RL392, Seminar on Religion and World Civilization (3 total hours)
5. RL405, Internship (3 hours)
6. RL381W, Theory and Method (3 hours)

Majors must take additional religion courses to yield 33 total hours, including (not in addition to) credits for courses fulfilling distributional requirements.

In addition to the course requirements above, majors will complete the following two requirements:

- Oral Expression Development. Majors will give an oral presentation in their junior or senior year (ask departmental faculty for details).
- Butler Seminar on Religion and World Civilization. Majors not enrolled in RL391 or RL392 are expected, each year, to attend all quarterly dinners/lectures associated with this annual seminar series.
* Both RL213 and RL214 (Biblical Hebrew, second year) can count as elective religion credit. But only RL213 may be used to fulfill a distribution requirement. (RL214 can only be used as elective credit.)


## Requirements for the Combined Philosophy and Religion Major

The major requires 42 hours. Detailed requirements are posted at www.butler.edu/ philosophy-religion or can be obtained at the departmental office.

## Requirements for the Minor

The minor requires 18 hours in religion, 12 of which must be at the 300 or 400 level, and three of which must be RL381W (Theory and Method in the Study of Religion). Minors should create a suitable package of courses in consultation with a religion professor appointed by the chair.

## Core Courses Offered by Religion

SW260-RL, Religions, Cults, and (In)
Tolerance in America: A basic introduction to the religions and religious communities of Indianapolis, and an exploration of prominent issues and themes related to our city's (and our country's) increasing religious diversity. (U)(3) Occasionally.

TI220-MU, Music and Religion: This course introduces students to two universals of human culture: music and religion. We will explore the complex, contradictory, and often symbiotic relationship of these two major cultural products in comparative and global perspective. We will look for connections between ritual, culture, and doctrine through an examination of several major religious and musical traditions, including the praise songs of the modern-day American evangelical movement, the spirituals of the 19th-century African American church, the chants and mystery plays of medieval European nuns, Indonesian cremation rituals, and the epic sacred stories of Turkic Siberia. Students will be encouraged to learn not only through readings on theology, ritual, and music (texts),
but experientially through attendance at worship events in the Indianapolis community, and participation in ethnographic research and live performances (ideas). We will reflect upon our experiences analytically and descriptively through writing and discussion. (U)(3)

TI250-RL, Religions of the World: An introduction to the texts, practices, and ideas of the world's major religious traditions, including Hinduism, Buddhism, Confucianism, Taoism, Shintoism, Judaism, Christianity, Islam, and the indigenous traditions of Africa and the Americas. (U)(3) Fall and spring.

TI251-RL, The Bible: Introduction to the content, historical context, methods of study, religious ideas, and cultural influence of the Jewish and Christian scriptures. (U)(3) Fall and spring.

## Religion Courses

RL304, The Book of Psalms: Study of the Psalms, the most frequently read and recited book of the Bible. Topics include the origin and composition of the Psalms in ancient Israel, the ethical and religious significance of the Psalms, and the impact of the Psalms on world literature and music. Prerequisite: One religion course or sophomore standing. (U)(3) Occasionally.

RL307, The Historical Jesus: A close look at Jesus of Nazareth focused on sources and methods of knowledge about Jesus as a historical figure. Attention will also be paid to historical and cultural context, and to beliefs about and depictions of Jesus in early Christian literature. Prerequisite: One religion course or sophomore standing. (U)(3) Occasionally.

RL308, Paul and the Early Church: The New Testament Epistles: Focus on the New Testament letters, especially of Paul, with attention to the emergence and growth of the Christian movement in the Graeco-Roman world from the death of Jesus to the middle of the 2nd century A.D. Prerequisite: One religion course or sophomore standing. (U)(3) Occasionally.

RL309, The Gospel of John: This course will study the Gospel of John both as literature and in relation to its historical setting. (U)(3) Occasionally.

RL311, Book of Revelation: Book of Revelation: Studied against the backdrop of its ancient cultural, historical, and literary setting, plus its ongoing influence and the history of its interpretation. (U)(3)

RL346, Heresy: This course focuses on the study of primary texts that didn't make it into
the Bible, and in the process explores how various definitions of what is orthodox and what is heretical came about. In addition to the socalled Gnostic Gospels, students will also learn about a Gnostic group that has survived from the ancient world down to the present day. (U)(3) Occasionally.

RL34'7, History of Christianity: Historical development of Christianity from the first century to the present. Special attention to selected topics, such as Eastern Orthodox worship and icons, Benedictine monasticism, the Roman Papacy, Luther and the Protestant Reformation, African Christianity, and the challenges to Christian belief in modern times. Prerequisite: One religion course or sophomore standing. (U)(3) Occasionally.

RL350, Topics in Judaism: Study of some central area of Jewish studies such as introduction to Judaism, American Judaism, Jewish religious thought and philosophy, and Jewish-Christian relations. May be repeated with a different topic. Prerequisite: One religion course or sophomore standing. (U)(3) Occasionally.

RL353, Buddhism, Past and Present:
Introduction to the basic concepts, philosophies, and practices of Buddhism in South Asia and East Asia from antiquity to the present. Prerequisite: One religion course or sophomore standing. (U)(3) Occasionally.

RL354, Islam: Religion, Culture, Society:
An introduction to Islam: origins, sacred texts, world view, culture and society, history and expansion, and Islam in the modern world. Origins and sacred texts are emphasized; relative emphasis on other topics varies. Prerequisite: One religion course or sophomore standing. (U) (3) Occasionally.

RL358, Hinduism, Past and Present: This course will examine Hinduism's practices and beliefs as depicted in its foundational scriptures as well as in the lives of modern Hindus.
Topics may include the following: meditation practices, Indian medicine, male and female saints, Hinduism as portrayed in literature/film, Hinduism and modern South Asian politics. (U) (3) Occasionally.

RL363, Religion, Politics, and Conflict in South Asia: Investigation of the interaction of South Asia's many religious communities, especially Hinduism, Islam, Christianity, Sikhism, and Buddhism, paying particular attention to how religious ideas, practices, and demographics have affected communal relations
at various points in the subcontinent's history. The course will focus on moments of conflict and movements of peace. (U/G)(3) Occasionally.

## RL366, Topics in Jewish and Christian

Traditions: Treats a specific subject area of Judaism or Christianity that is not the major subject of a regularly scheduled course. (U)(3) Occasionally.

RL367, Topics in Islam/Asian Faiths: Treats a specific subject area of Islam or the Asian faiths that is not the major subject of a regularly scheduled course. (U)(3) Occasionally.

RL370, Modern Religious Thought: A survey of important religious thinkers and theological issues of the 19th and 20th centuries (e.g., Buber, Tillich, Weil, liberation theology, feminism). Emphasis is on the Christian and Jewish traditions as they relate to earlier theological developments and to contemporary philosophical and cultural movements. Prerequisite: One religion course or sophomore standing. (U)(3) Occasionally.

RL371, Religion and Science: Surveys some main issues in the interaction between science and religion: a comparison of the tasks of scientific and theological research; models of interaction between science and religion; the Big Bang, evolution and creation; contemporary ideas of God. Prerequisite: One religion course or sophomore standing. (U)(3) Occasionally.

RL3'72, Mysticism: Study of the varieties of mysticism in world religion, with emphasis on Christian and Jewish mysticism. Readings drawn from the Bible, spiritual writings, autobiographies of mystics, letters, poems, and philosophical sources. Prerequisite: One religion course or sophomore standing. (U)(3) Occasionally.

## RL375, Topics in Texts/Textual

Interpretations: Treats a topic related to religious scriptures, their history, and/or their interpretation. (U)(3) Occasionally.

## RL3'77, Religion, Gender, and the Goddess

in Asia: A study at the intersection of religion and gender studies. Course will begin with a discussion of feminist and theoretical perspectives on religion, and will then apply the knowledge gained therein to various goddessoriented communities, past and present, with a focus on Asia. (U)(3) Occasionally.

RL3'78, Religion and Science Fiction: This course will explore and critically reflect on religious themes, motifs, concepts, and allusions in science fiction (including television and film
as well as classic and more recent literature). Philosophical and ethical issues with a religious component will also be considered. (U)(3) Occasionally.

RL379, The Problem of God: Perhaps no other topic has been discussed more passionately and contentiously in the recent history of philosophy and theology than God. Is there a God? If so, what or who is God? If not, what are the reasons for abandoning the idea of God? What sense does it make in the 21st century to speak meaningfully about God? What effects does faith or belief in God have on contemporary society, for good or for ill? In this course we will tackle the problem of God and ask questions about the existence of God, the nature of God, the limitations of human language and concepts in describing God, the implications of faith or belief in God, and future directions of the conversation. We will do so using a number of recent texts in philosophy and theology, including selections from process philosophers and theologians, feminist theologians, pantheists, the "New Atheists," and radical theologians. (U)(3) Occasionally.

RL 381W, Theory and Method in the Study of Religion: Introduction to theories and methods used in the academic study of religion with some attention to the history of the discipline. Readings in James, Weber, Durkheim, Otto, Eliade, Turner, Daly, Freud, Geertz, and others Prerequisites: Two religion courses or junior standing. (U)(3) Occasionally.

RL382, Theology from the Margins: This course explores several Christian theological movements that have, until recently, been marginalized voices within the Christian tradition. We will examine how a plurality of voices, especially those from the margins, enhances our understanding of the Christian tradition and its capacity to speak prophetically to issues of profound contemporary significance, both in Christian churches and in the wider world. We will pay special attention to such issues as gender, race, class, and sexual identity. (U)(3) Occasionally.

## RL38'7, Religious and Philosophical Explorations of the Problem of Evil: In

 this course we will consider the problem of evil from both a theoretical and practical perspective, asking questions about the nature and persistence of evil and about our duty to understand the conditions that give rise to the possibility of evil and to name and fight evil wherever we find it. We will do so with the aid of a broad range of sources, including biblical texts and works of philosophy, theology, and literature. (U)(3) Occasionally.
## RL391, Seminar on Religion and World

Civilization: Course is based on attendance at four public evening seminars and four Saturday morning workshops during the academic year. Theme varies annually, term varies. Students enrolled in RL391 are expected to take RL392 the following semester. (U)(1) Fall.

RL392, Seminar on Religion and World Civilization: Continuation of RL391. Course is based on attendance at four public evening seminars and four Saturday morning workshops during the academic year. Theme varies annually, term varies. Prerequisite: RL391 or instructor permission. (U)(2) Spring.

RL39'7, Field Seminar Abroad: Provides an opportunity to observe and enter into dialogue with religious communities abroad. Each seminar consists of preparatory study, a trip of one week in the field, and an assessment process including a paper. (U)(1) Occasionally.

RL398, Field Seminar Abroad: Provides an opportunity to observe and enter into dialogue with religious communities abroad. Each seminar consists of preparatory study, a trip of two to three weeks in the field, and an assessment process including a paper. (U)(2) Occasionally.

RL399, Field Seminar Abroad: Provides an opportunity to observe and enter into dialogue with religious communities abroad. Each seminar consists of preparatory study, a trip of two to three weeks in the field, and an assessment process including a paper. (U)(3) Occasionally.

RL401, Independent Study: Individual study of a specific topic in religion under supervision of a member of the department. Assigned readings, papers, and tutorials. Obtain permission from department chair before enrolling. (U/G)(1) Occasionally.

RL402, Independent Study: Individual study of a specific topic in religion under supervision of a member of the department. Assigned readings, papers, and tutorials. Obtain permission from department chair before enrolling. (U/G)(2) Occasionally.

RL403, Independent Study: Individual study of a specific topic in religion under supervision of a member of the department. Assigned readings, papers, and tutorials. Obtain permission from department chair before enrolling. (U/G)(3) Occasionally.

RL405, Internship: Offers the qualified student the opportunity for supervised work experience in a setting pertinent to their area of study and their career goals. Contact department chair if
interested. Open to junior and senior religion majors. (U)(3) Occasionally.

RL406, Internship: Offers the qualified student the opportunity for supervised work experience in a setting pertinent to their area of study and their career goals. Contact department chair if interested. Open to junior and senior religion majors. (U)(6) Occasionally.

RL411, Internship: A one credit-hour internship in religion. (U)(1) Fall, spring, and summer.

RL412, Internship: A two credit-hour internship in religion. (U)(2) Fall, spring, and summer.

RL499, Honors Thesis: Undergraduate honors thesis in religion. (U)(3) Occasionally.

## Physics and Astronomy

Administration
Xianming L. Han, PhD, Department Chair Professors
Xianming Han, PhD; Brian W. Murphy, PhD, Director, J. I. Holcomb Observatory and Planetarium
Associate Professors
Dan W. Kosik, PhD; Gonzalo Ordonez, PhD

## Instructors

Richard B. Brown, MS, Associate Director, J. I. Holcomb Observatory and Planetarium; Jennifer L. Poor, PhD

Professor Emeritus
H. Marshall Dixon

Department Website
www.butler.edu/physics

## Why Study Physics and Astronomy?

Physicists (including astronomers and astrophysicists) seek to understand the fundamental workings of the physical world from the tiniest particles known to the entire universe. Majors develop mathematical, computer, and problem-solving skills to solve problems in areas such as classical mechanics, electricity, magnetism, thermodynamics, relativity, optics, and quantum mechanics. The skills mastered by physics majors are an excellent foundation for many professions in science, engineering, medicine, business, and law. Graduates find opportunities for employment in education, industry, and research. A bachelor's degree in physics is also excellent preparation for pursuit of an advanced degree not only in physics but also in other fields such as computer science, engineering, medicine, and law.

## Why Study Physics and Astronomy at Butler?

- Majors participate in research experiences at about twice the national rate.
- Our students have 100 percent placement for those who seek undergraduate research/ internship positions.
- Our student-to-faculty ratio is small: 9:1.
- Faculty members have expertise in atomic physics, geophysics, astrophysics, nuclear physics, computational physics, and condensed matter, allowing students a number of choices for on-campus research.
- The department directs the Holcomb Observatory and Planetarium, which is home to a robotic 1-meter-class telescope. Butler University is a member of the SARA (Southeastern Association for Research in Astronomy) consortium, which operates two remotely operated telescopes at Kitt Peak National Observatory in Arizona and Cerro Tololo Inter-American Observatory in Chile. These three telescopes are available for our faculty and students for remote observing research as well as onsite visitation.
- Students have the opportunity to work in our Laboratory for Laser and Quantum Physics, which houses a YAG laser pumped tunable dye-laser to study interactions between light and matter.
- The University's supercomputer, "Big Dawg," with 384 compute cores, is used for departmental research.
- Students can earn a degree in engineering (mechanical, electrical, computer, biomedical, energy, or motorsports) concurrently through our Engineering Dual Degree Program (see Engineering Dual Degree Program).


## Physics and Astronomy Student Learning Objectives

Students majoring in physics and astronomy at Butler will gain a working knowledge of the basic concepts and theories of physics, which they will demonstrate by applying them to novel situations. They will learn to make inferences and deductions about physical systems using critical thinking, problem-solving techniques, mathematical and computer modeling, and laboratory experiments. They will gain the skills to conduct lab or modeling experiments, to analyze measurements, and to evaluate uncertainty, and they will learn to communicate their findings both through speaking and through writing.

## Degree Programs

- Major in Physics (BA, BS)
- Major in Astronomy and Astrophysics (BA, BS)
- Major in Physics with Engineering Dual Degree Program (see Engineering Dual Degree Program)
- Minor in Physics
- Minor in Astronomy


## Requirements for the Physics Major

- PH201, PH202, Introduction to Analytical Physics I and II
- PH301, Modern Physics
- PH303, Electromagnetic Waves and Optics
- PH311, Experimental Modern Physics
- PH321, Intermediate Classical Mechanics
- PH325, Thermodynamics and Statistical Physics*
- PH331, Electromagnetic Theory I**
- PH421, Quantum Theory I
- PH495, Senior Seminar
- PH/AS, Physics Electives*
* The physics elective must be chosen from AS301, AS311, PH315, PH351, PH422, PH42'7, PH461, or PH480.
** Mechanical engineering students in the Engineering Dual Degree Program may substitute an appropriate engineering mechanics course. Electrical engineering students in the Engineering Dual Degree Program may substitute appropriate engineering electronics courses.

A student who intends to pursue graduate studies in physics also should complete at least PH315 and PH422. Other electives may be advised by the department in consideration of a student's individual career plans. Consideration should be given to the prerequisites for each course in both math and physics. MA106, MA107, and MA208 are prerequisites for most 300-level physics courses.

## Requirements for the Astronomy and Astrophysics Major

- AS102, Modern Astronomy (same as NW263)
- AS301, Modern Astronomical Techniques
- AS311, Stellar Astrophysics
- AS312, Galaxies and Cosmology
- PH201/PH202, Introduction to Analytical Physics I and II
- PH301, Modern Physics
- PH303, Electromagnetic Waves and Optics
- PH321, Intermediate Classical Mechanics
- PH331, Electromagnetic Theory
- PH495, Senior Seminar 1


## Recommended

- PH311, Experimental Modern Physics
- PH325, Thermodynamics and Statistical Physics
- PH421, Quantum Theory
- PH461, Computational Physics


## Requirements for the Physics Minor

- PH201 and PH202, Introduction to Analytical Physics
- PH301, Modern Physics
- PH303, Electromagnetic Waves and Optics
- PH311, Experimental Modern Physics
- PH321, Intermediate Classical Mechanics


## Requirements for the Astronomy Minor

- AS102, Modern Astronomy with Laboratory
- PH201, PH202, Introduction to Analytical Physics
- AS301, Modern Astronomical Techniques
- AS311, Stellar Astrophysics
- AS312, Galaxies and Cosmology

Note that MA106 and MA107 are prerequisites to the upper-division astronomy courses.

## Core Course Offered by Physics

NW262-PH, The Physical World: A onesemester study of selected topics in physics, astronomy, chemistry, and other related fields, and the mathematical analysis of physical problems. Some mathematical tools will be introduced as needed. Four lecture periods and two hours of laboratory per week. (U)(5) Fall, spring, and summer.

## Physics Courses

PH105, Concepts of Physical Science: A onesemester study of selected topics in physics and the mathematical analysis of physical problems. The student should be already competent with algebra; a few additional mathematical tools will be introduced as needed. Four class periods and two hours of laboratory per week. (U)(5) Occasionally.

PH107, Elementary Physics 1: A two-semester course based on algebra and elementary trigonometry. This course is suitable preparation to meet the entrance requirements of most dental, medical, and pharmacy schools. Three class periods and two hours of laboratory per week. PH108 must be preceded by PH107. (U) (4) Fall.

PH108, Elementary Physics 2: A two-semester course based on algebra and elementary trigonometry. This course is suitable preparation
to meet the entrance requirements of most dental, medical, and pharmacy schools. Three class periods and two hours of laboratory per week. PH108 must be preceded by PH10\%. (U)(4) Spring.

PH152, Preparatory Analytical Physics: A course in physical-problem analysis and solution using calculus and other mathematical tools required for PH201. Recommended for science and mathematics majors who need/wish to study PH201, but whose mathematical and physical-problem solving experience is limited. Prerequisite or corequisite: MA 106. (U)(4)

PH200, Physics for the Health Sciences: A survey of topics in physics applied to the human body and to medical diagnostic and treatment devices. (U)(3)

## PH201, Introduction to Analytical Physics:

 An introduction to Newtonian mechanics, thermal physics, waves, electromagnetism, and optics using calculus. Familiarity with algebra, trigonometry, and calculus is assumed. Four lectures and two hours of laboratory per week, plus one hour of recitation per week. PH202 must be preceded by PH201. Prerequisite: MA106 (may be concurrent) or permission of instructor. (U)(5) Fall.
## PH202, Introduction to Analytical Physics:

An introduction to Newtonian mechanics, thermal physics, waves, electromagnetism, and optics using calculus. Familiarity with algebra, trigonometry, and calculus is assumed. Four lectures and two hours of laboratory per week, plus one hour of recitation per week. PH202 must be preceded by PH201. Prerequisite: MA106 (may be concurrent) or permission of instructor. (U)(5) Spring.

PH301, Modern Physics: The special theory of relativity is developed along with the introduction of basic ideas and equations of quantum physics. Topics include Lorentz transformations, relativistic mechanics, collisions and conservation of energymomentum, electromagnetism and relativity, blackbody radiation, photoelectric effect, Compton effect, and the Schrodinger equation. Prerequisites: MA107 and PH202 or permission of the instructor. (U)(3) Fall.

PH303, Electromagnetic Waves and Optics: A study of geometric and wave optics, interference, diffraction, and polarization of electromagnetic waves. Two lectures and two hours of laboratory per week. Prerequisites: MA208 (may be concurrent) and PH202 or permission of instructor. (U)(3) Fall.

PH311, Experimental Modern Physics: The student performs a series of experiments to explore and verify experimental implications of relativity and quantum mechanics. Experiments include determination of Planck's constant, speed of light, charge-to-mass ratio of electron, Franck-Hertz experiment, Bragg scattering, Rutherford scattering, and radioactive decay processes. Prerequisite: PH301 or permission of instructor. (U)(3) Spring.

PH315, Mathematical Methods for Physics: Differential equations; coordinate systems and differential geometry; special functions; linear operators, groups and representation theory; complex analysis; Fourier series; and integral transforms. Applications to problems in electromagnetic theory, classical mechanics, and quantum mechanics will be presented. Four lectures per week. Prerequisites: MA208, PH201, and PH202. (U)(4) Occasionally.

## PH316, Mathematical Methods for Physics:

Differential equations; coordinate systems and differential geometry; special functions; linear operators, groups and representation theory; complex analysis; Fourier series; and integral transforms. Applications to problems in electromagnetic theory, classical mechanics, and quantum mechanics will be presented. Four lectures per week. Prerequisites: MA208, PH201, and PH202. (U)(4) Occasionally.

## PH321, Intermediate Classical Mechanics:

A study of the classical dynamics of oscillators, gravitational systems, calculus of variations, Lagrangian and Hamiltonian formalisms, dynamics of many-particle systems and continuous media, including noninertial motion, rotational motion, normal modes, and wave theory. Prerequisites: PH202 and MA208 or permission of instructor. (U)(4) Fall.

PH325, Thermodynamics and Statistical Physics: A study of the theory and applications of the first and second laws of thermodynamics; thermodynamic potentials; kinetic theory; classical and quantum statistical mechanics; and ensemble theory to thermodynamic systems. Four lecture hours per week. Prerequisites: PH202 and MA107 or permission of instructor. (U/G)(4) Spring.

PH331, Electromagnetic Theory: The theory of classical electric and magnetic fields is developed covering such topics as electrostatics, magnetostatics, scalar and vector potentials, fields in matter, electrodynamics and Maxwell's equations, conservation laws, and radiation. Prerequisites: MA208 and PH301 or permission of the instructor. (U)(4) Fall.

PH351, Analog Electronics I: Survey of electronic devices. Measurement of continuously varying quantities in time and frequency domains. Rectifiers, amplifiers, feedback, with emphasis on operational amplifiers and their uses. Three lectures and three hours of laboratory per week. Prerequisite: PH202 or permission of instructor. Fee. (U)(4) Fall.

PH352, Digital Electronics: Logic design, Karnaugh maps, state diagrams. Arithmetic and logic functions. Flip-flops, counters, and shift registers. Introduction to design with MSA and LSI devices. Two lectures and three hours of laboratory per week. Prerequisite: PH351 or permission of instructor. Fee. (U)(3)

PH411, Theoretical Physics: A study of mathematical methods of physics, including boundary-value problems, special functions, linear operators, and group theory, with applications to problems in electromagnetic theory, classical and quantum mechanics. Three lectures per week. Prerequisites: PH331 and MA334 or permission of instructor. (U/G)(3) Occasionally.

PH412, Theoretical Physics: A study of mathematical methods of physics, including boundary-value problems, special functions, linear operators and group theory, with applications to problems in electromagnetic theory, classical and quantum mechanics. Three lectures per week. Prerequisites: PH331 and MA334 or permission of instructor. (U/G)(3)

## PH413, Independent Study in Physics. (U)(1)

PH414, Independent Study in Physics. (U) (1-3)

PH421, Quantum Theory: The mathematical foundations of quantum mechanics are presented with treatment of simple systems such as barriers, square wells, harmonic oscillator, and central potentials with the development of approximation methods and the theory of angular momentum for single particles. Prerequisites: MA208 and PH301 or permission of instructor. (U/G)(4) Occasionally.

PH422, Quantum Theory II: Applications of quantum mechanics to multi-particle systems. Time dependent perturbation theory, angular momentum coupling, atomic spectra, quantum statistics, radiation and scattering theory, and introduction to relativistic quantum theory. Prerequisite: PH421 or permission of instructor. (U)(4) Occasionally.

PH42'7, General Relativity and Gravity
I: Tensor analysis in classical field theory,

Einstein's field equations, the Schwarzschild solution, linearized field equations, experimental gravitation, cosmological models and gravitational collapse. Prerequisites: PH321 and PH332 or permission of instructor. (U/G)(3)

## PH428, General Relativity and Gravity

II: Tensor analysis in classical field theory, Einstein's field equations, the Schwarzschild solution, linearized field equations, experimental gravitation, cosmological models and gravitational collapse. Prerequisites: PH 427 or permission of instructor. (U/G)(3)

## PH461, Computational Physics: An

 introduction to numerical methods frequently used in physics for solving problems that cannot be solved analytically in a closed mathematical form. Topics include numerical solution of problems dealing with oscillatory motion, gravitation, electrical fields, fluid dynamics, heat conduction, Schrödinger equation, and elastic wave motion. Prerequisites: PH321, PH331, or permission of the instructor. (U)(3) Occasionally.PH480, Special Topics: By arrangement with appropriate staff. (U/G)

## PH491, Undergraduate Tutorial and Research. (U)(3)

PH492, Undergraduate Tutorial and
Research. (U)(6)
PH493, Undergraduate Tutorial and
Research. (U)(9)
PH495, Senior Seminar: This seminar, for junior and senior physics majors, features student presentations on special research projects and selected readings in scientific current literature. A comprehensive physics exam covering all areas of physics in the curriculum will be given to all senior physics majors in the course. (U)(1) Fall.

## PH499, Honors Thesis. (U)

## Core Course Offered by Astronomy

NW263-AS, The Astronomical Universe: A one-semester survey of astronomy including ancient Greek astronomy, the motions of the night sky, the solar system, other solar systems, the lives of stars including the Sun, and the origin and fate of the universe. This will be a four-lecture-hour/two-hour-lab course. (U)(5) Fall, spring, and summer.

## Astronomy Courses

AS100, The Astronomical Universe: A descriptive study of basic astronomy including the planets and the apparent motions of celestial
objects, the seasons, constellations, comets and meteors, stars, galaxies and large-scale structure of the universe, plus current events in space exploration. There will be planetarium demonstrations and telescope observations. Some hands-on lab experiences are provided. (U) (3) Fall, spring, and summer.

AS301, Modern Astronomical Techniques: Introduction to techniques and equipment used in modern astronomy with emphasis on detection and analysis of electromagnetic radiation and the fundamental properties of telescopes and detectors. Lectures and laboratory. Laboratories focus on observational techniques and data reduction. Prerequisites: AS102 and PH202. (U)(3) Spring.

AS311, Astrophysics 1: The first semester of an introductory course on stellar astrophysics using nearly every branch of physics. Emphasis is on the underlying physical principles, including the nature of stars, stellar energy generation, stellar structure and evolution, astrophysical neutrinos, binary stars, white dwarfs, neutron stars and pulsars, and novae and supernovae. Prerequisites: AS102 and PH202. (U)(3) Fall.

AS312, Astrophysics 2: A continuation of AS311. The course covers the application of physical principles to the interstellar medium, the kinematics and dynamics of stars and stellar systems, galactic structure, formation and evolution of galaxies, relativity, Big Bang and inflationary models of the origin of the universe, and the large-scale structure and ultimate fate of the universe. Prerequisite: AS311. (U)(3) Spring.

AS461, Computational Astrophysics: An introduction to numerical methods frequently used in astrophysics for solving problems which cannot be solved analytically in a closed mathematical form. Topics include numerical solution of problems dealing with oscillatory motion, gravitation, electrical fields, stellar dynamics, stellar evolution, Schrödinger equation, and fluid mechanics. Prerequisites: PH321, PH331, or permission of the instructor. (U)(3) Occasionally.

## Political Science

## Administration

Siobhán McEvoy-Levy, PhD, Department Chair Professor
Margaret A. Brabant, PhD
Associate Professors
Craig W. Auchter, PhD; Terri R. Jett, PhD; Siobhán McEvoy-Levy, PhD; Robin Turner, PhD Assistant Professor
Su-Mei Ooi, PhD

## Professor Emeritus

Dave Mason, PhD

## Department Website

www.butler.edu/political-science

## Why Study Political Science?

The faculty members of the Political Science Department at Butler University see our discipline as connected to liberal arts, which are about studying and understanding ourselves, other peoples, and different ways of being and knowing, as well as about developing tolerance and empathy, and learning to use evidence and think critically. As political scientists, we seek to understand the causes of wars, social injustices, economic disparities, and uneven technological growth for the purpose of alleviating suffering.

Because a liberal arts education encourages an activist disposition, we look for ways to address problems such as world poverty, inadequate health care, educational disparities between neighboring communities, and environmental degradation, and seek nonviolent solutions to human rights violations worldwide. The department deliberately challenges systems, institutions, and leaders that dehumanize, marginalize, and oppress any persons and other living beings. We seek to engage in intellectual practices that provide sustainable solutions for the betterment of all.

## Why Study Political Science at Butler?

The department is committed to teaching students how to effect positive social change. In practicing citizenship skills that include empathetic listening, moral reasoning, personal responsibility, and a greater awareness of one's responsibility to the human polity, our students develop as active and engaged citizens at the local, national, and international levels. We offer courses that include service learning and community-based research, encourage students to accept responsibility for their learning, and recognize that knowledge may be obtained from a variety of different people and situations.

## Political Science Student Learning Outcomes

- Analyze and differentiate various political movements, structures, and institutions in the United States and other countries
- Differentiate and make connections between theory and practice, between global and local events, and between political science and other disciplines
- Demonstrate an awareness of different cultures and their effect on domestic and international affairs
- Demonstrate leadership and collaborative skills through active engagement in service learning and internships
- Apply research and communication techniques effectively
- Value the fundamental importance of one's membership in the human polity, emphasizing citizenship and political community


## Degree Programs

- Major in Political Science (BA)
- Minor in Political Science


## Requirements for the Major

The major requires 33 hours of political science courses, of which at least 20 hours must be in courses numbered above 299. Majors must take PO201, plus three of the other introductory courses (PO101, PO102, PO131, PO141, PO151, PO210, or PO220) and at least one writingintensive departmental seminar (PO490).

## Requirements for the Minor

Eighteen hours of political science courses, including PO101 and PO201 and at least nine hours at the upper level (above 299). Undergraduates enrolled in any college or program are eligible to minor in the field.

## Core Courses Offered by Political Science

SW240-PO, Gender and Generations-War and Peace: This course is organized around the following inquiry: When gender and generation are used as categories of analysis, what do we learn about the politics of violence and peace? We are taking the lenses of gender and age and training them on different aspects of global politics, society, and culture. What forms of violence do we see? (U)(3) Annually, term varies.

TI255-PO, The Politics of Alice Walker: This course will introduce students to the great works of Alice Walker, who is accomplished in many literary areas-poetry, short stories, novels, and political/cultural essays. Infused in all of her works is her personal and evolving political worldview, in which so many diverse people identify, and yet her voice is distinctly African American female. We will read an array of her texts and develop an understanding of what drives her political identity. (U)(3) Spring.

## Political Science Courses

PO101, Introduction to Politics: The ideas and practice of politics, with consideration of the political systems and foreign policies of the United States and countries in Europe and the Third World. (U)(3) Occasionally.

PO102, Introduction to Peace Studies: This course provides a basic introduction to the study of peace studies. It begins with an examination of the history of the field and its major theoretical and philosophical currents. The second part of the course deals with structural, cultural, and direct violence and issues as social justice, human rights, and peace building with reference to contemporary cases. (U)(3) Fall and spring.

PO131, Introduction to U.S. Politics: The contemporary political system with emphasis on the functioning of the institutions of the national government in the context of the political culture and the political economy of the United States. (U)(3) Annually, term varies.

## PO141, Introduction to International

 Politics: An analysis of changing patterns in international politics with an emphasis on global challenges and the participation of individuals, nongovernmental organizations, states, and international organizations in the search for solutions. (U)(3) Annually, term varies.PO151, Intro to Comparative Politics: Study of several political systems in Europe, Asia, Africa, and Latin America examining similarities, differences, and factors involved in stability, change, or revolution. (U)(3) Annually, term varies.

PO201, Research and Analysis: This course, required of all majors, will introduce students to the process of designing and executing research projects (large and small) in political science; to library, archival, and web-based resources for political research; to quantitative and qualitative methods of analysis; and to writing research reports for various audiences. (U)(3) Fall and spring.

PO210, Basic Political Thought: Structured around certain perennial topics of politics, this course introduces students to the philosophical ideas that form the foundation of political institutions. (U)(3) Annually, term varies.

PO220, Community Mediation: This course focuses on conflicts experienced by human communities and ways in which these conflicts can be understood as opportunities for constructive change through the cultivation of multiple perspectives, identification of
underlying shared needs and interests, and collaborative approaches to forging agreements amidst challenging circumstances. (U)(3) Annually, term varies.

PO230, Activism: This course is designed to help you to: (1) better understand the role of activists in initiating and supporting social and political change, (2) acquire practical skills and tools for effective activism, and (3) develop conceptual and experiential insights needed to continually strengthen your evolving praxis of activism. No prerequisites. (U)(3) Annually, term varies.

## PO310, The Foundations of Chinese Politics:

This course introduces students to the politics of China by providing a chronological overview of key historical events that have shaped the politics of China, examining the formal and informal aspects of how power is organized in the People's Republic of China, and considering how world politics has shaped China and how China has and will continue to shape world politics. Prerequisites: One political science course or permission of instructor. (U)(3) Occasionally.

PO320, International Relations: Problems in world politics since 1900 with particular attention to the efforts at peaceful settlement of international conflicts. (U/G)(3) Occasionally.

## PO322, International Conflict and Peace

Building: The course examines theories of conflict and peace building and analyzes indepth specific cases of inter-state and intra-state warfare and post-war reconstruction. Students participate in simulated peace negotiations. (Prerequisite: PO141 or PO220 or consent of the instructor.) (U/G)(3) Annually, term varies.

PO324, The United States in the Asia-Pacific: This course examines the role of the United States as a Pacific power in the international relations of the Asia-Pacific region. Students will be required to think about various issues in the international relations of the region through historical and theoretical lenses. Prerequisites: PO141 or permission of the instructor. (U)(3) Occasionally.

PO326, Chinese Foreign Policy: Students will learn to identify and analyze key international and domestic sources of Chinese foreign policy through relevant concepts and theories in political science. Students will also use this knowledge to understand select aspects of SinoU.S. relations. Prerequisite: One PO course or permission of the instructor. (U)(3) Occasionally.

## PO328, Politics of China's Development:

This course examines the politics that have
driven the economic development path taken by the People's Republic of China and considers the economic choices and challenges it faces in the context of the global political economy. Prerequisite: One PO course or permission of the instructor. (U)(3) Occasionally.

PO332, State and Local Government and Politics: American state and local government activities and electoral politics, emphasizing the issues of political management and policy analysis. (U)(3) Occasionally.

PO335, Racial and Ethnic Politics: The course will examine racial and ethnic group efforts to gain political power within American society, mostly as a result of access to and representation within the formal structures of American politics. Particular attention will be given to the increasing political competition between these groups and to strategies for cooperation. (U)(3) Occasionally.

## PO33'7, Politics of the Urban Experience:

Students develop a comprehensive understanding of political processes and problem solving in the urban environment. Through service learning, students learn how the urban community is transformed, analyze contemporary challenges that drive its development of stagnation, and anticipate the importance of the urban community to our survival as a nation. (U/G)(3)

PO340, The Earth Charter: This course asks practical, strategic, and ethical questions of the Earth Charter's focus on respect and care for the community of life, ecological integrity, social and economic justice, and democracy, nonviolence and peace, and the choices we make as we chart our individual and collective paths to sustainable future. (U)(3) Annually, term varies.

PO350, African Politics: Africa is a diverse and complex continent comprising more than 50 countries with distinct histories and political economies. Although Americans are constantly bombarded with images and reports on wars, disease, conflict, and corruption in Africa, these representations are incomplete and somewhat misleading. Rather than attempting to provide a comprehensive portrait of politics across the continent, this course will expose you to important concepts and theories in African politics, to the political histories and dynamics of several sub-Saharan African states, and to African scholars' and writers' perspectives on the region. Prerequisite: PO151 or junior standing. (U)(3) Annually, term varies.

PO351, African Gender and Sexuality
Politics: This course will examine the varied
ways in which gender and sexuality have been constructed and politicized across the African continent. We will collectively engage with a variety of texts-essays, films, books, and scholarly journal articles-that address African understandings and expressions of gender and sexuality, the role of gender and sexuality in African politics, and Africans' individual and collective mobilizations toward liberation and against gender- and sexuality-based oppression. Although the course will focus on African gender/sexuality politics, we also will consider the relationship between African and Western gender/sexuality discourses and movements. Prerequisite: Sophomore status, GHS206, or PO350. (U)(3) Occasionally.

## PO352, Comparative Political Economy:

Development has long been a central concern of political economists. Most people would agree that Ouagadougou is much less developed than New York City, and Burkina Faso is less developed than the United States of America. But, what about the difference between Kerala and Beijing or between India and China? How does the USA compare to Canada, the Netherlands, and the United Kingdom? And why are some places less developed than others? While economists often rely on economic growth rates and GDP/capita to measure development, these measures tell us little about citizens' access to opportunities, their quality of life, or their political rights (or lack thereof). If development is the "process of expanding the real freedoms that people enjoy," as Amartya Sen argues, these indicators are radically incomplete. Focusing on the deeply contested concept of development, this seminar examine at the politics of economic growth and well-being. We will delve into the classical and contemporary literature on the political economy of development and will look closely at the development questions, trajectories, and challenges facing people across the globe. Prerequisite: PO151 or junior status. (U)(3) Occasionally.

## PO355, United States Foreign Policy:

Evolution of U.S. foreign policy since World War II and the processes and institutions involved in shaping and implementing that policy. (U/G) Occasionally.

PO356, Israel Palestine Conflict: The course focuses on the historical origins, key narratives, political dynamics, and most contentious issues involved in the Israel-Palestine conflict. How did this conflict begin? Why has it proved so intractable? What prospects are there for peace? To answer these questions, the course examines the social, political, economic, cultural, psychological, and military aspects of
the conflict. The core issues are analyzed from a variety of different perspectives, including the positions of important political, military, and religious actors, women, youth, civil society organizations, peace movements, and external actors. Prerequisite: One PO course or permission of instructor. (U)(3) Occasionally.

## PO35\%, The Politics of Youth and Conflict:

The course examines the relationship between young people and the ideas, behaviors, processes, structures, and cultures that promote violent conflicts and/or peaceful social change in our world. Prerequisite: One PO course or permission of instructor. (U)(3) Occasionally.

PO358, Foreign Policy Making in Washington: This course focuses on foreign policy making as practiced in Washington, DC; it examines how politicians, lobbyists, citizens, and diplomats interact in and around Washington's corridors of power to determine international policy outcomes. First-hand insights gained through dialogue with those who make and implement policy and close scrutiny of key international issues provide students with a "laboratory" for understanding the politics of foreign policy making in the U.S. capital, how these policies are shaped, and why they succeed or fail to achieve their stated objectives. (U)(3) Occasionally.

## PO360, Political Regimes Latin America:

Comparative study of the politics of development in Latin America with particular attention given to the interdependence of economic, social, cultural, and external influences upon political regimes as well as the efficacy and legitimacy of the regimes themselves. Prerequisite: PO101, PO151, or permission of the instructor. (U/G)(3) Annually, term varies.

## PO362, Popular Participation in Latin

America: This course focuses upon the efforts of peasants, urban workers, neighborhoods, church groups, and students to organize and mobilize in politically efficacious ways. The themes of social class, gender, ethnicity, and the informal sector are interwoven in an analysis of the successes and failures of these attempts at popular participation in the political process. Prerequisite: PO101, PO151, or permission of the instructor. (U/G)(3) Annually, term varies.

## PO364, United States-Latin American

Relations: Historical orientation to the evolving context, institutions, and central concerns of United States-Latin American relations with particular focus upon divergent perspectives of definitions of interests and responsibilities, as well as a search for viable solutions to common problems in the Western Hemisphere.

Prerequisite: PO101, PO141, or permission of the instructor. (U/G)(3)

PO3'71, U.S. Parties and Politics: Examination of interplay between the main components of our two major parties, party organization, party-in-government and party-in-the-electorate. Emphasis on recent trends, particularly in the process of presidential selection. (U/G)(3) Occasionally.

PO3'2, Role of Protest in U.S. Politics: Protest movements in U.S. politics. An examination of the historical context of protest movements and a consideration of theoretical approaches to understanding them. Includes the Civil Rights and anti-war movements of the 1960s. Prerequisite: (one of the following) PO101, PO131, PO141 or consent of instructor. (U/G)(3) Occasionally.

PO373, Public Policy: An introduction to the study of how public policies are established in the United States. Emphasis on developing and applying analytical skills. Students are expected to research in depth a particular policy issue such as housing, the environment, or the workplace. Prerequisite: (one of the following) PO101, PO131, PO151 or consent of instructor. (U/G)(3)

PO3 ${ }^{\prime \prime} 7$, Constitutional Law: Examination of Supreme Court cases in areas such as freedom of speech, religion, criminal due process, government regulation of commerce, and racial discrimination. (U/G)(3) Occasionally.

## PO379, The Presidency and the Congress:

The modern president's role as leader of public opinion, the executive branch, and Congress. Congressional leaders and their relationship with the president, each other, and Congress. (U/G)(3) Occasionally.

PO380, Topics in Political Science: Selected topics of contemporary significance in scholarship in political science. Prerequisite: At least one political science class or junior standing or permission of instructor. (U)(3) Fall and spring.

## PO381S, Ancient and Medieval Political

Thought: This course examines the foundation of Western political thought and considers the ways in which the successors of a tradition simultaneously criticize and incorporate the work of their predecessors as they seek to construct new theories of politics. Prerequisite: PO101, PO210, or permission of instructor. (U/G)
(3) Occasionally.

PO382, Modern Political Thought: Study of several leading political writers from Hobbes
through Marx, with attention to certain basic similarities in addition to pronounced differences. Prerequisite: Junior standing or permission of the instructor. (U/G)(3) Occasionally.

PO383S, U.S. Political Thought: Selected writings of U.S. authors focusing on four periods: founding of the republic, slavery, suffrage, and the civil rights movement. Prerequisite: PO131, PO210, or permission of the instructor. (U/G)(3) Occasionally.

PO384, Politics Through Film: Post-war Hollywood films as they reflect and help to create the persuasive political culture of the United States. Draws on analytical, historical, aesthetic, and political economy approaches. Prerequisite: PO101, PO131, or consent of instructor. (U/G)(3) Occasionally.

## PO385SL, The Enduring Quest for

 Community Service Learning: This course examines various ideas of the meaning and purpose of communities throughout the history of western political thought. Beginning with Greek conceptions of what it means to live together, we will consider how the definition and purpose of community evolves to the contemporary period. Consideration of contemporary efforts to recover idyllic communities will also be considered as part of the continuing effort on the part of human beings to link personal and political practices. The course includes a service-learning component. (U)(3) Occasionally.PO386, Black Political Thought: Students will develop a historical understanding of political thought that is reflective of the black experience. We will explore black political theorists of Africa, America, and other contexts of the African diaspora. (U)(3) Occasionally.

PO400, Independent Study: Offers the qualified student of political science the opportunity to pursue a topic of individual interest. Open only to seniors, by permission of the instructor. (U)(1) Fall and spring.

PO401, Independent Study: Offers the qualified student of political science the opportunity to pursue a topic of individual interest. Open only to seniors, by permission of the instructor. (U)(2) Fall and spring.

PO402, Independent Study: Offers the qualified student of political science the opportunity to pursue a topic of individual interest. Open only to seniors, by permission of the instructor. (U)(3) Fall and spring.

PO403, Internship: Offers the qualified student the opportunity for supervised work experience in a setting pertinent to political science. Prerequisite: permission of the department chairman. (U)(2) Fall and spring.

PO404, Internship: Offers the qualified student the opportunity for supervised work experience in a setting pertinent to political science. Prerequisite: permission of the department chairman. (U)(3) Fall and spring.

PO405, Internship: Offers the qualified student the opportunity for supervised work experience in a setting pertinent to political science. Prerequisite: permission of the department chairman. (U)(6) Fall and spring.

PO406, Internship: Offers the qualified student the opportunity for supervised work experience in a setting pertinent to political science. Prerequisite: permission of the department chairman. (U)(9) Fall and spring.

## PO40'\%, Student Apprenticeship in Political

Science: Students work with faculty mentors on their teaching or their research. In teaching apprenticeships, students work with the professor in the development and discussion of the classroom experience. In research apprenticeships, students work with a faculty mentor on his or her current research. Prerequisites: Junior standing, two courses in political science. By application only. (U)(1, 2, or 3) Fall and spring.

## PO408, Student Apprenticeship in

Political Science: Students work with faculty mentors on their teaching or their research. In teaching apprenticeships, students work with the professor in the development and discussion of the classroom experience. In research apprenticeships, students work with a faculty mentor on his or her current research. Prerequisites: Junior standing, two courses in political science. By application only. (U)(1, 2, or 3) Fall and spring.

## PO409, Student Apprenticeship in

Political Science: Students work with faculty mentors on their teaching or their research. In teaching apprenticeships, students work with the professor in the development and discussion of the classroom experience. In research apprenticeships, students work with a faculty mentor on his or her current research. Prerequisites: Junior standing, two courses in political science. By application only. (U)(1, 2, or 3)

PO490, Seminar in Political Science: A particular subject in political science will be
studied each semester. Writing-intensive Prerequisite: Junior standing or permission of the instructor. (U/G)(3)

PO499, Honors Thesis. (U) Occasionally.
PO'701, Research. (G)(3)
PO'711, Thesis. (G)(3)

## Psychology

## Administration

Joel M. Martin, PhD, Department Chair

## Professors

John Neil Bohannon III, PhD; Robert H. I. Dale, PhD; Tara T. Lineweaver, PhD; Joel M. Martin, PhD; Kathryn A. Morris, PhD; Robert J. Padgett, PhD
Associate Professors
R. Brian Giesler, PhD; Amanda C. Gingerich, PhD

Assistant Professors
Alison L. O'Malley, PhD; Scott Oster, PhD (visiting)

Department Website
www.butler.edu/psychology

## Why Study Psychology?

The goal of an undergraduate psychology program is to introduce students to knowledge of the principles of emotion, behavior, and cognition as established by scientific methods. Students majoring in psychology study the core content areas of psychology and scientific methodology in preparation for graduate study and later professional pursuits in psychology or related fields.

## Why Study Psychology at Butler?

Students in our program develop an understanding of psychological science through instruction in the classroom and hands-on participation in research projects. The classroom portion of the curriculum is structured so that students first receive a general overview of the topics and methods in psychology, followed by a more thorough exploration of specific content areas. We emphasize a broad and stable base of content: every psychology major studies the same basic core of subject matter and methods in psychology. Further, each psychology student has the opportunity to add depth to that knowledge by studying particular content areas more specific to his or her interests.

Participation in student-faculty collaborative research is the hallmark of our program. We encourage students to become involved in research projects with one or more professors during their undergraduate years. Research
involvement is structured so that students evolve from apprentices to collaborators by taking progressively greater responsibility for the design and execution of psychological research projects. Some students complete an honors thesis, a yearlong research project. They routinely make presentations at the Butler Undergraduate Research Conference and at national professional meetings such as the annual convention of the Association for Psychological Science. Approximately 80 percent of our graduates have collaborated on at least one research project.

Students benefit from participating in studentfaculty collaborative research in several ways. They have the opportunity to apply the concepts, theories, and ideas learned in the classroom. They also learn how to think like psychologists and how to conduct scientific research. No amount of reading about psychology or listening to instructors can replace the experience of conducting research in behavioral science.

Because a career as a professional psychologist requires a graduate degree, the knowledge and skills students acquire through coursework and research experience in our program prepare them for graduate study. About two-thirds of our students attend graduate school either immediately after completing our program or after working for one to five years in a field related to psychology. Most of these students enter graduate programs in psychology, social work, and counseling. Some attend medical or law school. The remaining students begin careers in a wide range of fields, most of which are health-care- or service-related (pharmaceutical companies, nonprofit organizations, health care services, management, computer services, human resources, sales, education, and advertising, to name a few).

## Psychology Student Learning Outcomes

Psychology students will demonstrate mastery of the core content areas of psychology and use critical thinking to advance scientific inquiry. Psychology students will also communicate their knowledge of the field to others, apply ethical standards to evaluate psychological science and practice, and will have developed a meaningful professional direction for life after graduation.

## Degree Programs

- Major in Psychology (BA)
- Combined Major in Psychology and Sociology/Criminology (BA) (see Combined Majors)
- Combined Major in Psychology and Sociology/Social Work (BA) (see Combined Majors)
- Combined Major in Psychology and Anthropology (BA) (see Combined Majors)
- Combined Major in Psychology and Philosophy (BA) (see Combined Majors)
- Combined Major in Psychology and Political Science (BA) (see Combined Majors)
- Minor in Psychology
- The department participates in the interdisciplinary Neuroscience Minor


## Requirements for the Major

The major in psychology ( 39 or 41 credit hours) sets three goals for student development: to master a central core of psychological knowledge, to acquire basic methodological and computer skills, and to attain a sophisticated knowledge of at least one area within psychology. Students must take the following courses:

## Content Core

- SW250-PS, Psychological Inquiry or equivalent, or NW220-PS, Behavioral Science
- PS202, Learning
- PS235, Biological Bases of Behavior
- PS320, Life Span Developmental Psychology
- PS350, Social Psychology
- PS385, Cognitive Processes
- PS440, Psychology of Personality


## Methodological Core

- PS210, Research Methods/Statistics I
- PS211, Research Methods/Statistics II
- PS310, Advanced Statistics in Psychology


## Specialized Courses

- One additional psychology elective at the 300-400 level
- One additional psychology elective at the 400 level
- One 400-level seminar (from the list of five special-topics seminars)

Psychology majors are encouraged to include courses in anthropology, the biological sciences, chemistry, computer science, mathematics, philosophy, physics, and sociology as they plan their undergraduate career.

## Requirements for the Minor

A minor in psychology ( 21 or 23 credit hours) consists of: 1) SW250-PS or equivalent, or NW220-PS; 2) PS210 and PS211; 3) any three of PS202, PS235, PS320, PS350, PS385, or PS440; and 4) one additional psychology course at the 300-400 level (including courses in the previous list).

## Core Courses Offered by Psychology

NW220-PS, Behavioral Science: Students will learn the core theories in psychology and the methods used to derive and test the adequacy of those theories. Included in this are concepts of behavioral measurement and statistics, operational definitions used to assess theoretical concepts/mechanisms, hypothesis testing, and scientific report writing according to APA guidelines. Each content area will be covered through current and past theories and their methods of testing theoretical adequacy. (U)(5) Occasionally.

NW221-PS, Human Behavioral Measurement:
An introduction to the philosophy and nature of science and scientific reasoning as applied to the problem of measuring human cognition and behavior. Topics include the development of surveys, tests, time and event sampling, reaction time measures, signal detection methods, as well as physiological measures of human behavior. (U)(5) Occasionally.

## SW225-PS, Humans and the Natural

Environment: Understanding how people think about and interact with nature is crucial for promoting both human well-being and environmental sustainability. We will apply psychological research on human cognitive, emotional, and behavioral responses to nature in hopes of fostering interaction with nature and encouraging conservation-oriented behavior at both individual and societal levels. (U)(3) Annually, term varies.

SW250-PS, Psychological Inquiry: An introduction to the general principles and facts of behavior, cognition, and emotion as established by the methods of social science. (U) (3) Fall and spring.

## Psychology Courses

PS105, Careers in Psychology: Overview of major's program. Discussions of potential career options and credentials required for each. Outside speakers. Development of statement of career objectives. Pass/fail credit. (U)(1) Spring.

PS202, Learning: A survey of various types of learning, including classical conditioning, instrumental conditioning, and observational learning. The course introduces behaviorist theories of learning for both humans and animals, and includes discussion of theoretical and methodological issues. Prerequisite: C- or better in SW250-PS or NW220-PS, or permission of instructor. (U)(3) Fall and spring.

PS210, Research Methods/Statistics I: This course is the first in a two-course sequence designed to introduce students to research methods and statistics commonly used in psychology. Prerequisite: Prerequisite: Cor better in SW250-PS or NW220-PS, or permission of instructor. (U)(3) Fall and spring.

PS211, Research Methods/Statistics II: A continuation of Research Methods/Statistics I. This semester focuses on more advanced research and statistical techniques commonly used in psychology. Prerequisite: C- or better in Research Methods/Statistics I or permission of instructor. (U)(3) Fall and spring.

PS235, Biological Bases of Behavior: Relations between the anatomy and physiology of the organism and its behavior. Prerequisite: Prerequisite: C- or better in SW250-PS or NW220-PS, or permission of instructor. (U)(3) Fall and spring.

PS305, Psychology of Gender: This course emphasizes the biological, cognitive, social, and cultural factors that produce, enhance, and maintain similarities and/or differences in men's and women's behavior and psychological functioning. Applied topics related to gender will also be covered. Introductory psychology is strongly recommended. (U)(3) Occasionally.

## PS310, Advanced Statistics in Psychology:

This advanced course on the use of statistics to analyze psychological data is the culminating course in the statistics/methods sequence in the department. Emphasis is given to both the logical and the computational aspects of statistics. Prerequisite: C- or better in PS201, or C- or better in PS210 and PS211, or permission of instructor. (U)(3) Fall and spring.

PS320, Life Span Developmental Psychology: Behavioral, cognitive, and developmental principles and theories of human psychological development. Special emphasis is placed on the development of intellectual, emotional, perceptual, linguistic, and social behavior. Prerequisite: C- or better in SW250-PS or NW220-PS, or permission of instructor. (U)(3) Fall and spring.

PS333, Human Sexuality: This survey course is intended to provide an introduction to the scientific study of human sexuality. Although psychological approaches to sexuality will be emphasized, the course will be grounded in the biopsychosocial model and will incorporate perspectives from a variety of disciplines. Prerequisite: C- or better in SW250-PS or NW220-PS, or permission of instructor. (U)(3) Occasionally.

PS350, Social Psychology: A study of variables in a social context, which may help determine the cognition, perception, and behavior of the individual. Special emphasis is placed on the current theory and research of social psychology. Prerequisite: C- or better in SW250-PS or NW220-PS, or permission of instructor. (U)(3) Fall and spring.

PS360, Industrial/Organizational Psychology: Psychology's methods and principles are applied to both "industrial" topics associated with human resources management such as employee selection and training as well as "organizational" topics such as motivation, leadership, and stress. Prerequisite: C- or better in SW250-PS or NW220-PS, or permission of instructor. (U)(3) Occasionally.

PS385, Cognitive Processes: A compare-andcontrast theory course, covering basic issues in memory, information processing, problem solving, psycholinguistics, artificial intelligence, and expert systems as they reflect memory abilities and thought processes in people. Prerequisite: C- or better in SW250-PS or NW220-PS, or permission of instructor. (U)(3) Fall and spring.

PS391S, Internship: An opportunity for the qualified student to participate in a supervised work experience in a setting pertinent to the major area of study. Open to junior and senior majors with permission of instructor. May be repeated up to 6 hours. (U)(1) Fall and spring.

PS396, Directed Research: Students working on faculty research can earn research credit. Students will help run experiments, read relevant literature, and write papers on related topics. Students gain hands-on research experience. Prerequisite: Permission of instructor. May be repeated up to six hours. (U)(1) Fall, spring, and summer.

PS412, Advanced Applied Neuroscience:
This course provides an advanced overview of the principles and methods of neuroscience as applied to understanding brain systems and dysfunction. Prerequisite: C- or better in PS235, PS385 or permission of instructor. (U)(3) Fall and spring.

PS415, Psychological Testing: An introduction to the theory and problems involved in the measurement of psychological variables leading to critical discussion and analysis of tests of ability and personality. Prerequisite: Ten hours or permission of instructor. (U/G)(3) Occasionally.

## PS420CW, History of Psychology: The

 historical antecedents of psychology leading to discussion of the events and trends of the recent past and their impact on modern psychology. Prerequisite: Ten hours or permission of instructor. (U/G)(3) Annually, term varies.PS440W, Psychology of Personality: An intensive study of the more important theories regarding the nature and determinants of personality. Prerequisites: Ten hours or permission of instructor. (U/G)(3) Fall and spring.

PS441, Abnormal Psychology: Current research relating to description, classification, and dynamics of the varieties of deviant behavior including elementary consideration of diagnostic and therapeutic techniques. Prerequisite: Ten hours or permission of instructor. (U/G)(3) Fall.

PS443, Intervention in the Community/ Psychotherapy: An advanced examination and critique of the concepts and methods of psychological intervention in dealing with individuals facing psychological stress. Special attention is given to the heritage, assumptions, and success in application of psychotherapeutic techniques. Prerequisite: Ten hours or permission of instructor. (U/G)(3) Occasionally.

## PS475, Advanced Seminar in Cognitive

Psychology: This is a capstone course for learning and cognition. The topics will vary across semesters. They may include neural networks and connectionism, comparative cognition, theories of learning, eyewitness testimony, or other specialty areas in learning and cognition. Prerequisite: C - or better in PS 385 or permission of instructor. (U/G)(3) Occasionally.

PS476, Advanced Seminar in Biopsychology: Continued exploration within an area of biological psychology. The topic of each advanced seminar will be announced in the class schedule. Prerequisite: C- or better in PS 235 or permission of instructor. (U/G)(3) Occasionally.

PS477\%, Advanced Seminar in Social Psychology: A focused and in-depth examination of a specialized topic in the field of social psychology. Examples of such topics include: small-group processes, self-perception and disclosure, attribution, interpersonal attraction, altruistic behavior, social influence, attitude formation and change, and leadership. Prerequisite: C- or better in PS350 or permission of instructor. (U/G)(3) Occasionally.

PS478, Advanced Seminar in Developmental Psychology: Continued coverage of an area
within developmental psychology. The topic of each advanced seminar will be announced in the class schedule and will consist of an in-depth exploration of research and theory. Prerequisites: C- or better in PS210, PS211, and PS 320 or permission of instructor. (U/G)(3) Occasionally.

## PS479, Advanced Seminar in Applied

Psychology: Continued coverage of an area within applied psychology. The topic of each advanced seminar will be announced in the class schedule and will consist of an in-depth exploration of research and theory. Prerequisite: Ten hours or permission of instructor. (U/G)(3) Occasionally.

PS491, Seminar in Recent Psychological Literature. (U)(3) Occasionally.

PS496, Independent Study: This course provides the student with academic credit for the completion of projects not usually included in an academic program. Prerequisite: Ten hours and permission of instructor. (U/G)(1-6) Fall, spring, and summer.

PS499, Honors Thesis. (U)(3)

## Science, Technology, and Environmental Studies

Administration

Carmen Salsbury, PhD, Program Director

## Program Website

www.butler.edu/science-technology
The Science, Technology, and Environmental Studies Program supports two majors: Science, Technology, and Society and Environmental Studies. The program is dedicated to providing students with an interdisciplinary perspective regarding the complex relationship between science and technology and our health, our families and communities, and our environment. Students are challenged to explore the sociocultural, economic, and political dimensions of practices of scientific research and technological development, to learn how our understanding of these practices and their products are shaped by language and communication, and to contemplate the philosophical questions raised by this enlarged perspective on the natural world, our place in it, and our obligations toward it.

The science, technology, and society major prepares students for a number of career paths in health, education, law, public policy, communications, and other fields. The environmental studies major prepares students for careers related to the exploration,
management, preservation, and conservation of the natural environment. Both majors integrate the natural sciences (biology, chemistry, physics, and computer science), humanities (history, philosophy, and English), and social sciences (anthropology, political science, sociology, and psychology). Service learning and hands-on community service are strongly emphasized to afford students the opportunity to apply their knowledge to real-world problems and connect with community partners and potential employers.

## Science, Technology, and Environmental Studies Student Learning Objectives

Students majoring in science, technology, and society will:

- Analyze and investigate the interaction between science and technology, and social forces (e.g., economics, culture, religion, and politics)
- Analyze and explain how science and technology influence and are influenced by language, communication, and practices of public translation and transmission
- Describe and assess the philosophical, scientific, and moral standards that should guide the conduct of scientific research and technological development
- Research, write, and speak from an interdisciplinary perspective about issues concerning science and technology as they relate to society

Students majoring in environmental studies will:

- Analyze and investigate the scientific basis of environmental issues facing both human societies and the rest of the living world in modern times
- Analyze and investigate challenges to solving environmental issues that stem from practical considerations tied to the political, economic, social, and ethical perspectives on the environment
- Research and communicate (in writing, orally, and symbolically) information from an interdisciplinary perspective pertaining to the environment


## Degree Programs

- Major in Science, Technology, and Society (BA, BS)
- Major in Environmental Studies (BA, BS)
- Minor in Science, Technology, and Society
- Minor in Environmental Studies


## Requirements for the Science, Technology, and Society Major

Core courses (12 hours):

- ST200, Introduction to Science Studies
- ST205, Science and Society Speakers Series (1-credit course that must be completed three times)

Two of the following:

- ST310, Social Studies of Science and Technology
- ST320, Philosophy of Science
- ST330, Language, Rhetoric, and Science

Eighteen hours of elective courses from various departments. Of these, 12 hours must be at the 300-400 level. A total of no more than three hours of independent study (ST401, ST402, or ST403) and/or internship credit (ST411ST413, or ST416) can be used to satisfy this requirement. Additionally, no more than one of the research methods courses PS210, PS211, and SO393 may count toward this requirement.

Fifteen hours in the natural sciences and/ or technology (engineering or computer science). One course from The Natural World requirement of the Core Curriculum can be used to satisfy part of this requirement. Natural science and/or technology courses that are also identified as science, technology, and society electives may be used either to satisfy the natural science/technology requirement or the elective requirement but not both. The 15 hours of science and/or technology courses are not understood to be part of the major, and as such, they may be counted toward a minor or major in a science and technology discipline.

Because of overlapping curricula, students may not double-major in science, technology, and society and environmental studies or combine a major in one of these areas with a minor in the other.

## Requirements for the Science, Technology, and Society Minor

Core courses (seven hours):

- ST200, Introduction to Science Studies
- ST205, Science and Society Speakers Series (1-credit course that must be completed one time)

One of the following:

- ST310, Social Studies of Science and Technology
- ST320, Philosophy of Science
- ST330, Language, Rhetoric, and Science

Twelve hours of elective courses from various departments. Of these, nine hours must be at the 300-400 level. A total of no more than three hours of independent study (ST401, ST402, or ST403) and/or internship credit (ST411ST413 or ST416) can be used to satisfy this requirement. Additionally, no more than one of the research methods courses PS210, PS211, and SO393 may count toward this requirement.

Ten hours in the natural sciences or technology (engineering or computer science). One course from The Natural World requirement of the Core Curriculum can be used to satisfy part of this requirement. Natural science and/or technology courses that are also identified as science, technology, and society electives may be used either to satisfy the natural science/technology requirement or the elective requirement but not both. The 10 hours of science or technology courses are not understood to be part of the minor, and as such, they may be counted toward a minor or major in a science and technology discipline.

## Requirements for the Environmental Studies Major

Core courses (19 hours):

- ST200, Introduction to Science Studies
- ENV200, Introduction to Environmental Studies
- ST205, Science and Society Speakers Series (1-credit course that must be completed three times)
- ENV330, Geographic Information Systems

One of the following:

- ST310, Social Studies of Science and Technology
- ST320, Philosophy of Science
- ST330, Language, Rhetoric, and Science

Practical experience: three-credit requirement that can be satisfied by completing BI407, Environmental/Sustainability Practicum, an approved community-based internship, or another experiential learning course approved by the director.

Fifteen hours of elective courses from various departments. Of these, 12 must be at the 300400 level. Further, six hours of the electives must be social-science-related and another six must be humanities-related. A total of no more than three hours of independent study or internship credit can be used to satisfy this requirement. Additionally, no more than one of the research methods courses PS210, PS211, and SO393 may count toward this requirement.

Fifteen hours of natural science courses, of which the following courses are required:

- NW207, Ecology and the Natural Environment or BI230, Ecology and Evolutionary Biology-Fundamentals
- CH105, General Chemistry 1
- CH106, General Chemistry 2

The 15 hours of natural science courses are not understood to be part of the major, and as such, they may be counted toward a minor or major in a science and technology discipline.

Because of overlapping curricula, students may not double-major in science, technology, and society and environmental studies or combine a major in one of these areas with a minor in the other.

## Requirements for the Environmental Studies Minor

Core courses (nine hours):

- ST200, Introduction to Science Studies
- ENV200, Introduction to Environmental Studies

One of the following:

- ST310, Social Studies of Science and Technology
- ST320, Philosophy of Science
- ST330, Language, Rhetoric and Science

Nine hours of elective courses from various departments. Of these, six must be at the 300400 level. Further, three hours of the electives must be social-science-related and another three must be humanities-related. A total of no more than three hours of independent study or internship credit can be used to satisfy this requirement. Additionally, no more than one of the research methods courses PS210, PS211, and SO393 may count toward this requirement.

Five hours of natural science credit is also required and can be satisfied by taking one of the following:

- NW207, Ecology and the Natural Environment
- BI230, Ecology and Evolutionary BiologyFundamentals
- CH105, General Chemistry 1

The five hours of natural science courses are not understood to be part of the minor, and as such, they may be counted toward a minor or major in a science and technology discipline.

## Core Course Offered by Science, Technology, and Society

TI261-STS, Science and Society: Introduction to key social, historical rhetorical, and societal
dimensions of a scientific field or discovery. Instructors will select the field or discovery but follow the same pedagogical model. (U)(3) Summer.

## Science, Technology, and Society Courses

ST200, Intro to Science and Tech Studies: An introductory survey of the variety of humanistic and social scientific approaches to the study of science and technology. Topics include the social, political, cultural, and economic structure of science and technology, scientific objectivity, scientific communication and rhetoric, science education. (U)(3) Spring.

## ST205, Science and Society Speakers

Seminar: This course is a companion seminar to the Woods Lectures in the Sciences and Mathematics. In addition to attending all Woods Lectures during the semester, students will attend preparatory and follow-up sessions in which they learn about these scientists' work and their relation to broader societal issues. Students will have opportunities to interact personally with some of the world's leading scientists, mathematicians, and technologists. (U)(1) Fall and spring.

## ST310, Social Studies of Science and

 Technology: This course investigates science and technology as socio-cultural processes, institutions, and products. It explores how the science and technology are embedded in society as a whole and how cultural variations affect their manifestations. Attention is given to the varying methods by which social scientists study science and technology. (U)(3) Fall, spring, and summer.ST320, Philosophy of Science: An analysis of some philosophical questions about the natural sciences, including the problem of distinguishing science from pseudoscience, the nature of scientific explanation, the structure and confirmation of scientific theories, the relationship between theories in different scientific domains, scientific revolutions, and the relationship between science and reality. (U/G) (3) Occasionally.

ST330, Language, Rhetoric, and Science: This course investigates how language and rhetoric influence the production and communication of scientific and technological knowledge. We investigate the language of science, its development and its conventions, and its use and misuse. We explore how social, economic, and political influences affect scientific language and communication. (U)(3) Fall, spring, and summer.

ST390, Topics in Science, Technology, and
Society: An investigation of a topic in the study of science, technology, and society. (U/G)(3) Occasionally.

ST391, Topics in Science, Technology, and Society: An investigation of a topic in the study of science, technology, and society. (U/G)(1) Occasionally.

ST392, Topics in Science, Technology, and Society: An investigation of a topic in the study of science, technology, and society. (U/G)(2) Occasionally.

ST401, Independent Study: Offers the qualified student of science, technology, and society the opportunity to pursue a topic of individual interest. Open only to juniors and seniors with the permission of the instructor and of the director of the STS program. (U/G)(1) Occasionally.

ST402, Independent Study: Offers the qualified student of science, technology, and society the opportunity to pursue a topic of individual interest. Open only to juniors and seniors with the permission of the instructor and of the director of the STS program. (U/G)(2) Occasionally.

ST403, Independent Study: Offers the qualified student of science, technology, and society the opportunity to pursue a topic of individual interest. Open only to juniors and seniors with the permission of the instructor and of the director of the STS program. (U/G)(3) Occasionally.

ST411, Internship: Offers the qualified student of science, technology, and society the opportunity to participate in a supervised work experience in a position that will enhance their understanding of STS issues. Prerequisites: Junior standing plus ST200 and one 300 level STS course. (U)(1) Fall, spring, and summer.

ST412, Internship: Offers the qualified student of science, technology, and society the opportunity to participate in a supervised work experience in a position that will enhance their understanding of STS issues. Prerequisites: Junior standing plus ST200 and one 300 level STS course. (U)(2) Fall, spring, and summer.

ST413, Internship: Offers the qualified student of science, technology, and society the opportunity to participate in a supervised work experience in a position that will enhance their understanding of STS issues. Prerequisites: Junior standing plus ST200 and one 300 level STS course. (U)(3) Fall, spring, and summer.

ST416, Internship: Offers the qualified student of science, technology, and society the opportunity to participate in a supervised work experience in a position that will enhance their understanding of STS issues. Prerequisites: Junior standing plus ST200 and one 300 level STS course. (U)(6) Fall, spring, and summer.

ST499, Honors Thesis. (U)(3) Fall and spring.

## Science, Technology, and Society Elective Courses

Courses counting for elective credit come from various departments within the College of Liberal Arts and Sciences, as well as the College of Business, College of Communication, and College of Pharmacy and Health Sciences. A complete list of elective courses will be published on the program website each semester in advance of the advising and registration period.

## Core Course Offered by Environmental Studies

NW207-BI, Ecology and the Natural Environment: This course will explore the foundational ecological principles that govern the interactions between species and the abiotic and biotic world and, in turn, determine patterns of distribution and abundance. Fundamental concepts of ecology at the population, community, and ecosystem levels will be emphasized. (U)(5) Spring.

## Environmental Studies Courses

ENV200, Intro to Environmental Studies: This course examines the concept of the environment from the standpoint of the humanities, social sciences, and natural sciences. (U)(3) Annually, term varies.

## ENV330, Geographic Information Systems:

This course offers and introduction to the concepts, principles, and application of Geographic Information Systems (GIS). In this manner the course is both theoretical and practical, addressing the structure of geographic information systems and their use of spatial analysis and data management in environmental and related fields (e.g., political sciences, sociology, and journalism to name a few). (U)(4) Occasionally.

## Environmental Studies Elective Courses

Courses counting for elective credit come from various departments within the College of Liberal Arts and Sciences, as well as the College of Business, College of Communication, and

College of Pharmacy and Health Sciences. A complete list of elective courses will be published on the program website each semester in advance of the advising and registration period.

## Sociology and Criminology

Administration<br>William Watts, PhD, Department Chair Professors<br>Kenneth D. Colburn Jr., PhD; Antonio V. Menendez, PhD; Katherine B. Novak, PhD; Marvin B. Scott, PhD<br>Assistant Professor<br>Krista M. C. Cline, PhD<br>Instructor<br>Jess Butler, PhD<br>Department Website<br>www.butler.edu/sociology-criminology

## Why Study Sociology and Criminology?

Sociology and criminology majors are taught the basics of human interaction and relationships and acquire an understanding of social life, social change, and the social causes and consequences of social behavior. As all human behavior is primarily social, sociology promotes an awareness and understanding of a wide range of social and cultural issues, from the study of crime and deviance, to the study of social inequality and social welfare, to the study of racial, gender, and sexual diversity, to the study of globalization and multiculturalism. With an understanding of society and how the social context and social forces shape behaviors and an emphasis on strong critical-thinking and research skills, majors in sociology and criminology are well prepared for a wide range of opportunities after graduation.

## Why Study Sociology and Criminology at Butler?

The Department of Sociology and Criminology aspires to be a cornerstone program in the social sciences, emphasizing writing and critical thinking, analytical skills, experiential learning, and an in-depth understanding of the changing world, including multicultural and global issues. The department provides comprehensive, sociology-based coursework in sociology, sociology with a specialization in social work and social policy, and criminology. Our program is distinguished by:

- A curriculum that emphasizes the connection between theory and practice. Students have numerous opportunities to apply what they have learned in the
classroom to real-world settings and to everyday life.
- Majors that culminate in a capstone experience. Students undertake and complete an independent empirical research project in their senior year that demonstrates their mastery of sociology or criminology. Students present their research findings at the Butler Undergraduate Research Conference or a professional meeting.
- An emphasis on multicultural and global issues. Our curriculum introduces students to other cultures and societies and prepares them for participation in an increasingly diverse and multicultural world.
- Student participation in internships and service-learning courses. Internships in criminal justice, human services, business, and community contexts provide students with practical experience and career opportunities. Service-learning courses promote learning through the active participation of students in the local community.
- Student engagement in the research process. Students have many opportunities to engage in the research process and to collaborate with faculty on research projects.
- A curriculum that prepares students for the job market and for advanced study. Graduates of the department work in a wide range of employment fields, including human services, social policy agencies, the criminal justice system, health care, and business. Majors also pursue advanced professional degrees in law and social work, as well as degrees in sociology, criminology, and other related fields.
- Numerous student opportunities beyond the classroom. The department sponsors a chapter of Alpha Kappa Delta, an international honor society for sociology. The Student Sociology Association conducts community-service projects such as tutoring disadvantaged youths and collecting food and blankets for the homeless. The association also sponsors speakers and a career panel each year.
- A diverse faculty of dedicated teachers and researchers. Faculty work closely with students and encourage student learning through hands-on experiences in and out of the classroom.


## Sociology and Criminology Student Learning Outcomes

The core values of the Sociology and Criminology Department are placed squarely within a liberal arts tradition that strives to foster critical reflection, social awareness and responsibility, sociocultural diversity, and a global perspective. The department's central mission is to (a) foster a knowledge of social and cultural issues, theories, and research methods; (b) cultivate students' abilities to succinctly and clearly express this knowledge in oral and written form; (c) provide opportunities for students to utilize these acquired skills in an applied context; and (d) develop an awareness of global and multicultural issues. Students will develop a perspective that emphasizes critical inquiry and reasoning to address challenging social problems. Ultimately, our program and curriculum cultivates values that will shape students into lifelong, active, responsible, and informed members of the greater community.

## Degree Programs

- Major in Sociology (BA)
- Major in Sociology with a Specialization in Social Work and Social Policy (BA)
- Major in Criminology (BA)
- Combined Major in Sociology and Criminology (BA) (see Combined Majors)
- Combined Major in Sociology with a Specialization in Social Work and Criminology (BA) (see Combined Majors)
- Combined Major in Criminology and Psychology (BA) (see Combined Majors)
- Combined Major in Sociology with a Specialization in Social Work and Psychology (BA) (see Combined Majors)
- Minor in Sociology
- Minor in Criminology


## Requirements for the Sociology Major

The major requires 39 hours plus an internship or service-learning course.

Major Core Requirements (15 hours)

- SW200SO, Understanding Society
- SO205, Contemporary Social Issues
- SO391W, Social Theory Seminar
- SO393, Research Methods Seminar
- SO486, Senior Research Seminar I
- SO487, Senior Research Seminar II

NOTE: SO499, Honors Thesis may be completed in place of SO486 and SO487.

Additional Area Requirements (24 hours). At least one course from each of the following four areas:

## Sociocultural Institutions

- SO301, Families and Gender Roles
- SO303, Political Behavior, Polity, and Society
- SO311, Law and Society
- SO315, Film, Media, and Society
- SO319, Mental Illness, Culture, and Society
- SO351, Punishment and Society
- SO353, Juvenile Justice and Delinquency Social Structure and Differentiation
- SO317, Gender and Society
- SO321, Crime and Society
- SO323, Racial and Ethnic Relations
- SO325, Class, Status, and Power
- SO326, Gender, Race, and Crime
- SO329, The Sociology of Racism


## Sociocultural Process and Integration

- SO339, Violence, Media, and Culture
- SO341, Self and Society
- SO343, Popular Culture
- SO345, Deviance and Social Control
- SO347, Urban Community
- SO349, Social Movements


## Global and Comparative Studies

- SO331, Latin American Societies
- SO333, European Societies
- SO335, Global Society
- SO355, International Crime

An internship or service-learning course is required.

## Requirements for the Sociology Minor

The minor comprises 21 hours. Core Requirements (9 hours):

- SW200SO, Understanding Society
- SO391W, Social Theory Seminar
- SO393, Research Methods Seminar

Additional Area Requirements (12 hours): at least one course from each of the four concentration areas in sociology (see sociology major).

## Requirements for the Sociology Major with a Specialization in Social Work and Social Policy

The major requires 39 credit hours plus an internship or service-learning course.

Major Core Requirements (15 credit hours)

- SW200SO, Understanding Society
- SO205, Contemporary Social Issues
- SO391W, Social Theory Seminar
- SO393, Research Methods Seminar
- SO486, Senior Research Seminar I
- SO487, Senior Research Seminar II

Note: SO499 Honors Thesis may be completed in place of SO486 and SO487.

Social Work Practice Requirements (9 hours)

- SO381, Social Work and Social Policy
- SO383, Social Work Methods
- SO385, Practice Skills in Social Work

Additional Area Requirements (15 hours). At least one course from each of the following four areas:

## Sociocultural Institutions

- SO301, Families and Gender Roles
- SO303, Political Behavior, Polity, and Society
- SO311, Law and Society
- SO315, Film, Media, and Society
- SO319, Mental Illness, Culture, and Society
- SO351, Punishment and Society
- SO353, Juvenile Justice and Delinquency


## Social Structure and Differentiation

- SO317, Gender and Society
- SO321, Crime and Society
- SO323, Racial and Ethnic Relations
- SO325, Class, Status, and Power
- SO326, Gender, Race, and Crime
- SO329, The Sociology of Racism


## Sociocultural Process and Integration

- SO339, Violence, Media, and Culture
- SO341, Self and Society
- SO343, Popular Culture
- SO345, Deviance and Social Control
- SO347, Urban Community
- SO349, Social Movements


## Global and Comparative Studies

- SO331, Latin American Societies
- SO333, European Societies
- SO335, Global Society
- SO355, International Crime

An internship or service-learning course is required.

## Requirements for the Criminology Major

The major requires 39 credit hours plus an internship or service-learning course.

Major Core Requirements (15 hours)

- SW200SO, Understanding Society
- SO205, Contemporary Social Issues
- SO391W, Social Theory Seminar
- SO393, Research Methods Seminar
- SO486, Senior Research Seminar I
- SO487, Senior Research Seminar II

Note: SO499 Honors Thesis may be completed in place of SO486 and SO48\%.

Additional Area Requirements (24 hours)
Law and Crime Area (5 courses; 15 hours)

- SO321, Crime and Society and four of the following:
o SO311, Law and Society
o SO326, Gender, Race, and Crime
o SO339, Violence, Media, and Culture
o SO345, Deviance and Social Control
o SO351, Punishment and Society
o SO353, Juvenile Justice and Delinquency

Sociocultural Diversity (1 course; 3 hours)

- SO317, Gender and Society
- SO323, Racial and Ethnic Relations
- SO325, Class, Status, and Power
- SO329, The Sociology of Racism

Global and Comparative Studies (1 course; 3 hours)

- SO331, Latin American Societies
- SO333, European Societies
- SO335, Global Society
- SO355, International Crime

Sociology Elective (1 course; 3 hours): any other 300-level sociology course, excluding SO381, SO383, or SO385.

An internship or service-learning course is required.

## Requirements for the Criminology Minor

The minor requires 21 credit hours.
Minor Core Requirements (9 hours)

- SW200SO, Understanding Society
- SO391W, Social Theory Seminar
- SO393, Research Methods Seminar

Additional Area Requirements (12 hours)
Crime and Law Area (3 courses; 9 hours)

- SO321, Crime and Society and two of the following:
o SO311, Law and Society
o SO326, Gender, Race, and Crime
o SO339, Violence, Media, and Culture
o SO345, Deviance and Social Control
o SO351, Punishment and Society
o SO353, Juvenile Justice and Delinquency
o SO355, International Crime

Sociocultural Diversity (1 course; 3 hours)

- SO317, Gender and Society
- SO323, Racial and Ethnic Relations
- SO325, Class, Status, and Power
- SO329, The Sociology of Racism


## Core Course Offered by Sociology

SW200-SO, Understanding Society: An exploration of key concepts, research methods, and theoretical perspectives in sociology applied to a specific topic, theme, or set of topics. Concepts covered include: culture, socialization, deviance, social structure, social stratification and inequality (including class, race, and gender), and social institutions. Prerequisite to all upperlevel sociology courses; counts for major/minor credit (U)(3). Fall and Spring

## Sociology Courses

SO205, Contemporary Social Issues: Analysis of selected social problems in contemporary society using readings from both academic and popular sociological analysis. The emphasis of this course is on developing in the students the ability to identify social phenomena, to understand how these causes may influence social policy, and to develop an ability to conduct basic research on social issues using social science methodology, including documentary and literature-based search skills from bibliographical databases and online web-based materials. Prerequisite: SW200-SO or any introduction to social sciences course. (U)(3) Fall.

SO293, Statistics for Social Research: An introduction to statistical techniques and their application to problems in social research. This course covers descriptive and inferential statistics including measures of central tendency and variability, correlation, cross-classification, sampling, and statistical inference, and an introduction to multivariate analysis. An emphasis is placed on the sociological application of such techniques, and on developing an understanding of when they are appropriate, and the information that they yield. Students will also learn to use the computer in data analysis. Prerequisite: MA101 or equivalent. (U)(3) Spring.

SO301, Families and Gender Roles: The organization and functions of marriage and the family. Cross-cultural and historical perspectives provide background for analysis of contemporary family patterns. Prerequisite: SW200-SO. (U/G) (3) Occasionally.

SO303, Political Behavior, Polity, and
Society: An analysis of social power and
decision-making in small groups, complex organizations, communities, and societies; social and personality factors, and political behavior; and political movements and social change. Prerequisite: SW200-SO. (U/G)(3) Occasionally.

SO311, Law and Society: An analysis of the legal system, legal doctrines, and legal institutions as social phenomena. The focus is on law in action as it reflects the relationship between law and society. (U/G)(3) Fall.

SO315, Film, Media, Society: This course examines how film and electronic media have impacted our cultural values and social institutions. Film and media will be studied sociologically both as a form of popular culture (symbolic analysis) and as a new social institution in its own right (structural analysis). Prerequisite: SW200. (U)(3) Occasionally.

SO31'r, Gender and Society: An examination of gender as a system of stratification and a social construction that changes over time and differs cross-culturally. Focus is on the structural and interactional aspects of gender inequality and the intersection of gender, class, race, and sexuality. Prerequisite: SW200. (U)(3) Occasionally.

SO319, Mental Illness, Culture, and Society: A sociological analysis of mental health and mental illness. This course examines the social, cultural, and political factors involved in the definition of mental illness and the control of mental illness in society. Emphasis is placed on labeling theory; on the impact of status characteristics (e.g., race, social class, and gender) and social relationships on levels of stress and social functioning; and on legal and ethical issues associated with current health care trends, including the deinstitutionalization of mental patients and the movement toward community-based care. Prerequisite: SW200-SO or permission of the instructor. (U/G)(3) Occasionally.

SO321, Crime and Society: An analysis of the definition and extent of crime; the impact of crime on society; and the theoretical explanations of crime, offending, and victimization. Prerequisite: SW200 and junior standing. (U)(3) Occasionally.

SO323, Racial and Ethnic Relations: Analysis of the ethnic (including racial) composition of society, the minority group status of some ethnic groups, and the strains toward assimilation or cultural pluralism. Prerequisite: SW200-SO. (U/G)(3) Occasionally.

SO325, Class, Status, and Power: A study of the dynamics of class and caste, class mobility, power, authority, influence, and prestige in
different kinds of communities. Prerequisite: SW200-SO. (U/G)(3) Occasionally.

SO326, Gender, Race, and Crime: Current sociological and criminological theories will be used to examine gender and crime, race and crime, and the intersection between the two. We will cover topics such as: men and women as offenders and as victims, domestic violence, child abuse, and juvenile delinquency. Prerequisite: SW200. (U)(3) Occasionally.

SO329, The Sociology of Racism: This course is designed for students interested in understanding how racism affects our social institutions and interactions. We will take a close look at understanding prejudices and myths about race. A clear retrospective will be explored in events that have influenced the establishment of racist institutions and behaviors. Prerequisite: SW200-SO. (U/G)(3) Occasionally.

SO331, Latin American Societies: This course introduces the student to the culture and social structures of Latin American societies and aims at undermining the traditional stereotypes that have long been a part of Latin American images circulating throughout the United States. It examines in particular Latin America in the context of the globalizing of social life. Prerequisite: SW200-SO or any Introduction to Social Studies course. (U/G)(3) Occasionally.

## SO333, European Societies: Politics, Culture,

 Economics, and the Process of European Integration: This course acquaints the student with the culture, economics, and politics of Western Europe and with the general process of European integration. First, it provides a general overview of contemporary Western Europe and then emphasizes the workings of the European Union, introducing the student to the organization and functioning of the different institutions of the European Union and interpreting the meaning of this process within the global context. (U/G)(3) Occasionally.SO335, The Global Society: This course is about the constitution of the global system, and the processes which are reproducing and transforming the structures of globalization. The course acquaints the student with the process of worldwide economic, cultural, and political flows and provides an introduction to the organization and functioning of the global society.
Prerequisite: SW200-SO or any Introduction to Social Sciences course. (U/G)(3) Occasionally.

SO339, Violence, Media, and Culture:
This course examines the topic of crime in popular culture: crime as portrayed in print
and electronic media, film, and entertainment industries. We will study the "popular" manifestation of crime as it exists in the stories reported by news media and in the cultural images produced for mass entertainment. (U)(3) Occasionally.

SO341, Self and Society: The socialization of the individual; the bearing of culture and social structure on the formation of personality; and group influences upon human response and patterns of perception. Prerequisite: SW200-SO. (U/G)(3) Occasionally.

SO343, Popular Culture: An examination of the role and function of popular culture in generating and sustaining a common realm of meaning and values in contemporary society. Popular works of fiction, television, film, sporting events, parades, etc. will be considered. Prerequisite: SW200-SO. (U/G)(3) Occasionally.

SO345, Deviance and Social Control: The ways in which the discrepancies between social reality and the individual experience generate deviance, with emphasis on the roles of institutions and counter-institutions in maintaining or changing behavior patterns. Prerequisite: SW200. (U/G)
(3) Occasionally.

SO347, Urban Community: Urban origins, the genesis of the modern city and the metropolitan area and region-structure, ecology, problems, and programs for their control. Prerequisite: SW200. (U/G)(3) Occasionally.

SO349, Social Movements: Analysis of representative economic, political, religious, and other social movements, defining typical lines of genesis, objectives, structures, leadership, and methods of operation. Prerequisite: SW200-SO. (U/G)(3) Occasionally.

SO351, Punishment and Society: Analyzes the incidence of deviance and crime, and the different approaches to social control and prevention of crime. It offers an introduction to penology and corrections and explores public reaction to contemporary corrections. Prerequisite: SW200-SO. (U/G)(3) Spring.

SO353, Juvenile Justice and Delinquency:
This course will focus on the topic of childhood and juvenile justice from a sociological perspective. We will examine how society provides a framework for how we understand, interact with, and pattern our relationships with children in general and with "delinquent" children in particular. Prerequisite: SW200. (U/G)(3) Occasionally.

SO355, International Crime: This course is intended to introduce students to the basic concepts and problems of international crime and international law. It will also address the definition, detection, prosecution, sentencing, and impact of international crime, including terrorism. Special consideration is given to the role of international law, including international organizations and enforcement practices. The course will cover the major topics in the international legal system, such as the sources and subjects of international law, the jurisdiction of states (relationship between international law and the internal law of states), and the use of force. Prerequisite: SW200-SO or any Introduction to Social Sciences course. (U)(3) Occasionally.

## SO360, Selected Topics in Criminology:

Designed to give the advanced undergraduate student academic flexibility. Likely topics are Policing a Democratic society, Ethical Issues in Criminal Justice, Legal Aspects of Law Enforcement, History of the Criminal Justice System, and Crime in Comparative Perspective. Prerequisite: SW200-SO. (U/G)(3) Occasionally.

## SO370, Selected Topics in Social Work: An

 in-depth analysis of the theory, methodology, and subject matter in an area not provided for the current offerings of the department. Prerequisite: SW200-SO. (U)(3) Occasionally.SO380, Selected Topics in Sociology: An indepth analysis of the theory, methodology, and subject matter in an area not provided for in the current offerings of the department. Prerequisite: SW200-SO. (U/G)(3) Occasionally.

SO381, Social Work and Social Policy: The history and types of public and private social work in the United States from early colonial times to the present. Prerequisites: SW200SO or permission. (U)(3) Fall.

SO383, Social Work Methods: An introduction to social work fields of practice and the methods used by social work professionals. Prerequisites: SO381 or permission. (U)(3) Spring.

SO385, Practice Skills in Social Work: This foundation practice course focuses on basic social work theories and skills that are necessary when working with a wide variety of client systems; individuals, families, small groups, communities, and organizations. Students will have opportunities to learn about themselves and will examine their personal values and any conflict between personal and professional values so they are able to practice with diverse
population in a confident and professional manner. Prerequisites: SO381 or permission. (U) (3) Spring.

SO391, Social Theory Seminar: An historical and analytical survey of major contributions to social theory with major emphasis upon late 19th-century, 20th-century and contemporary developments. Prerequisites: SW200, two sociology courses, and junior standing. (U)(3) Spring.

SO393, Research Methods Seminar: The principal methods of social research-formation of research problem concepts and hypotheses; measurement and data collection and analysis; and reporting of research. Prerequisites: SW200, SO293, or equivalent, and junior standing. (U/G) (3) Fall and spring.

SO461, Directed Research: An independent research experience in which students assist a faculty member on a research project. Activities may include library research, data collection, data entry, and data analysis. Prerequisites: Permission of instructor, two courses in sociology, and junior standing. (U)(1) Fall and spring.

SO462, Directed Research: An independent research experience in which students assist a faculty member on a research project. Activities may include library research, data collection, data entry, and data analysis. Prerequisites: Permission of instructor, two courses in sociology, and junior standing. (U)(2) Fall and spring.

SO463, Directed Research: An independent research experience in which students assist a faculty member on a research project. Activities may include library research, data collection, data entry and data analysis. Prerequisites: Permission of instructor, two courses in sociology, and junior standing. (U)(3) Fall and spring.

SO481, Independent Study: An opportunity for qualified students to pursue a topic of individual interest. Open to seniors and juniors with permission of department chair. (U/G)(1) Fall and spring.

SO482, Independent Study: An opportunity for qualified students to pursue a topic of individual interest. Open to seniors and juniors with permission of department chair. (U/G)(2) Fall and spring.

SO483, Independent Study: An opportunity for qualified students to pursue a topic of individual interest. Open to seniors and juniors with permission of department chair. (U/G)(3) Fall and spring.

SO484, Internship: A program offering the superior student the opportunity to participate in a closely supervised work experience in a setting pertinent to the major area of study. Majors are strongly encouraged to engage in the internship experience. Prerequisites: SW200SO, 10 hours in sociology, and permission of the department chair. (U/G)(3) Fall and spring.

SO485, Internship: A program offering the superior student the opportunity to participate in a closely supervised work experience in a setting pertinent to the major area of study. Majors are strongly encouraged to engage in the internship experience. Prerequisites: SW200SO, 10 hours in sociology, and permission of the department chair. (U/G)(6) Fall and spring.

SO486, Senior Research Seminar I: First of a two-course sequence in the senior year. Capstone experience with emphasis on synthesis, integration, and application of theories and methods in completion of an independent student research project. Proposal, IRB approval, and data collection are expected. Prerequisites: SO391, SO393, senior. (U/G)(2) Fall.

SO48'\%, Senior Research Seminar II: Second of a required two-course sequence. Capstone experience with emphasis on synthesis, integration, and application of theories and methods in completion of an independent student research project. Data collection and analysis, final paper, and URC presentation are expected. Prerequisite: SO486. (U/G)(1) Spring.

SO499, Honors Thesis. (U)(3) Fall.


## COLLEGE of EDUCATION

## Administration

Ena Goodrich Shelley, PhD, Dean; Debra Lecklider, PhD, Associate Dean; Angela Lupton, MS, Assistant Dean

## Professors

Stephen Bloom, PhD; Deborah Corpus, EdD; Arthur Hochman, EdD; Thomas Keller, EdD; Suneeta Kercood, PhD; Debra Lecklider, PhD; Matthew Maurer, PhD; Ena Goodrich Shelley, PhD
Associate Professors
Kathryn Brooks, PhD; Kelli Esteves, EdD; Ryan Flessner, PhD; Shelly Furuness, PhD; Brooke Kandel-Cisco, PhD; Meredith McAllister, PhD; Catherine Pangan, EdD; Mindy Welch, PhD

## Assistant Professors

Nicholas Abel, EdD; Susan Adams, PhD; Susan Adamson, PhD; Lisa Farley, EdD; Jill Jay, PhD; Brandie Oliver, EdD

## Instructors

Brandon Cole, MS; Art Furman, MA; Erin Garriott, MS; Cathy Hargrove Hartman, MS; Jill Jay, PhD; Theresa Knipstein-Meyer, MS; Angela Lupton, MS; Richard Mitchell, MS; Lindsay Williams, MS

## Director of EPPSP

Jill Jay, PhD
Director of School Counseling
Tom Keller, EdD
Director of METL and International
Baccalaureate Program
Brooke Kandel-Cisco, PhD
Accreditation Coordinator
Karen Farrell, MS
Director of Student Personnel Services and External Relations
Katie Russo, MS

## College Website

www.butler.edu/coe
The Butler University College of Education was created in 1930 when Butler's Department of Education, established in 1919, and the Teachers College of Indianapolis, founded in 1892, combined. The College of Education has two major purposes:

- Preparing teachers, counselors, and administrators for positions in elementary education and middle/secondary education
- Providing services to schools and allied professionals, educational organizations, agencies, and the general community through surveys, consultative services, research, cooperative studies, and clinical services

The College offers curricula leading to the bachelor of science degree in elementary education or the bachelor of science degree in middle/secondary education. The programs in teacher education include field and clinical experiences throughout the curriculum, with the capstone experience being integrated laboratory and student teaching. Butler University teacher education programs are accredited by the Indiana Office of Educator Licensing and Development and the Council for Accreditation of Educator Preparation.

## Graduation Requirements

All undergraduate students who plan to teach in an elementary, middle, or high school must complete the bachelor's degree. Candidates must satisfactorily complete a minimum of 126 semester hours of college coursework. They also must meet all requirements listed under respective program areas.

At least 40 of the 126 semester hours needed for graduation must be in upper-division courses-courses numbered 300 or above. Student teaching is required for initial licensure programs.

## Educational Placement

The College of Education has moved to entirely self-managed credentials. Self-managed files are appropriately responsive and practical in the era of portfolios and electronic applications and communications. Current job listings can be found through Butler's Internship and Career Services website, at www.butler.edu/ics, or on individual school district websites.

## Undergraduate Transition Points

The College of Education has set four transition points for delineation and progress through the licensure/degree program.

Annual updates will be made available at www.butler.edu/coe.

## Core I and Core II

To complete COE Core I and Core II, students must meet the following criteria:

1. A cumulative GPA of 2.5. Anyone transferring from another college within the University to the COE must have a cumulative GPA of 2.3.
2. A grade of C or higher in FYS101 and FYS102. A student receiving a grade of C- or below in either class must either repeat the class and receive a grade of $C$ or better or obtain a grade of C or above in a comparable or higher-level class.
3. Successful completion of Core I (grades of C or better): ED112, Introduction to the Profession of Teaching (grade of C or better); (Music Education Majors-ME101, Foundations in Music Education I); ED245, Introduction to Computers in Education (grade of C or better); (Music Education Majors-ME102, Foundations in Music Education II).
The Indiana State Department of Education requires that all candidates demonstrate basic skills proficiency for admission to an education program. The following assessments/routes are used to document basic skills proficiency at the time of admission:

- ACT score of 24 or above (composite score).
- SAT score of 1100 or above (math and verbal).
- Evidence of passing scores on the Core Academic Skills Assessment (CASA). Cutoff scores in each of the three areas: (Reading=220, Math=220, Writing=220).
- Passing scores must be received one week prior to the start of classes each semester.

Philosophy of Teaching Statement Satisfactory scores on the COE Student Disposition Assessment or satisfactory remediation.
4. Successful completion of Core II (grades of C or better): ED241, Developmental Theory and Application in Education (grade of C or better); ED242, Educating Children with Special Needs (grade of C or better); ED244, Concepts of Education (grade of C or better).

Satisfactory scores on the COE Student Disposition Assessment or satisfactory remediation.

Students who do not meet the above criteria to complete Core I and Core II may appeal in writing to the COE administrative team to proceed with Core III. The student may be asked to appear in person.

## Apply to Teacher Education/Core III (End of Core II)

Upon completion of Core I and Core II, any student who wishes to be admitted to the Teacher Education Program must complete the application available at www.butler.edu/coe and meet the following criteria:

1. Recommendation by the student's program area and by the COE Recruitment, Retention, and Recognition Committee.
2. Cumulative GPA of 2.5.
3. Completion of approved professional education courses with a GPA of 2.5 or better and no grade lower than a C (C-is not acceptable). These courses are: ED112, ED245, ED241, ED242, and ED244. A course with a grade of C- must be repeated.
4. Satisfactory completion of appropriate clinical and field experiences.
5. A grade of C or above in the major. A class in the major with a grade of C - or below may be repeated to attain a grade of $C$ or above. With the advisor's permission, the student may instead substitute an equivalent course and attain a grade of $C$ or better.
6. Satisfactory progress must be met in completing requirements for a specific major.

Decision based on above criteria by College committee (with appropriate program representation) on ability to continue in the program.

## Core III: Program-Specific

To enter COE Core III, the student must have successfully completed Core I and Core II and must be admitted to teacher education based on the aforementioned criteria. Decision is made by the program area for admittance to Core IV: Student Teaching, and is based on disposition assessment rubrics and grades.

## Apply to Core IV: Student Teaching

1. Candidates for student teaching must have completed COE Core I and Core II and been admitted to teacher education.
2. During the first semester of the junior year, candidates for student teaching must obtain a student teaching application available at www.butler.edu/coe. Completed applications (except for fall semester grades) are to be submitted to the advisor by the published due date. Completed applications including fall semester grades are due by the published due date. If applications are not received by the published due date, there is no guarantee that a placement will be made.
3. Candidates must have a cumulative GPA of 2.5, a GPA of 2.75 in the teaching major and minor(s), and a GPA of 2.5 in all education courses.
4. At least 15 semester hours must be taken at Butler University to qualify for admission to teacher education and student teaching.

Students who do not meet these criteria may appeal in writing to the COE administrative team and may be asked to appear in person.

## Core IV: Student Teaching and Internship

The student must have successfully completed COE Core I, Core II, and Core III, be recommended for student teaching or internship by the program, and have met all of the above criteria to be admitted. State licensure tests, CPR/Heimlich certification, and evidence of suicide prevention training are required for initial licensure. Recommendation for licensure is made by program area, based on disposition assessment rubrics and grades.

## Elementary Education

In addition to receiving a comprehensive liberal arts background, students in the Elementary Education program are prepared for teaching and instructional leadership in elementary schools. With extensive site-based instruction, students learn alongside their professors, through guided practice and reflection that increases in scope over time, culminating in a full year of student teaching. Students will be in the classroom, working with children and program faculty, seven of their eight semesters. The elementary program and its faculty emphasize learning through doing, collaborative inquiry, a nurturing environment, and the development of a professional identity. By completing the program and all required standardized tests, students will meet state licensing requirements for grades K-6. Minors and/or licensing are also available in Reading, Special Education, English as a New Language, Early Childhood, and Recreation and Sports Studies. Specific curriculum requirement sheets are available at www.butler.edu/coe. This program addresses these University Student Learning Outcomes:

- Students will articulate and apply required content knowledge within their area(s) of study (cognitive).
- Students will communicate clearly and effectively (psychomotor).
- Students will share their talents with Butler and the greater community at large (affective).


## Middle/Secondary Education

The Middle/Secondary Education program is committed to preparing teachers and other professionals to work toward achieving our College's core values and shared vision for education. We believe all our programs must prepare our candidates for schools and communities as they should be, not simply perpetuating them as they currently exist. The program is a comprehensive teacher education program that combines in-depth preparation in the academic content areas of English, mathematics, science (biology, chemistry, physics), social studies, physical education, health education, or foreign language (French, German, Spanish) with the professional teacher education skills necessary for success in educational contexts for undergraduates seeking licensure in grades 5-12 in these areas. Indiana teacher licensure for physical education, health education, and music education is $\mathrm{P}-12$. Minors and/or licensing are also available in English as a New Language, Special Education, and Recreation and Sports Studies. Specific curriculum requirements for each content area are available at www.butler.edu/coe.

The program is grounded in a set of beliefs, which serves as a compass to guide the work we do with students within our program. They are the principles that we hope will guide the work our candidates will do with their future students. We believe in the following:

## Primacy of the Learner

Core Value: Diversity and Similarity

- Meeting the needs of the learner through the development of caring relationships is the most important part of our work.
- Learner needs are social, cultural, linguistic, developmental, physical, emotional, and cognitive in nature.
- Meeting the foregoing needs provides safe opportunities for learners to take risks that lead to individual growth.
- Learners come first.


## Ethic of Care

Core Value: Integrity and Responsibility

- Our work with students, schools, teachers, the community, and each other will be grounded in an ethic of care, compassion, honesty, respect, and transparency.
- Developing caring relationships creates space for transformative experiences to happen.


## Significance of Knowledge Base

Core Value: Collaboration of Theory and Practice

- Content knowledge and pedagogical knowledge are inextricably intertwined.
- Theory and practice are linked, but ever-changing. This means we must intentionally model lifelong learning.
- Having a deep understanding of this knowledge base strengthens educators' ability to make informed curriculum decisions in the classroom.


## Integrated Inquiry Curriculum

Core Value: Collaboration of Theory and Practice

- Content areas are integrated through meaningful connections and shared assessments.
- An inquiry mindset is modeled by learning alongside our students and being open to living with uncertainty and yet-to-beanswered questions.


## Site-Based Collaborative Experiences

Core Value: Teaching, Learning, and Mentoring

- Placements are purposeful, and community stakeholders are considered a part of the larger learning community.
- Relationships are nurtured with classroom teachers, University supervisors, and faculty.
- Collaboration is seen as an intentional part of an educator's work.

These beliefs further reflect our College's core values and guide the student learning outcomes we strive to achieve. These outcomes are as follows:

- Based on both formative and summative assessments, COE Middle/Secondary students will develop, implement, and adapt developmentally appropriate, inquirybased, and engaging instructional lessons for students in middle school and high school.
- Using critical reflection as a basis for improving their professional practices, our students will create positive and inclusive instructional environments using their understanding of social, cultural, literacy, academic, and cognitive developmental characteristics of adolescent learners.
- They will demonstrate responsibility for their interpersonal and instructional interactions with students, parents, colleagues, and community partners.


## Approved Minors in the COE Mild Intervention Minor

Licensure in Mild Intervention is only available, with additional coursework and passing the state-approved licensure exams, to students pursuing an elementary license. The minor is open to all COE students.

Communication Sciences Disorders majors in the College of Communication may take ED454 and/or ED479 instead of ED490 and/or ED491 to complete the minor. These courses can be taken at any time after taking ED242 but prior to student teaching, and in any order.

- ED243, Methods and Materials, Mild Intervention (3)
- ED490, Assessment of Children with Special Needs (3)
- ED491, Behavior Management for Inclusive Classrooms (3)
- ED492, Special Education Law, online (1)
- Education elective (approved by advisor) (3)

Total hours: 13

## Reading Teacher Minor

Students pursuing the Reading Teacher license must pass the state-approved K-6 licensure exams.

To complete the minors, students must achieve a 3.0 minimum GPA in the reading courses in Blocks A and B and the courses listed below. Disposition scores of 3 or higher are required in literacy classes that use the disposition assessment (ED303, ED308, ED408, and ED228).

- ED228, Content Area Literary in Middle/ Secondary Curriculum (3)
- ED408, Foundations of Effective Reading Instruction (3)
- ED307, Children"s Literature OR ED420, Adolescent Literature (3)
- ED465, Second Language Acquisition and Assessment (3) (but ED398 Multilingual Learners and Their Cultural Contents or ED498, Methods for Teaching Multilingual Learners (3) could be taken)

Total hours: 12

## English as a New Language (ENL) Minor

- ED398, Multilingual Learners and Their Cultural Contexts (3)
- ED408, Problems in the Teaching of Reading (3)
- ED490, Assessment/Evaluation of Children with Differences (3)
- ED498, Methods for Teaching Multilingual Learners (3)
- ED465, Second Language Acquisition and Assessment (3)

Total Hours: 15, plus student teaching (if pursuing licensure)

## Early Childhood (EC) Minor

Students pursuing the Early Childhood license must have a student teaching experience in an EC classroom with a licensed EC teacher and pass the state-approved K-6 licensure exams.

- ED243, Methods and Materials, Mild Intervention (3)-offered fall and spring
- ED30'7, Children's Literature (3)-offered fall and spring
- ED404, Differentiation and Culturally Responsive Teaching in Early Childhood (3)-offered fall and spring
- ED412, Reggio-Inspired Teaching and Documentation of Learning (3)-offered fall only
- ED417, Methods of Teaching in Early Education (3)-offered spring only

Total hours: 15, plus student teaching (if pursuing licensure)

## Recreation and Sports Studies Minor

This minor is open to all Butler University students, regardless of their college or major field of study.

## Required Courses (13 hours)

* Choose three of six course in the Skills Series PE202-207
- PE127, Introduction to HPERD (Health, Physical Education, Recreation, and Dance) (2)
- PE147, Prevention and Treatment of Injuries (3)
- PE124, Experiential Education (1)
- *PE202, Basketball/Soccer (1)
- *PE203, Pickleball/Golf (1)
- *PE204, Tennis/Badminton (1)
- *PE205, Ultimate Frisbee/Team Handball (1)
- PE206, Softball/Volleyball (1)
- PE207, Cross Country/Track \& Field (1)
- PE240, Foundations of Fitness and Health (2)
- PE261, Theory and Practice of Coaching (2)


## Elective Courses (5+ hours)

- PE218, Water Safety Instructor (2)
- PE235, Educational Gymnastics (2)
- PE237, Educational Dance and Games (3)
- PE311, Officiating Volleyball (2)
- PE312, Officiating Basketball (2)
- PE336, Recreation Program Design (2)
- PE338, Event and Facilities Management (2)
- PWB150, ACE Personal Training (1)
- Dance for Non-majors, in JCA (1) Maximum of 2
- PX210, Building a Better Bulldog (3)
- MK495, Special Topics, Sports Marketing (3)

Total hours: 18

## Core Courses Offered by Education

 NW260-COE, Earth Systems Science: In this course, we will use an earth systems perspective to view environmental phenomena, such as global climate change, and the impact of humans on the environment. By the end of the class, students will gain an awareness of some significant scientific theories and achievements, and recognize how they are related both to other areas of science and to our understanding of broader societal issues. In addition, students will develop an understanding of the methods of natural science and a capacity to reason scientifically, as well as experience first-hand the scientific process method through discoverybased learning. (U)(5) Fall.PCA205-COE, Art and Exceptionality: Students will gain an understanding of the importance of art in our lives by exploring the intersections of art and people with exceptionality; creating art with exceptional students at VSA Indiana (on-site); and examining our own abilities and perceived disabilities in relation to thinking and engaging creatively. (U) (3)

SW219-COE, World Geography Through Media and Maps: Geography is the study of the Earth and its relationship to humans and human activities. This course will examine both the physical and cultural aspects of the Earth and its inhabitants. This includes topics such as major urban concentrations, descriptive physical characteristics of continents and countries, political subdivisions, and general man-land relationships that reflect cultural preferences. Class experiences will include map study activities to enhance investigating the Earth, its systems, and the human/environment interaction. (U)(3) Occasionally.

## Education Courses

ED112, Introduction to the Profession of Teaching: This introductory course helps potential teachers explore the essential questions: How do people learn? What is curriculum and where does it come from? What is the teacher's role in the school? What role does the community take in the education of children? Do I want to be a teacher? (U)(2) Fall, spring, and summer

## ED204, Infusing Arts in Early and Middle

 Childhood Curriculum: This course is designed to prepare the pre-service teacher to use the fine arts of dance, music, theatre, and visual arts to enrich classroom life and enhance learning across the curriculum, as well as to enhance personal aesthetic development. Prerequisite: Completion of COE Core I. (U)(4) Fall and spring.
## ED206, Introduction to Early and Middle

 Childhood Education: This course explores the history and philosophy of early and middle childhood education including significant trends and research. Students will be introduced to the guiding themes of the Early and Middle Childhood Education Program. (U)(3) Fall and spring.ED22'7S, Introduction to Middle and Secondary Students and Schools: This course introduces middle school and high school structures and philosophies. Students will investigate appropriate school environments, activities, and curricular organizations aimed at meeting the range of developmental needs of early adolescents and young adults. Field experience is required. Prerequisite: COE major and completion of COE Core I and II. (U)(3) Fall and spring.

ED228S, Content Area Literacy in Middle-
Secondary Curriculum: This course introduces content area literacy instruction in the middle and secondary classroom. Students will acquire the skills necessary to select strategies and plan content-specific literacy instruction to improve comprehension of subject-specific content for middle school and high school students. Field experience is required. Prerequisite: Completion of COE Core I and II, ED227 or co-enrollment. (U)(3) Fall, spring, and summer.

ED241, Developmental Theory and Application in Education: Topics include theories of development and their application at various age levels. Developmentally appropriate practice, as well as a basic introduction to social, moral, emotional, and cognitive development of children and adolescents is included. Content
is focused on teacher education. Prerequisites: Successful completion of COE Core I and Praxis I. (U)(3) Fall, spring, and summer.

ED242, Educating Children with Special
Needs: Surveys the characteristics of exceptional children and explores methods and materials for teaching and assessing such students. Prerequisite: Successful completion of COE Core I and CASA. (U)(2) Fall, spring, and summer.

ED243, Methods and Materials: Strategies for Teaching Students with Mild Disabilities: This course examines the application of researchvalidated practices in the areas of placement, differentiated instruction and assessment, adaptations to curriculum, and instructional strategies used for students who require support in the general education classroom or resource room. (U)(3) Fall and spring.

ED244, Concepts of Education: Examines the sociological, historical, political, legal, and economic concepts in education. This course is part of the COE Core II requirements. Prerequisites: Successful completion of COE Core I and Praxis I. Sophomore standing required or permission of instructor. (U)(3) Fall, spring, and summer.

## ED245, Introduction to Computers in

Education: This class emphasizes development of knowledge, skills, and dispositions to effectively use technology to enhance learning. The secondary goal is to advance skill with computer hardware/software for classroom management purposes. Prerequisite: Must be an education major, have taken or be enrolled in ED112. Not intended for enrollment by non-education majors. (U)(3) Fall, spring, and summer.

ED301, Individualized Study of Growth: (U)(1) Fall and spring.

## ED302, Individualized Study of Growth: (U) (2) Fall and spring.

ED303, Reading and Language Arts-Early Childhood: This course will provide students with opportunities to explore current theoretical perspectives of emergent and early literacy. Students will explore a wide variety of narrative and informational texts that support literacy growth, and they will gain practical experience in emergent and early instruction and assessment. Writing-intensive. Prerequisite: Completion of COE Core I and COE Core II. (U)(6) Fall and spring.

ED30'7, Children's Literature: This
introductory course in children's literature is designed to acquaint and develop an appreciation of a wide variety of traditional and contemporary literature available for children. Pre-service students are provided opportunities to prepare, present, and evaluate the effective use of literature in curriculum planning. (U)(3) Fall and spring.

ED308WS, Reading and Language ArtsMiddle Childhood: Students will explore the nature of literacy for middle childhood including current theoretical perspectives on developing literacy. Students will gain practical experience in instruction and assessment for developing readers. Writing-intensive. ED308S, ED317S, ED414S, and ED418S are taken as a block fulfilling the Indianapolis Community Requirement. Prerequisite: Completion of the COE Core I and Core II. (U)(6) Fall and spring.

## ED316, Teaching Mathematics-Early

Childhood: This course examines how primary grade children learn mathematics while exploring instructional strategies, supportive learning environments, and materials that promote meaningful learning. Emphasis on effective teaching and learning will include child development, lesson development, planning, guidance, assessment, evaluation, and professionalism. Prerequisite: Completion of COE Core I and COE Core II. (U)(3) Fall and spring.

## ED317S, Teaching Social Studies-Middle

 Childhood: This course provides students with the theoretical and practical foundation for teaching social studies in middle childhood settings. Through readings, discussions, projects, and presentations, students explore the conceptual framework that undergirds the social studies. On-site practical experiences provide a laboratory in which to integrate curriculum and reflect on teaching experiences. ED308S, ED317S, ED414S, and ED418S are taken as a block fulfilling the Indianapolis Community Requirement. Prerequisite: Completion of COE Core I and COE Core II. (U)(2) Fall and spring.ED327, Curriculum and Instruction Strategies for the Middle Grades: This course involves the study of a variety of curriculum designs and instructional strategies utilized at the middle grade level. Emphasis is placed on strategies and innovative middle-level programs and practices. Extensive field experience is required, and portions of the course are conducted off campus. Prerequisite: ED227, ED228, and completion of COE Core I and COE Core II. (U)(3) Fall, spring, and summer.

## ED346, Integration of Computers in

Education: The primary emphasis of this course will be to develop a philosophy and associated strategies for integrating technology into the $\mathrm{K}-12$ curriculum. A secondary emphasis will be to continue to develop skill in the use of computers in an educational setting. (U)(3) Fall and spring.

ED348, Perspectives in Leadership: This is the introduction course for students working toward a leadership certificate in the College of Education and for students who want to expand their understanding of leadership. The main purpose is to create a learning experience where you will come to understand leadership theories, styles, and skills. You will learn that leadership development is a process of leading yourself before trying to lead others through the development of your own Personal Leadership Plan. You will collaborate with University and community leaders on how leadership styles are applied and practiced. (U)(3) Spring.

ED3 ${ }^{\text {r1, }}$, 21st Century Inquiry and Information Literacy: This inquiry and information literacy course is designed to help education majors, and others, to discover how best to learn and teach information, media, and technological literacy skills through the process of research and inquiry. (U)(3) Spring.

ED385, Information Literacy Practicum: This supervised practicum, in either an academic library setting or in a K-12 media setting with a certified and licensed school library media specialist, will provide students pursuing the information literacy minor the opportunity to implement ideas and strategies presented in the Butler-based information literacy coursework. (U)(2) Occasionally.

## ED386, Information Literacy Culminating

Project: In this course, students pursuing the information literacy minor will define and complete an approved project that brings together previous coursework from the minor. (U)(3) Occasionally.

## ED398, Multilingual Learners and Their

 Cultural Contexts: This course focuses on the cultural practices and norms that affect the language development and academic success of multilingual learners who are learning English as a new language. The conditions that inhibit and support learning English and content will be analyzed. Prerequisites: ED241, ED242, ED244. (U)(3) Fall, spring, and summer.ED401, Workshop in Education: Short-term concentrated study of a specific topic related to the field of education. (U/G)(1) Fall and spring.

ED402, Workshop in Education: Short-term concentrated study of a specific topic related to the field of education. (U/G)(2) Fall and spring.

ED403, Workshop in Education: Short-term concentrated study of a specific topic related to the field of education. (U/G)(3) Fall and spring.

## ED404, Differentiation-Culturally <br> Responsive Teaching in Early Childhood:

This course will provide an opportunity for students to explore personal beliefs and assumptions about teaching and learning through constructivist learning experiences. Readings, discussions, and activities will focus on individual differences, diversity, equity, inclusion, and fairness to support students in understanding the challenge and complexity of effective teaching all learners. (U/G)(3) Occasionally.

ED40'7, Survey of Children's Literature: Exploration of the field of literature for children and adolescents and uses of recent research in the area. Methods of selection and utilization are emphasized. (U/G)(3) Occasionally.

## ED408, Foundations of Effective Reading

Instruction: This course focuses on teaching of reading in elementary and secondary settings. The course consists of three hours of instruction and a zero-credit one-hour lab each week. Students will be required to tutor a child in reading under the supervision of the instructor as part of the lab. (U/G)(3) Fall and spring.

## ED409, Dean's Short Term Study Abroad:

The College of Education Dean's Office offers a short-term study-abroad experience for all Butler students. This unique opportunity allows students to explore and participate in various cultures around the world, building global competency. Students will meet prior to traveling to research culture and geography of destination. Guided educational tours allow students to be actively engaged in the local culture and develop new perspectives. (U/G)(1-3) Summer.

ED412, Reggio-Inspired Teaching and Documentation of Learning: This course explores the philosophy and guiding principles of the internationally renowned Italian schools of Reggio Emillia, including concepts of the "image of the child," the "environment as the third teacher," the assessment practice of "documentation," and the arts as a language through which children express meanings and demonstrate learning. (U/G)(3) Occasionally.

ED414S, Teaching Mathematics-Middle Childhood: This course examines how middle grade children learn mathematics while
exploring instructional strategies, supportive learning environments, and materials that promote meaningful learning. Emphasis on effective teaching and learning will include child development, lesson development, planning, guidance, assessment, evaluation, and professionalism. ED308S, ED317S, ED414S, and ED418S are taken as a block fulfilling the Indianapolis Community Requirement. Prerequisite: Completion of COE Core I and COE Core II. (U)(3) Fall and spring.

ED415, Methods for Teaching Language Arts
K-8: Students will learn methods for teaching and assessing all aspects of the language arts: reading, writing, speaking, listening, and viewing. Students will examine ways of organizing classroom instruction for the integrated study of the language arts across developmental levels. (Summer 1, Even-Numbered Years)(U/G)(3) Summer.

ED416, Curriculum-Early Childhood: This course will acquaint the learner with the theory of constructivism and its application to designing curriculum for young children. How children, parents, and teachers construct meaning and knowledge and how this information should be used to develop meaningful learning experiences for children will be examined. Prerequisite: Completion of COE Core I and COE Core II. (U) (6) Fall and spring.

ED417, Methods of Teaching in Early Childhood Education: This course combines a content-area teaching methods lab with a practicum in early childhood education. The class requires extensive field experiences with some coursework taught off-campus in an early childhood setting, where Butler students will experience early-childhood content-specific methods modeled by veteran preschool teachers. Prerequisite: Permission of the program faculty and director of student personnel services, and satisfactory completion of ED243, ED307, ED404, and ED412. (U/G)(3) Occasionally.

## ED418S, Teaching Science-Middle

Childhood: This course focuses on inquiry-based experiences designed to offer the elementary pre-service teacher the opportunity to examine personal, cultural, and scientific concepts that provide the foundations for science literacy and the teaching of science in multicultural classrooms. ED308S, ED317S, ED414S, and ED418S are taken as a block fulfilling the Indianapolis Community Requirement. Prerequisite: Completion of COE Core I and COE Core II. (U)(2) Fall and spring.

ED420, Adolescent Literature and Strategies
for Teaching: This hybrid course familiarizes students with a wide variety of fiction and nonfiction aimed at young adolescent through young adult audiences and includes multicultural and ethical considerations. At the same time, good teaching and planning strategies will be modeled and practiced. Portions of this course are conducted in an online setting. Prerequisite: Completion of COE Core I, ED227, ED228, and ED327 or co-enrollment. (U/G)(3) Fall.

ED423, Student Teaching Junior/Middle
High: Taken in conjunction with ED425, practical experience in approved schools under the guidance of supervising teachers and University professors. Prerequisite: Permission of the director of student personnel services and completion of COE Core I, COE Core II, and COE Core III. Pass/Fail (U)(5) Fall and spring.

ED425, Secondary Student Teaching 1: Taken only in conjunction with ED423 or ED426. Practical experience in approved schools under guidance of supervising teachers and university professors. Prerequisite: Permission of the director of student personnel services and completion of COE Core I, COE Core II, and COE Core III. Pass/Fail (U)(5) Fall and spring.

ED426, Secondary Student Teaching 2: Taken in conjunction with ED425. Practical experience in approved schools under guidance of supervising teachers and university professors. Prerequisite: Permission of the director of student personnel services and completion of COE Core I, COE Core II, and COE Core III. Pass/Fail (U)(5) Fall and spring.

ED430, Current Issues Early and Middle Childhood Ed 1: This course supplements the student teaching seminar and engages the student teacher in issues of relevance that are beyond the scope of typical coursework. Prerequisite: Completion of COE Core I, COE Core II, and COE Core III. (U)(1) Fall and spring.

ED431, Current Issues Early and Middle Childhood Ed 2: This course supplements the student teaching seminar and engages the student teacher in issues of relevance that are beyond the scope of typical coursework. Prerequisite: Completion of COE Core I, COE Core II, and COE Core III. (U)(1) Fall and spring.

ED433, Content Specific Secondary Methods: This course combines a content-area teaching methods lab with a practicum in secondary education. The class requires extensive field experiences, and portions of the course will be taught in a high school setting where Butler
students will experience secondary contentspecific methods modeled by veteran classroom teachers. Prerequisite: ED327 and completion of COE Core I and COE Core II. (U)(4) Fall and spring.

ED434, Middle/Secondary Student Teaching Seminar: Examination and application of the content and methodology of middle-level and secondary pedagogy. Prerequisite: COE Core I, COE Core II, and COE Core III. (U)(2) Fall and spring.

## ED438, Seminar for the Secondary Clinical

Capstone: A professional seminar to be taken concurrently with secondary student teaching or secondary intensive field experience for candidates enrolled in the Graduate Initial Licensure Program. Class focuses on relationships with grades 5-12 students, lesson planning, instruction, data-driven assessment, and integration of technology into instruction, professional development, and collaborative efforts with colleagues. (G)(2) Spring.

ED440, Student Teaching-Early/Middle Childhood Student Teaching 1: Practical experiences in approved early childhood settings under the guidance of a regular early childhood classroom teacher and University staff; includes observations, planning, classroom management, actual teaching, and directing student learning. Prerequisite: Permission of the director of student personnel services or completion of COE Core I, COE Core II, and COE Core III. Pass/Fail (U)(6) Fall and spring.

ED441, Integrated Lab-Early Childhood: Examination and application of the content and methodology of early childhood pedagogy. Prerequisite: Completion of COE Core I, COE Core II, and COE Core III. (U)(5) Fall and spring.

ED442, Student Teaching-Early/Middle Childhood Student Teaching 2: Practical experiences in approved middle childhood settings under the guidance of a regular middle childhood classroom teacher and University staff; includes observations, planning, classroom management, actual teaching, and directing student learning. Prerequisite: Permission of the director of student personnel services or completion of COE Core I, COE Core II, and COE Core III. Pass/Fail (U)(6) Fall and spring.

ED443, Integrated Lab-Middle Childhood:
Examination and application of the content and methodology of middle childhood pedagogy. Prerequisite: Completion of COE Core I, COE Core II, and COE Core III. (U)(5) Fall and spring.

## ED444, MC/EA Student Teaching Seminar:

Students will take this course with their student teaching semester, if they are pursuing MC/EA licensure. They will engage in reflection, collect evidence on the effectiveness of their teaching based upon standards for beginning teachers, and build their skills as a teacher. (U)(2) Fall and spring.

ED445, Intro to Computers in Education: The emphasis of this class is on the development of skill with using computer hardware and software, with a secondary goal of developing knowledge and ability to integrate computers into a classroom. Graduate students will be required to write a research paper on the computer applications for the classroom. (G)(3) Occasionally.

ED448, Instructional Tech Practicum: The emphasis of this course will be on practice of skills gained in other instructional technology classes. Students will work in schools implementing technology, working with teachers and students and performing various technologyrelated duties. (U)(3) Occasionally.

ED449, Exploration Internship: This course offers students who aren't pursuing licensure an opportunity to explore the non-teaching field of education through an intensive internship experience. This course doesn't lead to licensure, but helps students discover or reinforce an appropriate career path. Specific site(s), mentor(s), and goals are defined with a COE faculty member and must have program approval. (U/G)(6) Fall and spring.

ED450, Introduction to Secondary Education: This course utilizes an inquiry approach to explore the characteristics and needs of secondary (grades 5-12) learners; theoretical approaches to serving secondary learners; and highly effective curriculum, instructional strategies, and assessments to best support learners in secondary settings. (G)(2) Summer.

ED454, Assistive Technology: Students learn about the technology that is appropriate to support the learning of students with special needs. A wide range of special needs is considered, including issues related to vision, hearing, mobility, cognition, and learning. Students have an opportunity to put the issues discussed in the class into action. (U/G)(3) Occasionally.

ED465, Second Language Acquisition and
Assessment: This course will explore the sociopsycholinguistic factors that influence how multilingual learners acquire English as a new
language in terms of reading, writing, speaking, and listening. Students will learn how to assess second-language acquisition and literacy development. Prerequisites: ED 498. (U/G)(3) Fall.

## ED467, Standards-Based Professional

 Practices for Multilingual Learners: Through a professional learning community seminar model, students will engage in critical self-reflection on their professional practices with multilingual learners. Using state ENL licensing standards, students will document how they support multilingual learners. Prerequisites include ED408, ED490, ED497, ED498, and ED465. (U/G)(3) Occasionally.ED4'71, Eye Conditions: This course examines the range of eye conditions that cause visual impairment. The function and structure of the eye will be explored. Students will understand the causes of each eye condition, the typical course the condition takes, and the associated teaching and learning adaptations that are required by each. Students will earn to carry out a functional vision assessment. Students will also learn any common coincident disabilities that are typically found with each eye condition. (U/G)(1) Fall.

ED472, Beginning Braille: In this course students will learn the importance of Braille for full literacy of a child who is blind or has low vision. Students will learn the full literary Braille code, including letters, numbers, common punctuation, all the contradictions and rules for composition. Students will also learn to read Braille with their finger, mastering the basic hand movements important for literate readers. Additionally students will learn to use a slate and stylus and braillewriter. Lastly, students will learn about other Braille codes, including foreign language Braille, Nemeth Braille, and music Braille. (U/G)(3) Spring.

ED473, Low Vision Instructional Adaptations: This course focuses on the learning needs of lowvision students. Issues specific to this group of students are examined, including magnification devices, adapted instructional strategies, and social implications. Students will also learn to perform a functional vision assessment and the importance of that assessment for guiding instructional decisions. (U/G)(2) Fall.

## ED4'44, Adapted Materials for Visually

Impaired: Students will learn to make or acquire tactile materials for students who are blind or visually impaired. Students will learn how tactile materials function, the benefits of different types of tactile material, and the learning patterns that
are exhibited by learners with respect to tactile materials. Students will learn the importance of appropriate material to foster maximum learning and a positive learning environment. (U/G)(2) Spring.

ED475, Assistive Technology for Visually Impaired Learners: This course focuses on assistive technologies specifically for blind and visually impaired students. Technologies that assist with literacy development will be a primary focus. Technologies to support other curricular learning will be also covered, along with technologies that support daily living and recreation. (U/G)(2) Fall.

## ED4'7\%, Literacy for Visually Impaired

Learners: In this course, students will learn techniques for teaching Braille. They will learn about hand and finger placement, hand movement, hand coordination, and body posture. Students will learn about reading practice regimes and systems for monitoring progress. Students will practice these techniques with children who are learning Braille. Prerequisites: ED4r2. (U/G)(2) Summer.

## ED4'78, Orientation and Mobility for

 Visually Impaired Learners: Students will learn fundamental principles of independent travel, including pre-cane skills, sighted guide techniques, cane skills, and working with a helper dog. They will learn both the physical aspects of successful travel as well as the cognitive and emotional aspects. A logical flow of learning for blind and visually impaired learners will be presented and tested. Students will practice these techniques with children who are blind or visually impaired and who are learning to travel independently. (U/G)(3) Summer.ED479, Communication and Collaboration with Stakeholders in Special Education:
This course examines how to develop effective communication models with education professionals, community leaders, and families. Instructor guided fieldwork with professionals is required. (U/G)(3) Fall.

## ED480, Foundations of Teaching Children

 with Differences: This course addresses the various psychological principles as applied to understanding and teaching children with differences. Topics include theories of development and their application at various age levels. Developmental appropriate practice, as well as a basic introduction to social, emotional, and cognitive development of students ( $\mathrm{P}-12$ ) is included. (U/G)(3) Summer.ED488, Philosophy of Visual Impairment: In this workshop, students will meet successful individuals who are blind or visually impaired. They will discuss issues of culture, employment, and recreation that support the success of individuals who are blind or visually impaired. Students will be asked to reflect on these interactions to support the formation of a philosophy of blindness. (U/G)(1) Fall.

ED489, Practicum with Learners with Visual
Impairments: The practicum is a capstone experience in which students apply their learning from the full course of study. Students will work with youth who are advancing their literacy and learning math and science. Students will work with students on the use of assistive technology. Students will also work with blind and visually impaired youth on developing daily living skills. Prerequisites: Completion of all other VI certification courses. (U/G)(3) Fall, spring, and summer.

ED490, Assessment of Students with Special Needs: This course examines formal and informal assessment and their application to writing Individual Education Plans (IEPs), curriculum modifications and adaptations (academic and social), behavioral management plans, and reports to families. Assessment bias and its implications will be studied. 15 clock hours of instructor-guided fieldwork are required. (U/G)(3) Fall, spring, and summer.

ED491, Behavior Management for Inclusive Classrooms: This course examines positive, effective classrooms, student motivation, and practical methods for various behavioral problems common in inclusion classrooms. Emphasis is in designing, implementing, and evaluating positive management in general education classrooms, including functional behavioral analyses and plans. Fifteen clock hours of instructor-guided fieldwork are required. (U/G)(3) Fall, spring, and summer.

ED492, Special Education Law: This online course is designed to provide an overview of the legal rights of students and their families in the field of special education. The individuals with Disabilities Education Act and its implication for teachers will be emphasized. Prerequisite: Completion of COE Core I. (U/G)(1) Fall, spring, and summer.

ED493, Professional Practicum-Mild intervention Early Childhood: Guided professional experiences in a primary grade (K-3) working with mild intervention students. Student teachers demonstrate best practice in teaching and managing a classroom in an
inclusive school setting. The experience includes observations, teaching, and other professional activities which demonstrate competency of the INTASC/CEC teaching standards for mild intervention. Concurrent with ED440. Prerequisite: Completion of COE Core I, COE Core II, and COE Core III. (U/G)(3) Fall and spring.

ED494, Prof Practicum-Mild Intervention Middle Childhood: Guided professional experiences in a primary grade (4-6) working with mild intervention students. Student teachers demonstrate best practice in teaching and managing a classroom in an inclusive school setting. The experience includes observations, teaching, and other professional activities that demonstrate competency of the INTASC/ CEC teaching standards for mild intervention. Concurrent with ED442. Prerequisite: Completion of COE Core I, COE Core II, and COE Core III. (U/G)(3) Fall and spring.

ED496, Professional Practicum-Mild Intervention Early Adolescent: Guided professional experiences in early adolescent (ages 7-15) working with mild intervention students. Student teachers demonstrate best practice in teaching and managing a classroom in an inclusive school setting. The experience includes observations, teaching, and other professional activities that demonstrate competency of the INTASC/CEC teaching standards for mild intervention. Prerequisite: Completion of COE Core I, COE Core II, and COE Core III. (U/G)(3) Fall and spring.

## ED497, Inclusive Education for Multilingual

Learners: This course focuses on the cultural practices and norms that affect the language development and academic success of multilingual learners who are learning English as a new language. The conditions that inhibit and support learning both English and content will be analyzed. (G)(3) Fall, spring, and summer.

## ED498, Methods for Teaching Multilingual

Learners: This course will assist in understanding effective content-based teaching in a pluralistic, multilingual society. An understanding of socio-linguists and secondlanguage acquisition will frame an analysis of curriculum, materials, instructional strategies, assessments, and classroom management. Students are required to complete a field experience in a setting with culturally and linguistically diverse students. (U/G)(3) Fall, spring, and summer.

ED499, Honors Thesis: (U)(3) Fall and spring.
See other courses listed in Graduate Programs section.

## Human Movement and Health Science Education

The mission of the Human Movement and Health Science Education (HMHSE) program is to prepare educational leaders who promote quality programs for physical and health education, physical activity, fitness, and sport in a variety of settings. The HMHSE program is nationally recognized by two specialized program associations, the National Association for Sport and Physical Education and the American Association for Health Education. The HMHSE program functions as an academic content-specific teacher licensure program in physical education ( $\mathrm{P}-12$ ) and health education (P-12); a pre-professional preparation program for allied careers in non-school settings; and a postgraduate-school preparation program for various allied disciplines.

1. Teacher Licensure. Candidates who complete all Butler University, College of Education, and program graduation and certification requirements become eligible for Indiana state licensure in two content areas: physical education and health education. The consensus goal for physical and health education revolves around developing the knowledge, skills, and confidence for P-12 learners to develop health-enhancing, physically active lifestyles for a lifetime. The progressive model begins with school curricula augmented by before- and after-school, community, and family-centered initiatives.
2. Allied Professions. Graduates from the program can pursue careers including but not limited to the following:

- Coaching-sports for all ages, abilities, and levels
- Fitness-personal training, corporate wellness, and group fitness instruction
- Athlete development and sports performance-strength and conditioning for secondary, collegiate, and professional level teams, sportspecific industry, i.e., golf, distance running, and team sports
- Rehabilitation-adjunct to athlete development and sports performance for recreational and organized sport participants, athletic training, physical therapy, and occupational therapy
- Community health-advocacy and education for families, individuals, schools, and corporations
- Nutrition-advocacy and education for private and public entities
- Health promotion-advocacy and education for private and public entities.

3. Postgraduate Studies. Candidates who complete the program can pursue graduate studies including but not limited to education, education administration, physical therapy, exercise physiology, kinesiology, exercise science, athletic training, sports leadership, and school counseling. The program prepares all candidates to sit for credible professional certifications such as the Certified Health Education Specialist, the American College of Sports Medicine, Certified Personal Trainer, Health/Fitness Instructor, National Strength and Conditioning Association, Certified Personal Trainer, and/or Certified Strength and Conditioning Specialist exams.

## Core Courses Offered by Human Movement and Health Science

 EducationPWB101, Ballroom Dance Sport: This course is designed to give students a basic introduction to the International and American Style of ballroom, Latin, and social dancing. The primary focus is to teach and reinforce the lifelong health and wellness benefits of partnership dancing including physical activity and fitness, stress reduction, intra- and interpersonal relationships, and self-efficacy. No dance experience required. Open to students who have not completed a PWB course. (U)(1) Fall and spring.

PWB102, Israeli Dancing: Israeli dancing reflects the diverse culture of Israel and the fusion of traditional and contemporary dance styles. This course emphasizes dance as a lifetime fitness activity while acquainting students with other aspects of Israeli culture. The dancers' social interaction enhances the activity and is integral to the dance form. Open to students who have not completed a PWB course. (U)(1) Fall and spring.

PWB103-DA, Beginning Ballet 2 (non-majors): Basic ballet technique in the recognized classic form. (For students who have had no previous training. Not applicable to the dance major; open to all other students). Two meetings per week. Open to students who have not completed a PWB course. (U)(1) Fall.

PWB104-DA, Beginning Jazz: Basic jazz styles and forms for non-majors. No prerequisite. Two meetings per week. Open to students who have not completed a PWB course. (U)(1) Fall.

PWB105-DA, Intermediate/Advanced Jazz: Intermediate/advanced jazz styles and forms for non-majors. Two meetings per week. Open to students who have not completed a PWB course. (U)(1) Spring.

PWB106-DA, Modern Dance (non-majors):
Dance technique as a combination of movement improvisation and modern technique emphasizing qualities of movement in space and time. (Not applicable to dance majors; open to all other students.) Two meetings per week. Open to students who have not completed a PWB course. (U)(1) Fall and spring.

PWB110, Hiking and Backpacking: In this semester-long course, we will consider hiking/ backpacking as a recreational sport in both its historical and cultural context. Students will have the opportunity to go on hikes and develop/ plan their own backpacking trip to fulfill the Physical Well Being requirement. This course is designed to teach the value of both urban nature and wilderness experiences and the knowledge and skill necessary for enjoyable and safe basic hiking and wilderness trips. During fall and spring terms, open to students who have not completed a PWB course. (U)(1) Occasionally.

PWB121-PE, Beginning Tennis: This course is designed for the novice or advanced beginner tennis player to develop competent or proficient tennis skills, and to develop confidence in the game of tennis that can be enjoyed across a lifespan. The students will also learn to apply rules, regulations, and courtesies of tennis governed by the United States Tennis Association (USTA) and the International Tennis Federation (ITF). No tennis experience necessary. During fall and spring terms, open to students who have not completed a PWB course. (U)(1) Fall, spring, and summer.

PWB122-PE, Advanced Tennis: This course is designed to advance player development for the intermediate and advanced tennis player both physically and mentally. Primary focus will be on advanced tennis strategies and tactics for both singles and doubles. Skill proficiency, a focus on fitness, and tactical and strategic decision making during match play conditions are intended to enhance sport enjoyment, personal challenge, and a more sophisticated appreciation of tennis that will promote good health and increased quality of life. During fall and spring terms, open to students who have not completed a PWB course. (U)(1) Fall, spring, and summer.

PWB123-PE, Learning Golf Through Games: This course will provide players on all ability levels to advance golf as one movement form that contributes uniquely to the lifelong habits of good health, physical activity benefits, and overall quality of life. Students will become golf literate, competent, and confident through creative skill progressions and a modified games approach to learning. Open to students who have not completed a PWB course. (U)(1) Spring.

PWB124-PE, Basketball: Open to students who have not completed a PWB course. (U)(1) Fall and spring.

PWB125-PE, T'ai Chi: T'ai Chi is a traditional Chinese system of stress relief and exercise rooted in the martial arts. Recognizing and relieving stress in conjunction with increasing strength, balance, and coordination contribute to body and mind development. This balanced approach to wellness promotes good health, encourages lifespan physical activity, and an overall quality of life. Open to students who have not completed a PWB course. (U)(1) Fall and spring.

PWB126-PE, Buda Khi: Buda Khi is a unique combination of aerobic, muscular strength, and flexibility training that combines martial arts with overall physical conditioning. The purpose of this course is for students to develop physical, mental, and emotional productivity that will enhance confidence and motivation that contributes towards health, wellness, and individual goal achievement. Open to students who have not completed a PWB course. (U)(1) Fall and spring.

PWB127-PE, Weighing In on Optimal Health: Many college students battle body weight and body image issues. Optimal health requires more than exercise and proper nutrition. This course takes a holistic, quality of life approach to promote a physically active lifestyle as a healthy and sustaining approach to weight management across a lifespan. Open to students who have not completed a PWB course. (U)(1) Fall and spring.

PWB129-PE, Strength and Conditioning: This course is designed to provide an educational supervised weightlifting environment, which allows students to gain strength, basic knowledge of weight training principles, lifting techniques, and training strategies. Open to students who have not completed a PWB course. (U)(1) Fall, spring, and summer.

PWB130, All About the Bike: Our reading, discussion, and writing in this class will explore the ways in which cycling can contribute to leading a healthy life. By participating in the group rides offered through the course, and by developing their own cycling plan, students will cultivate healthy habits of exercise. Open to students who have not completed a PWB course. (U)(1) Spring.

PWB135-PE, Spinning: Spinning is an intense form of indoor cycling. This course will utilize twice-weekly spinning sessions to improve and maintain physical fitness. You will sweat and
have fun in this class! We will also explore other health-related topics such as nutrition, sleep, stress management, healthy relationships, sex, and alcohol. Open to students who have not completed a PWB course. (U)(1) Annually, term varies.

PWB140, Marching Band: Butler University's Marching Band understands and appreciates its dual role in providing quality spirited performances on behalf of the University and the development of its members' musicianship, movement skills, and personal wellness. The objective of this course is to develop and instill in its members a lifelong love of music making and the development of good habits of personal wellness and physical activity. Open to students who have not completed a PWB course. (U)(1) Fall.

PWB141, Cheerleading: This course is designed to advance the overall well-being for members of the Butler cheerleading squad. Cheerleading is a sport-related activity that requires proficient gymnastics, tumbling, and rhythmic skills for individuals and groups. Emphases will be on skillful performance, sufficient levels of healthrelated physical fitness, application of fitness principles, proper nutrition, safety, interpersonal relationships, and community awareness that contribute to the centrality of health, wellness, and the pursuit of a good life. Open to students who have not completed a PWB course. (U)(1) Fall.

PWB145-PE, Fitness Bootcamp: This fitness boot camp is designed to improve personal wellness through physical fitness, nutrition, and health maintenance. The physical activity portion of this course will be a mixture of outdoor and indoor group activities that combine body weight and callisthenic exercises with strength and interval training. All fitness levels are welcome. During fall and spring terms, open to students who have not completed a PWB course. (U)(1) Occasionally.

PWB150-PE, ACE Personal Trainer: This course prepares students to take the national American Council on Exercise (ACE) Personal Trainer Certification Exam by means of content (lecture), application (lab), and practical opportunities (hands-on). Students are prepared to sit for the ACE Certified Personal Trainer (cPT) certification. Open to students who have not completed a PWB course. (U)(1) Spring.

PWB160, Women's Self Defense: Open to students who have not completed a PWB course. (U)(1) Fall and spring.

PWB161, Sports Fishing: This course is designed to increase student awareness of the potential for lifelong health and wellness through sport fishing. Students will develop related skills and knowledge that make a unique contribution to an overall quality of life through recreation. Instruction will be appropriate for the beginning and experienced angler. Areas of study will include fish identification and habitat, casting techniques, equipment selection, and safety while accessing the fishable waters in the Butler and Indianapolis communities. Open to students who have not completed a PWB course. (U)(1) Fall.

## PWB162S, Wagging, Walking, and Wellness:

 This course is designed to foster lifelong habits of good health and multidimensional wellness by integrating physical activity, civic awareness, and community service. Emphasis will be on personal and social responsibility for optimal quality of life. Students will partner with the Humane Society of Indianapolis to provide physical activity and play for the animals, learning through service to the community, improved fitness, and awareness that health and wellness are central to living a good life. During fall and spring terms, open to students who have not completed a PWB course. (U)(1) Fall and spring.PWB163, Introduction to Study of Yoga: An introductory course in the physical techniques and philosophy of yoga to achieve a healthier and more balanced life through the ancient practices. No prerequisite; yoga mat required. During fall and spring terms, open to students who have not completed a PWB course. (U)(1) Occasionally.

PWB164, Continued Study of Yoga: A course designed for students with prior experience in the physical techniques and philosophy of yoga to achieve a healthier and more balanced life through the ancient practices. Prerequisite: 2 years prior experience; yoga mat required. (U)(1) Occasionally.

## PWB165, Pressure Point Self Defense:

During fall and spring terms, open to students who have not completed a PWB course. (U)(1) Occasionally.

PWB166, Intercollegiate Athletics: This course is designed to advance sport-specific knowledge, optimal skill levels, health and motor performance fitness, and personal wellness towards sustaining a health-enhancing and physically active lifestyle. During fall and spring terms, open to students who have not completed a PWB course. Note: enrollment is reserved for students currently participating on an NCAA

Division I Butler intercollegiate sports team. (U)
(1) Fall, spring, and summer.

PWB167, Independent Study: During fall and spring terms, open to students who have not completed a PWB course. (U)(1) Occasionally.

## HMHSE Courses

PE124, Experiential Education: This course will provide theoretical foundations of experiential education, the history of ropes courses, and the importance of processing, debriefing, and reflection. Students will participate in icebreakers, field initiatives, low course elements, and high course elements. Prerequisite: Minor in Recreation and Sports Studies or permission of instructor. (U)(1) Spring.

PE127, Intro to Health, Physical Education, Recreation, and Dance: An orientation course for HMHSE majors and minors; considers history, philosophy, professional organizations, and job opportunities in areas of physical education, dance, recreation, and health and safety. (U)(2) Fall and spring.

## PE128, Introduction to Health Education:

This introductory course discusses basic philosophy and practice in health education. Emphases are on literature and organizations that support health educators. Topics include safety education, community education, and coordinated school health. (U)(2) Fall and spring.

## PE147, Prevention and Care of Athletic

 Injuries and Illnesses: This introductory level course is designed to introduce the student to the athletic training profession. The student will learn basic athletic injury and illness prevention strategies and the role of the athletic trainer and the sports medicine team in the prevention and management of such injuries and illnesses. This class includes laboratory and classroom instruction. (U)(3) Fall and spring.
## PE202, Skills Series-Basketball/Soccer:

 Course emphasizes content knowledge and development of competent or proficient motor skill performance using basic sport-related skills that are foundational to effective teaching and coaching. Related emphasis includes sport history, culture, conventions and traditions, rules, language, tactics and strategies, competition, and fair play. Prerequisite: permission by the instructor for non-education majors. (U)(1) Fall.
## PE203, Skills Series-Pickleball/Golf:

Course emphasizes content knowledge and development of competent or proficient motor
skill performance using basic sport-related skills that are foundational to effective teaching and coaching. Related emphasis includes sport history, culture, conventions and traditions, rules, language, tactics and strategies, competition, and fair play. Prerequisite: permission by the instructor for non-education majors. (U)(1) Fall.

PE204, Skills Series-Tennis/Badminton: Course emphasizes content knowledge and development of competent or proficient motor skill performance using basic sport-related skills that are foundational to effective teaching and coaching. Related emphasis includes sport history, culture, conventions and traditions, rules, language, tactics and strategies, competition, and fair play. Prerequisite: permission by the instructor for non-education majors. (U)(1) Spring.

PE205, Skills Series-Ultimate Frisbee/
Team Handball: Course emphasizes content knowledge and development of competent or proficient motor skill performance using basic sport-related skills that are foundational to effective teaching and coaching. Related emphasis includes sport history, culture, conventions and traditions, rules, language, tactics and strategies, competition, and fair play. Prerequisite: permission by the instructor for non-education majors. (U)(1) Spring.

PE206, Skills Series-Baseball/Softball/ Volleyball: Course emphasizes content knowledge and development of competent or proficient motor skill performance using basic sport-related skills that are foundational to effective teaching and coaching. Related emphasis includes sport history, culture, conventions and traditions, rules, language, tactics and strategies, competition, and fair play. Prerequisite: permission by the instructor for non-education majors. (U)(1) Spring.

PE20'7, Skills Series-Weight Training/ Fitness/Track and Field/Cross Country: Course emphasizes content knowledge and development of competent or proficient motor skill performance using basic sport-related skills that are foundational to effective teaching and coaching. Related emphasis includes sport history, culture, conventions and traditions, rules, language, tactics and strategies, competition, and fair play. Prerequisite: permission by the instructor for non-education majors. (U)(1) Spring.

PE218, Water Safety Instructor: Preparation for teaching swimming and other water activities. Meets requirements for Red Cross WSI certificate. (U)(2) Fall and spring.

PE224, Coordinated School Health: This course features personal, school, and community health problems and needs, especially how they affect and concern children. The focus is on the coordinated school health program (CSHP) model components, including the relationship to health education policy and funding. Prerequisite: PE 128. (U)(2) Spring.

PE235, Educational Gymnastics: This course provides instruction in educational gymnastics emphasizing developmentally appropriate practice. The design is to establish content knowledge, skills, and dispositions necessary for teaching kindergarten through middle school students with and without disabilities in the physical education and/or physical activity setting. (U)(2) Fall.

PE23'7, Educational Dance and Games: This course provides instruction in educational dance and games, emphasizing developmentally appropriate practice. The purpose is to establish content knowledge, skills, and dispositions for movement as self-expression, and in games/ activities necessary for teaching kindergartenmiddle school students with and without disabilities in the physical education and/or physical activity settings. (U)(3) Spring.

## PE240, Foundations of Fitness and Health:

This course includes the application of current fitness concepts, principles, and appropriate practices. Emphasis will be to achieve and maintain personal fitness, fitness assessment, professional certifications, and education for all ages, ability levels, and settings. Application of current equipment, technology, and research to promote health-enhancing lifetime physical activity is required. Prerequisite: HMHSE major or permission of instructor. (U)(2) Spring.

PE253, Motor Learning: This course examines the cognitive and neuromuscular processes underlying motor skill acquisition, performance, or reacquisition of motor skills. Human development is studied from infancy across a lifespan in relationship to motor learning and motor control. Emphasis is application of concepts and theory to teaching motor skills. (U) (2) Fall.

## PE261, Theory and Practice of Coaching:

Course provides in-depth study of knowledge and skills necessary for effective coaching on any level and in any setting. Topics include ethics and philosophy, teaching and communication, growth and development, physical conditioning, sport skills and tactics, safety and injury prevention, organization, and administration. (U)(2) Spring.

PE29'7, Orientation to Internships on Physical Education and Health Education: This course provides an orientation to professional skills, knowledge, and dispositions necessary for careers in various non-school settings related to physical education, health education, fitness, physical activity, and sport. Prerequisite: permission from instructor for non-education majors. (U)(2) Fall.

## PE321, Measurement in Physical Education:

The theory and practice of measurement in physical education; selection and applications of standardized and teacher-made testing; testing as related to grading. Prerequisite: Completion of COE Core I and COE Core II. (U/G)(3) Fall.

PE322, Concepts in Health Education: Basic health concepts identified by the Centers for Disease Control and Prevention including alcohol, tobacco, and other drugs; nutrition; mental health; and sexual health with an emphasis on program planning for health education in schools. Prerequisite: Completion of COE Cores I and II, PE224. (U/G)(3) Fall.

PE323, Kinesiology: A focus on mechanics of basic human movement with an emphasis in musculoskeletal and anatomical components. Analysis of specific joint movements and muscular actions will be performed as they relate to physical education and sports. Prerequisite: PE324 and completion of COE and PE Core I and COE Core II. (U/G)(3) Fall.

PE324, Physiology of Exercise: A review of selected physiological systems with focus on the response to acute bouts of exercise and how these systems adapt to longterm exposure to exercise training. Prerequisite: BI257 or equivalent (U) (3) Spring.

PE325, The Adapted Program in Physical Education: Students will study activities suitable for students in adapted programs; obtain knowledge of current special education laws and guidelines; understand assessment of basic locomotor and activity skills; gather information on different disabilities; and participate in observations of local facilities with special education students. (U)(3) Fall and spring.

PE330, Introductory Methods for Physical and Health Education: This course provides instruction for developing teacher effectiveness in the physical and health education and related physical activity settings. Application of instructional principles in small peer groups using open and closed skills, task presentations, environmental conditions, content development, and feedback. Prerequisite: completion of COE Core I and Core II. (U)(3) Fall.

PE331, Physical and Health Education Methods for Early and Middle Childhood: This course provides preparation with content and pedagogical knowledge, skills, and dispositions appropriate for teaching $\mathrm{P}-5$ learners with and without disabilities in physical education, physical activity, and health education settings. Emphases are classroom management, content development, and lesson planning through seminar and field practicum. Prerequisite: PE330 (U)(5) Spring.

## PE335, Physical and Health Education Methods for Middle Secondary: This

 course provides preparation with content and pedagogical knowledge, skills, and dispositions appropriate for teaching 5-12 learners with and without disabilities in physical education, physical activity, and health education settings. Emphases are curriculum and content development for short and longterm planning through seminar and field practicum. Prerequisite: PE 331. (U)(5) Fall.PE336, Recreation Program Design: This course focuses on designing and staging leisure experiences using a servant leadership approach. It provides students with information and practical experiences required to translate agency vision, philosophy, and policies into the design, implementation, and program evaluation of recreation program and services in community or university context. Prerequisite: Minor in Recreation and Sports Studies or permission of instructor. (U)(2) Fall.

PE338, Event and Facility Management: This course will provide information on the operation and management of athletic and recreational facilities. Students will have the opportunity to plan and prepare a major event, to include handson opportunities to organize, direct personnel, fundraise, market, and administer a local event. Prerequisite: Minor in Recreation and Sports Studies or permission of instructor. (U)(2) Spring.

PE352, Exercise Prescription: Course focuses on developing physical activity programs for achieving physical fitness including screening instruments, risk appraisals, contraindication for exercise, and program-planning assessments. Emphases include exercise workloads, lifestyle assessment, and intervention with appropriate health education for diverse populations. Prerequisite: PE323 and completion of COE and PE Core I-Core II. (U)(3) Spring.

PE369, Supervised Field Experience for
Coaches: Students act as an assistant with a coach in a local high school. Prerequisites:

Two of the following: PE261, PE262, PE263, PE264, PE265, or PE266 and permission of the instructor and completion of COE Core I and COE Core II. (U)(3) Fall, spring, and summer.

PE407, Individualized Study of Growth: For students who have a special topic that they want to study under faculty guidance. Prerequisite: Junior or senior standing and permission of the program coordinator. (U/G)(1) Occasionally.

PE408, Individualized Study of Growth: For students who have a special topic that they want to study under faculty guidance. Prerequisite: Junior or senior standing and permission of the program coordinator. (U/G)(2) Occasionally.

## PE438, Sport Conditioning and Resistance

Training: This course will present systematic physical training for general fitness and sports conditioning appropriate for a range of experience and ability: beginners, elite performers, and some special populations. Emphasis is on a variety of training techniques and theory. Prerequisites: Core I, II, and III. (U/G)(3) Fall.

## PE445, Internships in Physical Education:

This course is a full-time, field-based internship at approved agencies under the guidance of sitebased supervisors and university professors. Prerequisite: Permission of the program faculty and director of student personnel services and completion of COE and PE Core I-III. Concurrent enrollment PE446. (U/G)(9) Fall, spring, and summer.

PE446, Seminar for Physical Education
Internship: This course is a professional seminar which meets during Internship in Physical Education (PE445). Focus is on professional standards, relationships, responsibilities, professional and career development, and reflection. Prerequisite: Completion of COE and PE Core I-III. Concurrent enrollment PE445. (U/G)(3) Fall, spring, and summer.

## Graduate Programs

Graduate coursework and degree programs are offered in the College of Education for teachers, counselors, administrators, and others who seek advanced degrees, professional credentials, or personal enrichment. Graduate tuition rates are competitive with public institutions, and several scholarship programs for graduate students make graduate education at Butler very affordable. Additional information about these programs may be obtained from the College of Education graduate studies office in Jordan Hall, room 246, 317-940-9501. You
also may wish to consult the College website at www.butler.edu/coe.

For general information on applying and admission to any Butler graduate program or course, see Admission Information and Requirements chapter. College- and programspecific requirements are detailed below.

## Experiential Program for Preparing School Principals

The Experiential Program for Preparing School Principals (EPPSP) is a leading principal preparation program with graduates throughout Indiana and the United States. EPPSP is a twoyear, 36 -credit-hour program resulting in a master of science degree.

A cohort of approximately 25 students begins in January of each year. Admission requirements are available at www.butler.edu/educationaladministration.

## EPPSP at Butler:

- Combines theory and practice in an innovative and experience-based approach
- Utilizes the concept of adult learning as an essential foundation
- Encompasses the Interstate School Leaders Licensure Consortium Standards, as well as effective schools research
- Fosters collaboration and collegiality in a relationship-based, cohort setting
- Provides an opportunity for students to experience authentic and relevant learning and mastery of administrative skills through internships and group projects
- Challenges students to demonstrate leadership skills in their school setting and community


## Non-Master's Licensure-Only in Education Administration

For those students who are seeking licensure in Education Administration and already hold a master's degree, EPPSP offers a 24 -credit hour program of study. Students must meet the same requirements for admittance as for the 36 -credit hour program, and will participate in the four Core phases with the cohort members with whom they were admitted:

- ED557, School Principalship, Phase 1
- ED558, School Principalship, Phase 2
- ED559, School Principalship, Phase 3
- ED561, School Principalship Phase 4


## EPPSP Student Learning Outcomes

The EPPSP student has the knowledge and ability to promote the success of all students by:

- Facilitating the development, articulation, implementation, and stewardship of a school vision of learning supported by the school community
- Collaborating with families and other community members, responding to diverse community interests and needs, and mobilizing community resources
- Promoting a positive school culture, providing an effective instructional program, applying best practice to student learning, and designing comprehensive professional growth plans for staff
- Understanding, responding to, and influencing the larger political, social, economic, legal, and cultural context, and by acting in a fair and ethical manner
- Managing the organization, operations, and resources in a way that promotes a safe, efficient, and effective learning environment


## EPPSP Courses

For course descriptions not given, see previous education course listings.

ED55'7, School Principalship-Phase 1: Phase I of the Experiential Program for Preparing School Principals (EPPSP) places emphasis on a vision of learning, collaboration with families and community, school and community relations, and leadership. Participants explore leadership styles through the use of several inventories and selfassessment instruments. Only open to EPPSP students. (G)(6) Spring.

ED558, School Principalship-Phase 2: Phase II of the Experiential Program for Preparing School Principals (EPPSP) places emphasis on the school culture and instructional program. This course is focused on curriculum, instructional practices, success for all students, school improvement, professional development, and teacher evaluation. Only open to EPPSP students. (G)(6) Fall.

ED559, School Principalship-Phase 3: Phase III of the Experiential Program for Preparing School Principals (EPPSP) places an emphasis on school law, negotiations and collective bargaining, due process, rules and regulations, ethics, student diversity, cultural competency, and meeting the needs of special populations. Only open to EPPSP students. (G)(6) Spring.

ED561, School Principalship-Phase 4: Phase IV of the Experiential Program for Preparing School Principals (EPPSP) places emphasis on organizational management. Focus is given to policy and administrative guidelines, school safety, facilities, budget, data management
technologies, models of organizational change, effective change strategies, team development, and conflict management. Only open to EPPSP students. (G)(6) Fall.

## ED562, School Principalship-Transition

1: Transition I of the Experiential Program for Preparing School Principals (EPPSP) places emphasis on internship and proficiency development, research, school reform, current issues in education, and understanding, responding to and influencing the political, social, cultural, economic, and legal context. Only open to EPPSP students. (G)(6) Summer.

## ED563, School Principalship-Transition 2:

 Transition II of the Experiential Program for Preparing School Principals (EPPSP) places an emphasis on research, internship and proficiency development, and experiential activities designed to prepare future school principals in authentic learning. Only open to EPPSP students. (G)(6) Summer.
## Master's in Effective Teaching and Leadership

The Master's in Effective Teaching and Leadership (METL) has a long history of serving educators seeking a master of science in education. METL is a 36 -hour program requiring the completion of 21 COE Core hours and 15 hours tailored to student interest. The program is designed for working educational practitioners to complete in two to three years. The program begins with the intensive summer cohort and culminates with the thesis research project. More information is available at www.butler.edu/ teaching-leadership.

## METL at Butler:

- Encourages educators to think deeply, creatively, and critically about the discipline of education, and is academically rigorous and personally transformative
- Includes a core curriculum and cohort model while allowing students to individualize their course of study
- Encourages students to connect educational theory to their professional context
- Challenges students to consider the purpose of education in a pluralistic society
- Nurtures students' relationships with caring and committed faculty
- Culminates with a thesis project grounded in the student's area of interest
- Prepares students to continue in their classrooms, provide leadership within their school setting or corporation, or continue studies at the doctoral level


## METL Student Learning Outcomes

The METL student:

- Understands and applies the notion that curricula is grounded in ideologies and historical context, is socially situated, and that, when implemented, has an impact on students, schools, and self
- Displays a commitment to educational practice and research as moral, intellectual, and creative work that demands knowledge, skill, imagination, and care
- Appropriately applies an understanding of research design by conducting data collection and analysis strategies pertinent to classroom research
- Demonstrates an understanding of teacher leadership and commitment to teacher leadership by serving as educational leaders


## METL Courses

ED40'7, Survey of Children's Literature: Exploration of the field of literature for children and adolescents and uses of recent research in the area. Methods of selection and utilization are emphasized. (U/G)(3) Occasionally.

## ED408, Foundations of Effective Reading

Instruction: This course focuses on teaching of reading in elementary and secondary settings. The course consists of three hours of instruction and a zero-credit one-hour lab each week. Students will be required to tutor a child in reading under the supervision of the instructor as part of the lab. (U/G)(3) Fall and spring.

## ED415, Methods for Teaching Language Arts

K-8: Students will learn methods for teaching and assessing all aspects of the language arts: reading, writing, speaking, listening, and viewing. Students will examine ways of organizing classroom instruction for the integrated study of the language arts across developmental levels. (Summer 1, Even-numbered Years)(U/G)(3) Summer.

ED420, Adolescent Literature and Strategies for Teaching: This hybrid course familiarizes students with a wide variety of fiction and nonfiction aimed at young adolescent through young adult audiences and includes multicultural and ethical considerations. At the same time, good teaching and planning strategies will be modeled and practiced. Portions of this course are conducted in an online setting. Prerequisite: Completion of COE Core I, ED227, ED228, and ED327 or co-enrollment. (U/G)(3) Fall.

ED445, Intro to Computers in Education: The emphasis of this class is on the development of skill with using computer hardware and
software, with a secondary goal of developing knowledge and ability to integrate computers into a classroom. Graduate students will be required to write a research paper on the computer applications for the classroom. (G)(3) Occasionally.

## ED465, Second Language Acquisition and

Assessment: This course will explore the sociopsycholinguistic factors that influence how multilingual learners acquire English as a new language in terms of reading, writing, speaking, and listening. Students will learn how to assess second-language acquisition and literacy development. Prerequisites: ED 498. (U/G)(3) Fall.

## ED467, Standards-Based Professional

 Practices for Multilingual Learners: Through a professional learning community seminar model, students will engage in critical self-reflection on their professional practices with multilingual learners. Using state ENL licensing standards, students will document how they support multilingual learners. Prerequisites include ED408, ED490, ED497, ED498, and ED465. (U/G)(3) Occasionally.
## ED49'7, Inclusive Education for Multilingual

Learners: This course focuses on the cultural practices and norms that affect the language development and academic success of multilingual learners who are learning English as a new language. The conditions that inhibit and support learning both English and content will be analyzed. (G)(3) Fall, spring, and summer.

## ED498, Methods for Teaching Multilingual

Learners: This course will assist in understanding effective content-based teaching in a pluralistic, multilingual society. An understanding of socio-linguists and secondlanguage acquisition will frame an analysis of curriculum, materials, instructional strategies, assessments, and classroom management. Students are required to complete a field experience in a setting with culturally and linguistically diverse students. (U/G)(3) Fall, spring, and summer.

ED501, Concentrated Learning Experience: Concentrated study of topic(s) of current importance, interest, and relevance. Independent study and research will be stressed along with classwork. (G)(1) Occasionally.

ED502, Concentrated Learning Experience:
Concentrated study of topic(s) of current importance, interest, and relevance. Independent study and research will be stressed along with classwork. (G)(2) Occasionally.

ED503, Concentrated Learning Experience:
Concentrated study of topic(s) of current importance, interest, and relevance. Independent study and research will be stressed along with classwork. (G)(3) Occasionally.

ED504, Curriculum Theory: Students in this course examine curriculum discourse as an enduring, philosophical, and theoretical debate by studying fundamental questions, central ideas, and varied ideologies that inform the development of curricula. Students in this course connect theory with practice through study of educational reform in diverse contexts. Prerequisites: ED530, ED531 (G)(3) Fall.

ED514, Issues and Directions in Elementary Mathematics Curriculum, Learning, and Instruction: Recent trends in elementary mathematics education and their implications for school programs will be examined. The course includes implications of research for teaching, learning, curriculum, assessment, and other current issues related to school mathematics. (G) (3) Occasionally.

ED515, 21st Century Inquiry and Information Literacy (Graduate): This inquiry and information literacy course is designed to help graduate students in education, and other disciplines, discover how best to learn and teach information, media, and technological literacy skills through the process of research and inquiry. (G)(3) Fall and spring.

ED525, Exploration of Best Practices in Early
Literacy: Three strands of inquiry will guide this course: 1) an in-depth exploration of language learning theory; 2) collection and analysis of language and literacy information for assessment and research purposes; and 3) construction of curriculum and literacy environments in the early childhood classroom. (G)(3) Occasionally.

## ED526, The Emergent Curriculum-

 Introduction to the Project Approach: Early childhood and primary grade teachers will investigate the Project Approach curriculum framework that is based upon constructive theory. Students will develop a curriculum using the three phases of the Project Approach model to be used in their classroom setting. (G)(2) Occasionally.ED52'7, Exploration of the Principles and Practices of Reggio Emilia: Early childhood and primary grade teachers will explore the philosophy and guiding principles of the internationally renowned Italian schools of Reggio Emilia. The "image of the child," "the environment as the third teacher,"
"documentation," and "the 100 languages of children" will be introduced. (G)(2) Occasionally.

ED528, Issues and Directions in Curriculum and Instruction: Students in this course will study a variety of curriculum designs and instructional strategies. Students will examine recent trends in curriculum and instruction and their implications for schools, teachers, and students. (G)(3) Occasionally.

## ED529, Teaching Reading in the Content

Areas: Students will learn how reading instruction can be incorporated into any content area in ways that will increase student comprehension and enjoyment of informational texts and literacy texts. (G)(3) Summer.

## ED530, Foundations in Effective Teaching and Leadership, Part 1: Students in this course examine educational theories, research frameworks, and teacher identity. This is the initial core course in the Master of Science in Effective Teaching and Leadership Program. ED530 must be taken in summer session with ED531 as part of the summer cohort. (G)(3) Summer.

ED531, Foundations in Effective Teaching
and Leadership, Part II: Students in this course apply knowledge of educational theories, research frameworks, and teacher identity to teacher research and leadership in personal and professional contexts. This is the second core course in the Master of Science in Effective Teaching and Leadership Program. ED531 must be taken in summer session with ED530 as part of the summer cohort. (G)(3) Summer.

ED534, Topical Readings: This course is designed to serve the needs and interests of students and faculty who choose to collaboratively pursue advanced study of a topical nature within the field of education. (G) (3) Occasionally.

ED535, Teacher Research and Leadership in Education Part I: This course supports the ongoing work of teacher researchers as they engage in their own classroom inquiries. Students take this class either just before completing their thesis or in conjunction with their thesis. Each class session gives students an opportunity for collaborative data analysis, writing feedback, and help with a variety of research strategies. Prerequisites: ED530, ED531, ED504, and ED569, 12 hours of graduate electives. (G)(3) Fall.

ED548, Using and Interpreting Mixed Methods in Educational Research: Students in this course will examine the conceptual
issues surrounding the use of mixed methods in educational research and will practice analysis of data using a variety of tools, including introductory descriptive and inferential statistics. Students will read and interpret published educational research representative of qualitative, quantitative, and mixed-method approaches. (G)(3) Occasionally.

ED569, Problems, Issues, and Trends in American Education: Students in this course engage in an intensive and searching analysis of selected theoretical, fundamental, and current problems and issues in education. Students in this course connect theory to practice by examining the implications of current issues for the local context. Prerequisites: 530, 531, and 504. (G)(3) Spring.

ED600, Individualized Study of Growth:
Course of arranged study to support the ongoing work of METL students as they develop their knowledge and deepen their understandings. The course is arranged through the advisor in the student's individualized study of growth area. The instructor will create a syllabus to be reviewed and approved by the dean. (G)(3) Occasionally.

ED601, Individualized Study of Growth: Course of arranged study to support the ongoing work of METL students as they develop their knowledge and deepen their understandings. The course is arranged through the advisor in the student's individualized study of growth area. The instructor will create a syllabus to be reviewed and approved by the dean. (G)(2) Occasionally.

ED658, Teacher Research and Leadership in Education, Part II: Students will examine the role of the teacher leader in educational settings by creating leadership projects and engaging in the practice of educational leadership in personal and professional contexts. Prerequisites: ED530, ED531, ED504, ED569, and ED535, 15 hours of graduate electives. (G)(3) Spring.

ED700, Project/Thesis (MS): Credit and hours arranged (hours to be taken immediately before completion of degree). (G)(3) Occasionally.

## ED741, Independent Study-Elementary:

Independent study arranged with adviser with an emphasis on problem identification, data gathering, analysis, organization, and presentation of the research report. (G)(1) Occasionally.

ED'442, Independent Study-Secondary:
Independent study arranged with adviser with an emphasis on problem identification,
data gathering, analysis, organization, and presentation of the research report. (G)(1) Occasionally.

## ED'444, Independent Study-Special

Education: Independent study arranged with adviser with an emphasis on problem identification, data gathering, analysis, organization, and presentation of the research report. (G)(1) Occasionally.

ED746, Independent Study-Administration:
Independent study arranged with adviser with an emphasis on problem identification, data gathering, analysis, organization, and presentation of the research report. (G)(1) Occasionally.

## ED'751, Independent Study-Elementary:

Independent study arranged with adviser with an emphasis on problem identification, data gathering, analysis, organization, and presentation of the research report. (G)(2) Occasionally.

ED752, Independent Study-Secondary: Independent study arranged with adviser with an emphasis on problem identification, data gathering, analysis, organization, and presentation of the research report. (G)(2) Occasionally.

## Master of Science in School Counseling

The 48-hour Master of Science in School Counseling is nationally accredited by the Council for Accreditation of Counseling and Related Programs (CACREP). Program requirements meet or exceed the national standards. The program is experiential and emphasizes a theory-to-practice learning environment. State-of-the-art technology used for clinical supervision maximizes learning and provides opportunities to enhance facultystudent interaction. The department also offers the additional 12 hours necessary to receive the LMHC license. The program has partnerships with a local nonprofit organization to assist grieving children and a local PK-12 urban school. The counselor education faculty is committed to respecting diversity and similarity within ourselves, our graduate students, and the PK-12 students our graduates are being prepared to serve. We encourage, promote, and respect diversity in the counselor education curriculum and in the knowledge, skills, and attitudes expected of our graduate students and alumni.

The program complies with all CACREP national standards, including the eight core areas: 1) Professional Orientation and Ethical Practice, 2)

Social and Cultural Diversity, 3) Human Growth and Development, 4) Career Development, 5) Helping Relationships, 6) Group Work, 7) Assessment, and 8) Research and Program Evaluation. Student learning outcomes cover knowledge, skills, and practices in the following areas: foundations of the counseling profession; counseling, prevention, and intervention; diversity and advocacy; assessment, research, and evaluation; academic development; collaboration and consultation; and leadership.

## School Counseling Learning Outcomes

- Articulate the professional roles, functions, and relationships with other human service providers
- Define theories of learning and personality development, individual and family development, and transitions across the life-span
- Identify career, vocational, educational, occupational, and labor market information resources, as well as other electronic career information systems
- Demonstrate ability to provide individual and group counseling for those students experiencing personal or social problems that interfere with learning, along with prevention programs
- Demonstrate ability to address multicultural counseling issues, including possible effects of ability levels, culture, race, stereotyping, family, socioeconomic status, and gender and sexual identity


## MS in School Counseling Courses

ED54'7, Appraisal-Theory and Technique:
Studies that provide an understanding of individual and group approaches to assessment and evaluation of all learners. (G)(3) Summer.

ED553, Professional, Legal, and Ethical Issues in Counseling: An orientation to the school counseling profession and associated legal and ethical concerns. (G)(3) Fall.

ED571, Career and Life Planning: Studies that provide an understanding of career development, assessment, and related life factors. (G)(3) Summer.

ED5 ${ }^{2}$ 2, Fundamental Counseling Theory and Techniques: A study of basic counseling theories and techniques, followed by application of those techniques to real and role-playing experiences. (G)(3) Spring.

ED575, Human Development over the Lifespan: An introduction to developmental
theory, developmental characteristics over the lifespan, and developmental assessment for counselors-in-training. Issues in today's PK-12 schools will be viewed with a developmental focus. (G)(3) Fall.

ED5 ${ }^{7} 7$ \%, Group Procedures: A study of group interactions, occasions for group counseling, and techniques of group counseling. (G)(3) Summer.

ED630, Diversity and Similarity: This course is designed to help students develop multicultural and advocacy competencies for working with people of diverse groups on society. Students will have opportunities to develop awareness of their own cultural values and biases, to study prevalent beliefs and attitudes of different cultures, and to develop skills useful for appropriate interactions with particular groups. (G)(3) Spring.

ED671, The Administration of Counseling and Guidance Services: An exploration of effective counseling and guidance programs, including the determination of sound principles and functions and selection and training of personnel, organization and administration of the program, and adjustments to changing conditions. (G)(3) Fall and spring.

## ED672, Advanced Counseling Theories

 and Techniques: This course examines various theories of counseling, principles, and techniques of counseling and its application to professional counseling settings. The course will provide students the competence to select the form of counseling approach that will be most effective and appropriate for the client's worldview. Prerequisites: ED572 and ED5 77 . (G) (3) Fall.ED673, Research for School Counselors: This course will emphasize critical review of research in the counseling field. There will be a specific focus on the research process, including problem identification, data gathering, and organization and presentation of a research project. (G)(3) Spring.

ED676, Leadership, Advocacy, and Consultation in Counseling: Individual and group study of problems in counseling and guidance. Major emphasis upon problem-solving process and consultation. (G)(3) Summer.

## ED677, Foundations of Mental Health

 Counseling: This course addresses professional practice issues in mental health counseling. It includes history, identity, roles, and trends affecting the field and practice of mental health counseling. (G)(3) Fall.ED678, Diagnosis and Treatment Planning:
This course provides an intensive study/ analysis of selected counseling cases to enhance assessment competencies in case description, problem appraisal, assessment, diagnostic classification, intervention strategies, as well as case consultation and presentation skills. Emphasis is given to the principles and practices that relate to psychopathy, psychopharmacology, DSM diagnosis, etiology and assessment, systematic treatment planning, interviewing, and short- and long-term interventions. (G)(3) Fall.

ED679, Contextual Dimensions of Mental Health Counseling: This class will provide an overview of community agency counseling, the role of the counselor in communities, prevention, outreach, systemic issues, multicultural issues in community agency counseling, advocacy and social change, and service delivery programs. The course will also focus on the application of community counseling theories and problem solving within the community and agency setting. (G)(3) Spring.

ED712, Practicum-Counseling: A variety of supervised counseling experiences within the classroom and in the field. Prerequisite: Permission of the instructor. (G)(3) Fall and spring.

ED722, Internship-Counseling: Three hundred clock hours of on-the-job experience in all aspects of counseling and guidance with a qualified supervisor. Prerequisites: Counseling practicum and permission of the instructor. Repeatable for credit for up to six hours. (G)(3) Fall and spring.

ED725, Advanced Internship: An intensive practical opportunity for the counseling student in a selected mental health field setting; internship involves daily observation and personal implementation of counseling theory, strategy, and programming. A supervised seminar (individual and group supervision) will complement this on-the-job training program. (G)(3) Annually, term varies.

ED743, Independent Study-Counseling: Independent study arranged with adviser with an emphasis on problem identification, data gathering, analysis, organization, and presentation of the research report. Permission of program adviser. (G)(1) Occasionally.

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## Alternative Licensure and Certificate Graduate Non-Degree Seeking Programs

The following graduate non-degree certificate programs are offered in the College of Education. For more information, visit the COE website at www.butler.edu/coe or contact the Graduate Education Office at 317-940-9501.

- Accelerated Alternative Program for Initial Licensure in Mild Interventions (Grades P-12)*
- College and Career Readiness
- Graduate Initial Licensure Program (Grades 5-12)*
- Hinkle Academy for Wellness and Sport Leadership
- International Baccalaureate Teaching and Learning
- Licensed Mental Health Counselor
- Visually Impaired**
* indicates licensure program
** indicates a minor add-on


## Accelerated Alternative Program/ Certificate for Initial Licensure in Mild Interventions

There is a nationwide shortage of qualified teachers in special education. To enter this challenging field, join Butler's Graduate Initial Licensure Program in Special Education. In one year, you can become licensed to teach students in special education needing mild intervention in preschool through grade 12. Our non-degree program is for adults with bachelor's degrees in education or other subjects. It is an effective alternate route to licensing for individuals now working as job coaches or instructional aids and assistants, as well as those who want to transition to a rewarding education career.

Plan of Study: Total of 30 semester hours*
Note: Schedules for courses are not finalized until one semester prior.

## Spring Semester (6 hours)

- ED480
- ED583
- ED492

Summer I and II (9 hours)

- ED490
- ED491
- Elective reading class


## Fall Semester (9 hours)

- ED584
- ED479
- ED408
- ED589
- ED454
* Plus any other classes deemed necessary to complete the entrance to Butler University as decided by the faculty panel.

See full information on non-degree-seeking graduate admission for this program on page XX.

## Accelerated Alternative Program for Initial Licensure in Mild Interventions Courses

ED408, Foundations of Effective Reading
Instruction: This course focuses on teaching of reading in elementary and secondary settings. The course consists of three hours of instruction and a zero-credit one-hour lab each week. Students will be required to tutor a child in reading under the supervision of the instructor as part of the lab. (U/G)(3) Fall and spring.

ED454, Assistive Technology: Students learn about the technology that is appropriate to support the learning of students with special needs. A wide range of special needs is considered, including issues related to vision, hearing, mobility, cognition, and learning. Students have an opportunity to put the issues discussed in the class into action. (U/G)(3) Occasionally.

## ED479, Communication and Collaboration

 with Stakeholders in Special Education:This course examines how to develop effective communication models with education professionals, community leaders, and families. Instructor-guided fieldwork with professionals is required. (U/G)(3) Fall.

ED480, Foundations of Teaching Children with Differences: This course addresses the various psychological principles as applied to understanding and teaching children with differences. Topics include theories of development and their application at various age levels. Developmental appropriate practice, as well as a basic introduction to social, emotional, and cognitive development of students ( $\mathrm{P}-12$ ) is included. (U/G)(3) Summer.

ED490, Assessment of Students with Special
Needs: This course examines formal and informal assessment and their application to writing Individual Education Plans (IEPs), curriculum modifications and adaptations (academic and social), behavioral management plans, and reports to families. Assessment bias and its implications will be studied. Fifteen
clock hours of instructor-guided fieldwork are required. (U/G)(3) Fall, spring, and summer.

ED491, Behavior Management for Inclusive Classrooms: This course examines positive, effective classrooms, student motivation, and practical methods for various behavioral problems common in inclusion classrooms. Emphasis is in designing, implementing, and evaluating positive management in general education classrooms, including functional behavioral analyses and plans. Fifteen clock hours of instructor-guided fieldwork are required. (U/G)(3) Fall, spring, and summer.

ED492, Special Education Law: This online course is designed to provide an overview of the legal rights of students and their families in the field of special education. The Individuals with Disabilities Education Act and its implication for teachers will be emphasized. Prerequisite: Completion of COE Core I. (U/G)(1) Fall, spring, and summer.

ED583, Characteristics of Children Needing Mild Intervention: Surveys the characteristics of exceptional students ( $\mathrm{P}-12$ ) and explores methods and materials for teaching and assessing such students. This course also examines the historical and legal treatment, identification, classification, and unique cognitive and social/emotional characteristics of individuals requiring mild intervention in school settings. (G)(3) Summer.

ED584, Strategies for Teaching Children Needing Mild Intervention: This course examines the application of researchvalidated practices in the areas of placement, differentiations in instruction and assessment, adaptations to curriculum areas ( $\mathrm{P}-12$ ), and common instructional strategies used for students who require intermittent and limited support in the general education classroom or resource room. Instructor-guided fieldwork is required. (G)(3) Fall.

## ED589, Practicum Teaching and Portfolio

Development: Students will demonstrate differentiation through direct instructional strategies in ( $\mathrm{P}-12$ ) classrooms, collaborate with stakeholders, work with Individualized Education Plans and Functional Behavior Plans, and document progress with students needing mild intervention. A professional standardsbased teaching portfolio will be assembled and critiqued as it demonstrates competency in all INTASC/CEC teaching standards for mild intervention. (G)(3) Spring.

## College and Career Readiness Certificate

The College and Career Readiness Certificate program (CCR) will build on the current 48 credit hour master's degree in School Counseling offered by the College of Education. Although there is clear benefit for current students in the master's of School Counseling, the main target audience for the CCR certificate is practicing school counselors in the state of Indiana. This certificate program will consist of nine graduate credit hours and will be offered in the spring semester and both summer sessions. For complete details, please visit www.butler.edu/coe.

## Graduate Initial Licensure Program/ Certificate

The Graduate Initial Licensure Program (GILP) is a 31-hour program consisting of 24 hours of graduate level coursework and seven hours of a clinical capstone experience. The program follows a cohort model in which each student proceeds through the program with a consistent peer group. Students have the option to complete this program independently to obtain a teaching license for grades 5-12 in their content area of expertise or may continue on to complete the Master's in Effective Teaching and Leadership (METL).

Plan of Study for Graduate Initial Licensure Program:

ED 530 \& 531, Foundations in Effective Teaching and Leadership, Part I \& II (G6)

ED 420, Young Adolescent Literature and Strategies for Teaching Literature (G3), OR ED529, Teaching Reading in the Content Areas (G3)

ED 450, Introduction to Secondary Education (2)
ED 528, Issues in Curriculum \& Instruction (Secondary Content Methods) (G3), AND ED528A, Secondary Curriculum and Instruction Field Experience Lab (G1)

ED 534a, Topical Seminar: Inclusive Pedagogy for Diverse Learners (G3)
ED 480, Foundations of Teaching Children with Differences (G2)
ED 583, Characteristics of Children Needing Mild Intervention (G3)
ED 492, Special Education Law (G1)
ED 438, Seminar for the Secondary Clinical Capstone Experience (G2)
ED 580, Secondary Student Teaching, OR ED
581, Intensive Field Experience (G5)

See full information on non-degree-seeking graduate admission for this program on page 36.

## Graduate Initial Licensure Program Courses

ED420, Adolescent Literature and Strategies for Teaching: This hybrid course familiarizes students with a wide variety of fiction and nonfiction aimed at young adolescent through young adult audiences and includes multicultural and ethical considerations. At the same time, good teaching and planning strategies will be modeled and practiced. Portions of this course are conducted in an online setting. Prerequisite: Completion of COE Core I, ED22'7, ED228, and ED327 or co-enrollment. (U/G)(3) Fall.

## ED438, Seminar for the Secondary Clinical

Capstone: A professional seminar to be taken concurrently with Secondary Student Teaching or Secondary Intensive Field Experience for candidates enrolled in the Graduate Initial Licensure Program. Class focuses on relationships with grades 5-12 students, lesson planning, instruction, data-driven assessment, and integration of technology into instruction, professional development, and collaborative efforts with colleagues. (G)(2) Spring.

## ED450, Introduction to Secondary Education:

This course utilizes an inquiry approach to explore the characteristics and needs of secondary (grades 5-12) learners; theoretical approaches to serving secondary learners; and highly effective curriculum, instructional strategies, and assessments to best support learners in secondary settings. (G)(2) Summer.

ED480, Foundations of Teaching Children with Differences: This course addresses the various psychological principles as applied to understanding and teaching children with differences. Topics include theories of development and their application at various age levels. Developmental appropriate practice, as well as a basic introduction to social, emotional, and cognitive development of students ( $\mathrm{P}-12$ ) is included. (U/G)(3) Summer.

ED528, Issues and Directions in Curriculum and Instruction: Students in this course will study a variety of curriculum designs and instructional strategies. Students will examine recent trends in curriculum and instruction and their implications for schools, teachers, and students. (G)(3) Occasionally.

## ED529, Teaching Reading in the Content

Areas: Students will learn how reading instruction can be incorporated into any content area in ways that will increase student
comprehension and enjoyment of informational texts and literacy texts. (G)(3) Summer.

## ED528A, Secondary Curriculum and

 Instruction Field Experience Lab: This course is a field experience lab that candidates in the Graduate Initial Licensure Program will take concurrently with ED528. This lab integrates special teaching methods by discipline with extensive field experience in a secondary setting. (G)(1) Occasionally.ED530, Foundations in Effective Teaching and Leadership Part 1: Students in this course examine educational theories, research frameworks, and teacher identity. This is the initial core course in the Master of Science in Effective Teaching and Leadership Program. ED530 must be taken in summer session with ED531 as part of the summer cohort. (G)(3) Summer.

ED534, Topical Readings: This course is designed to serve the needs and interests of students and faculty who choose to collaboratively pursue advanced study of a topical nature within the field of education. (G) (3) Occasionally.

ED531, Foundations in Effective Teaching and Leadership, Part II: Students in this course apply knowledge of educational theories, research frameworks, and teacher identity to teacher research and leadership in personal and professional contexts. This is the second core course in the Master of Science in Effective Teaching and Leadership Program. ED531 must be taken in summer session with ED530 as part of the summer cohort. (G)(3) Summer.

## ED580, Secondary Student Teaching:

Clinically based experience in an approved setting with students in grades $5-12$. Experience is supported with guidance of supervising teacher(s) and university professors. Only for candidates enrolled in Graduate Initial Licensure Program. Should be taken concurrently with ED438. Prerequisite: Permission of the GILP director and director of student personnel services. (G)(5) Spring.

ED581, Intensive Field Experience: Clinically based experience in an approved setting with students in grades 5-12. Experience is supported with guidance of supervising teacher(s) and university professors. Only for candidates enrolled in Graduate Initial Licensure Program who currently work as full-time instructional assistants. Should be taken concurrently with ED438. Prerequisite: Permission of the GILP director and director of student personnel services. (G)(5) Spring.

ED584, Strategies for Teaching Children Needing Mild Intervention: This course examines the application of researchvalidated practices in the areas of placement, differentiations in instruction and assessment, adaptations to curriculum areas ( $\mathrm{P}-12$ ), and common instructional strategies used for students who require intermittent and limited support in the general education classroom or resource room. Instructor guided fieldwork is required. (G)(3) Fall.

## Hinkle Academy for Wellness and Sport Leadership Certificate

The Hinkle Academy is a graduate-level, 12 -credit-hour certificate program. Designed by members of Butler's Department of Athletics, College of Education, and Health and Recreation Complex, the Hinkle Academy uses the Butler Way ethos as a foundation for studying effective leadership. It will prepare you to empower team commitment and excellence in your organization and community. You will connect with recognized Indianapolis leaders in sport and wellness and with professional experiences and help design your own apprenticeship. Completing this one-year, graduate-level hybrid certificate program can take you one-third of the way towards a Butler Master's in Effective Teaching and Leadership degree or towards another graduate degree programs pending approval.

## Hinkle Academy for Wellness and Sport Leadership Certificate Courses

ED550, The Hinkle Academy: Creating Community and Culture: This course focuses on communication, culture, and theoretical foundations that frame innovative program development and effective leadership based on the principles of The Butler Way. Students will review research, examine essential relationships, investigate a successful model, and identify strategies for successful communication. (G4)

ED551, The Hinkle Academy: Innovation and Program Development: This course focuses on learning the essential components of successful program development. Topics include marketing, facility operations, event management, legal aspects, personnel, wellness coaching, and current event discussions. Students will have the opportunity to develop, plan, and implement real-world programs and events via Butler University and Indianapolis-based businesses and agencies. (G4)

ED552, The Hinkle Academy: Experiential Apprenticeship: This course is an eight-week, field-based apprenticeship at an approved agency under the guidance of site-based supervisors and University mentors. Students will apply concepts and strategies for program innovation and development, culminating in an original project presented at both the apprenticeship site and the University. (G4)

## International Baccalaureate Teaching and Learning Certificate

Would you like to teach in an International Baccalaureate (IB) world school, or other global education settings? In one year, you can prepare for certification in the IB Primary Years Programme (PYP, instruction for ages 3-12) or the IB Middle Years Programme (MYP, instruction for ages 11-16). Course credits can be applied to the elective requirement of the Master's in Effective Teaching and Leadership degree at Butler.

## International Baccalaureate Teaching and Learning Courses

ED503-60, Curriculum Processes in the International Baccalaureate Primary Years
Programme: Students will identify the key areas of commonality and difference in the three International Baccalaureate (IB) programs, adopt the educational principles of the IB Primary Years Programme (PYP), and apply and critique the curricular structure to promote and develop the values and philosophy of the PYP within the school context. (G3)

ED503-65, Curriculum Processes in the International Baccalaureate Middle Years Programme: Students will identify the key areas of commonality and difference in the three International Baccalaureate (IB) programs, adopt the educational principles of the IB Middle Years Programme (MYP), and apply and critique the curricular structure to promote and develop the values and philosophy of the MYP within the school context. (G3)

## ED503-61, Teaching and Learning in the

 International Baccalaureate Primary Years Programme: Students will plan, develop, and reflect on the processes that support the achievement of Primary Years Programme (PYP) learning outcomes; design learning activities and develop teaching strategies that support the achievement of PYP learning outcomes; differentiate teaching and learning activities to meet the needs of all students; select and use a range of appropriate teaching and learning resources that support the achievement of PYP learning outcomes. (G3)ED503-66, Teaching and Learning in the International Baccalaureate Middle Years Programme: Students will plan, develop, and reflect on the processes that support the achievement of Middle Years Programme (MYP) learning outcomes; design learning activities and develop teaching strategies that support the achievement of MYP learning outcomes; differentiate teaching and learning activities to meet the needs of all students; select and use a range of appropriate teaching and learning resources that support the achievement of MYP learning outcomes. (G3)

## ED503-62, Assessment in the International

 Baccalaureate Primary Years Programme: Students will identify the role of varied assessments in supporting the achievement of International Baccalaureate Primary Years Programme (PYP) learning outcomes; develop and implement assessment strategies and associated rubrics that support the achievement of PYP learning outcomes; design differentiated assessment tasks and rubrics that enable teachers to meet the needs of all PYP students; provide effective feedback to students and parents regarding the achievement of PYP learning outcomes. (G3)
## ED503-67, Assessment in the International

 Baccalaureate Middle Years Programme: Students will identify the role of varied assessments in supporting the achievement of International Baccalaureate Middle Years Programme (MYP) learning outcomes; develop and implement assessment strategies and associated rubrics that support the achievement of MYP learning outcomes; design differentiated assessment tasks and rubrics that enable teachers to meet the needs of all MYP students; provide effective feedback to students and parents regarding the achievement of MYP learning outcomes. (G3)ED503-63, Professional Learning in a Global Context Primary Years Programme: Students will evaluate the impact of their planning, teaching, and assessment activities and resources on student learning and revise their Primary Years Programme (PYP) practices; participate in and evaluate collaborative working practices and use information and communication technologies to engage with the wider IB community to further develop PYP learning outcomes. (G3)

ED503-68, Professional Learning in a Global Context Middle Years Programme: Students will evaluate the impact of their planning, teaching, and assessment activities and resources on student learning and revise their

Middle Years Programme. (MYP) practices; participate in and evaluate collaborative working practices and use information and communication technologies to engage with the wider IB community to further develop MYP learning outcomes. (G3)

## Licensed Mental Health Counselor Certificate

Butler University offers a graduate non-degree program specifically designed to build on the master's in School Counseling, providing the coursework required for the State of Indiana License in Mental Health Counseling (LMHC). This 12-credit hour certificate program provides the three content-based classes and the advanced internship that align with state requirements for the LMHC. The program is designed to dovetail with the 48 credit hour master's in School Counseling, but admission is not limited to school counselors. Classes can be taken individually, according to availability. * With demand for mental health workers on this rise, the LMHC certificate opens the door to many interesting job opportunities.
*Permission is required to enroll in the Advanced Internship

## Licensed Mental Health Counselor Certificate Courses

## ED6'7'\%, Foundations of Mental Health

Counseling: This course addresses professional practice issues in mental health counseling. It includes history, identity, roles, and trends affecting the field and practice of mental health counseling. (G3)

ED678, Diagnosis and Treatment Planning: This course provides an intensive study/ analysis of selected counseling cases to enhance assessment competencies in case description, problem appraisal, assessment, diagnostic classification, psychopharmacology, intervention strategies as well as case consultation and presentation skills. Emphasis is given to the principles and practices that relate to psychopathology, DSM diagnosis, etiology and assessment, systematic treatment planning, interviewing, and short- and long-term interventions. (G3)

ED6'79, Contextual Dimensions of Mental Health Counseling: This class will provide an overview of community agency counseling, the role of the counselor in communities, prevention, outreach, systemic issues, multicultural issues in community agency counseling, advocacy and social change, and service delivery programs. The course will also focus on the application of
community counseling theories and problem solving within the community and agency setting. (G3)

ED725, Advanced Internship: An intensive practical opportunity for the counseling student in a selected mental health field setting; internship involves daily observation and personal implementation of counseling theory, strategy, and programming. A supervised seminar (individual and group supervision) will compliment this on-the-job training program. (G3)

## Teachers of the Visually Impaired Certificate

Butler University offers a graduate non-degree program designed to offer candidates greater depth of instruction, more hands-on work with visually impaired students, and greater contact with successful blind adults as role models. The program consists of a series of nine courses totaling 19 credit hours. This program can be an add-on to an existing undergraduate or graduate license. Students must complete an introduction to special education course before they begin the Teachers of the Visually Impaired (VI) program. The program prerequisites are classes currently required in our Elementary Education major (ED490, Assessment of Students with Special Needs, and ED492, Special Education Law).

The courses offered during the fall and spring semesters will be taught as hybrid classes with a blend of online and face-to-face instruction. The summer courses will be taught at a location that includes children who are visually impaired, e.g., at the Indiana School for the Blind and Visually Impaired during summer enrichment programs.

## Teachers of the Visually Impaired Courses

ED4'71, Eye Conditions: This course examines the range of eye conditions that cause visual impairment. The function and structure of the eye will be explored. Students will understand the causes of each eye condition, the typical course the condition takes, and the associated teaching and learning adaptations that are required by each. Students will earn to carry out a functional vision assessment. Students will also learn any common coincident disabilities that are typically found with each eye condition. (U/G)(1) Fall.

ED472, Beginning Braille: In this course students will learn the importance of Braille for full literacy of a child who is blind or has low vision. Students will learn the full literary

Braille code, including letters, numbers, common punctuation, all the contradictions and rules for composition. Students will also learn to read Braille with their finger, mastering the basic hand movements important for literate readers. Additionally students will learn to use a slate and stylus and braillewriter. Students will learn about other Braille codes, including foreign language Braille, Nemeth Braille, and music Braille. (U/G)(3) Spring.

ED4'73, Low Vision Instructional Adaptations: This course focuses on the learning needs of lowvision students. Issues specific to this group of students are examined, including magnification devices, adapted instructional strategies, and social implications. Students will also learn to perform a functional vision assessment and the importance of that assessment for guiding instructional decisions. (U/G)(2) Fall.

## ED474, Adapted Materials for Visually

Impaired: Students will learn to make or acquire tactile materials for students who are blind or visually impaired. Students will learn how tactile materials function, the benefits of different types of tactile material, and the learning patterns that are exhibited by learners with respect to tactile materials. Students will learn the importance of appropriate material to foster maximum learning and a positive learning environment. (U/G)(2) Spring.

ED475, Assistive Technology for Visually Impaired Learners: This course focuses on assistive technologies specifically for blind and visually impaired students. Technologies that assist with literacy development will be a primary focus. Technologies to support other curricular learning will be also covered, along with technologies that support daily living and recreation. (U/G)(2) Fall.

ED477, Literacy for Visually Impaired
Learners: In this course, students will learn techniques for teaching Braille. They will learn about hand and finger placement, hand movement, hand coordination, and body posture. Students will learn about reading practice regimes and systems for monitoring progress. Students will practice these techniques with children who are learning Braille. Prerequisites: ED472. (U/G)(2) Summer.

## ED4'78, Orientation and Mobility for

Visually Impaired Learners: Students will
learn fundamental principles of independent travel, including pre-cane skills, sighted guide techniques, cane skills, and working with a helper dog. They will learn both the physical aspects of successful travel as well as the cognitive and emotional aspects. A logical flow of learning for blind and visually impaired learners will be presented and tested. Students will practice these techniques with children who are blind or visually impaired and who are learning to travel independently. (U/G)(3) Summer.

ED488, Philosophy of Visual Impairment: In this workshop, students will meet successful individuals who are blind or visually impaired. They will discuss issues of culture, employment, and recreation that support the success of individuals who are blind or visually impaired. Students will be asked to reflect on these interactions to support the formation of a philosophy of blindness. (U/G)(1) Fall.

## ED489, Practicum with Learners with Visual

Impairments: The practicum is a capstone experience in which students apply their learning from the full course of study. Students will work with youth who are advancing their literacy and learning math and science. Students will work with students on the use of assistive technology. Students will also work with blind and visually impaired youth on developing daily living skills. Prerequisites: Completion of all other VI certification courses. (U/G)(3) Fall, spring, and summer.



## COLLEGE of BUSINESS

## Administration

Steve Standifird, PhD, Dean; Craig Caldwell, PhD, Associate Dean, Graduate and Professional Programs; William K. Templeton, PhD, Associate Dean for Careers and Undergraduate Studies; Robert B. Bennett Jr., JD, Chair of Economics, Law, and Finance; Deborah Skinner, PhD, Chair of Marketing and Management; William Terando, PhD, Chair of Accounting, Management Information Systems, Operations, and Statistics; Julie Quigley, MS, NCC, Academic Advisor; Marietta Stalcup, MBA, Director of MBA, Sheri Fella, MBA, BSBA, Executive Director, Butler Executive Education; Trent Ritzenthaler, BS, Executive Director, Butler Business Consulting Group; Kim Goad, MS, Director, Career Development; Kathleen Hood, MBA, Director of Budgets and Grants; Abby Thompson, BS, Director of Marketing

## Professors

Robert B. Bennett Jr., JD; Peter Z. Grossman, PhD; Robert Mackoy, PhD; Sakthi Mahenthiran, PhD; Robert S. Main, PhD; Gregory Osland, PhD; William Rieber, PhD; Steve Standifird, PhD; William K. Templeton, PhD; Chuck Williams, PhD

## Associate Professors

Priscilla Arling, PhD; Craig Caldwell, PhD; Steven Dolvin, PhD; Richard E. Fetter, PhD; Kathy A. Paulson Gjerde, PhD; Anne Kelly, PhD; Barry E. King, DBA; Larry J. Lad, DBA; Daniel H. McQuiston, PhD; Margaret Padgett, PhD; James F. Sander, PhD; Deborah Skinner, PhD; William Terando, PhD

## Assistant Professors

Hilary Buttrick, JD; Bryan Cataldi, PhD; Courtney Droms-Hatch, PhD; Stephanie Fernhaber, PhD; Chris Fleming, MBA; Bryan Foltice, PhD; Jill Kirby, PhD; Marleen McCormick, PhD; Mauricio Melgarejo, PhD; Peter Prescott, JD; Jennifer Rice, PhD; SherylAnn Stephen, PhD; Hongjiang Xu, PhD

## Clinical Professor

Zachary Finn, MBA, Director of the Davey Risk Management and Insurance Program

## Instructors

Cathy Chamberlaine, MBA; Jason Davidson, MBA; Ryan Fuhrmann, MBA; Amy Giesler, MPAcc; Richard Halstead, MBA; Lisa Hines, MBA; Thomas Litkowski, MA; Richard McGowan, PhD; James McKneight, JD; Stephen Nelson, MBA; Josh Owens, MSc; Pamela Rouse, MBA; Catherine Stiver, MBA; Lori Tindall, MBA

## Adjunct Faculty

David Berry, JD; Jon Black, MBA; Donald Broad, JD; David Castor, JD; Donald Coffin, PhD; Alan Colquitt, PhD; Alan Dick, MBA; Mark Foglesong, MBA; Richard Forsythe, MBA; Richard Hofstetter, JD; Richard Hoogerwerf, MBA; Charles James, MBA; Kate King, MBA; Ted Kuhn, MA; Cate Lambert, MBA; John Lucas, MBA; Alyson Lurker, JD; Mark Maddox, JD; Meredith McCutcheon JD; Margarete Ortman, MBA; Joe Peri, MS; Chris Pohl, MBA; Rick Ray, MBA; Todd Richardson, JD; Tim Robinson JD; Joerg Schreiber, PhD; Scott Scoville, MBA; Michael Simmons, DBA; Brandt Voight, JD; Kurt Webber, JD; Jeff Woods, PhD; Tim Zimmer, PhD; Jim Wesp, MBA

## Executives in Residence

Randy Brown, BA; Roland Dorson, BA; Chelsea Dukate, PHR; Tom Flowers, MBA; Ed Friel, BS; Ronald Gress, BS; Rhoda Israelov, MS; Paul Madden, BS; Marjorie Maginn, BS; Rusty McKay, MBA; Carrie Meyer, MS; Jerry Pitt, JD; Marvin Recht, BBA; Jerry Toomer, PhD; Scott Troyer, MS; Debra Uhl, MHA; Lorraine Vavul, MBA; Charles Williams, BS; Mary Ellen Wolfsie, MBA

## Staff

## Clerical

Mary Allen, Administrative Specialist, Undergraduate Programs; Brenda Bantz, BS, Administrative Specialist, Career Development Program; Beth Falkenbach, Administrative Assistant, Reception/Careers Support; Gina Head, Administrative Specialist, Dean's Office; Lindsey Love, MA, Administrative Specialist, Departments; Ashley O'Riley, BS, Administrative Specialist, Graduate Programs
Butler Business Consulting Group
Katie Abernathy, MBA, Manager; Melissa
Beckwith, MBA, Manager; Ramona Koehl, MBA, Senior Consultant; Brian Landis, MSIA, Managing Director; Ginger Lippert, MBA, Senior Consultant; Chris Stump, MBA, CFO Services; Diana Todd, BA, Senior Administrative Assistant Career Development Consultants
Lori Coe, MBA; Jane Surges, MS, SPHR; Mike Thomas, MBA, SPHR

## Butler Executive Education

William Gulley, MBA, Director of Business
Development; Vicki Wilson, Office Administrator

## College Website

www.butler.edu/cob

## 'Real Life, Real Business'

The guiding theme in the College of Business is
"Real Life, Real Business."

Undergraduate students in the College of Business (COB) receive a rich, well-rounded academic experience that is grounded in the liberal arts and includes a rigorous curriculum in the business disciplines. Students have access to top internship opportunities, immersive study-abroad experiences at our partner schools around the globe, and the opportunity to participate in research with faculty through the Honors Program. COB students often continue their studies at top graduate and law schools. Students begin their journey with the First-Year Business Experience, in which they engage in guided self-exploration, hone their teamwork skills, and develop a business plan. This leads into an innovative sophomore experience in which students develop and run a live business for real money. Students and faculty work alongside professional consultants in the Butler Business Consulting Group, a consulting firm that is run within the College. Students also participate in a four-year career development program that involves two internships and career mentors. Interaction with real business continues throughout the curriculum-from the first year through the senior year.

The College also offers two graduate degrees. The Master of Business Administration (MBA) is a part-time program that connects theory with business practice. Students kick off their graduate coursework by participating in a one-day business problem-solving immersion experience with a local company in the Gateway Experience. This course gives students an initial exposure to the experiential, hands-on learning process in the MBA program. At the end of the program, students participate in the integrated Capstone Experience, which serves as the bookend to the Gateway Experience. This course pulls together everything the students have learned throughout the MBA program into a practical, applied, semester-long consulting project. In addition to these two unique learning experiences, students encounter "real life, real business" in a number of other ways on their path to graduation, including participating in a leadership development program, traveling with a faculty member on an international study trip, or serving as a Board Fellow.

The Master of Professional Accounting (MPAcc) program prepares students for successful careers in the accounting profession, both public and corporate, as well as successful completion of the CPA exam. The one-year curriculum includes a set of fundamental accounting core classes and allows students to choose additional courses from two concentration areas: tax and financial reporting. In addition, students may incorporate
a number of electives, including a Becker FastPass CPA review course and an international study trip.

## Vision and Mission

The Butler University College of Business will become a recognized national center of excellence in business education. The COB mission is to prepare students for success in life and leadership in business through experiential learning guided by a research-oriented faculty with relevant business experience.

## Degree Programs

- Major in Accounting (BS)
- Major in Economics (BSE)
- Major in Entrepreneurship and Innovation (BS)
- Major in Finance (BS)
- Major in International Business (BS)
- Major in Management Information Systems (BS)
- Major in Marketing (BS)
- Major in Risk Management and Insurance (BS)
- Master of Business Administration (MBA)
- Master of Public Accounting (MPAcc)
- Minors in Business (general), Business Law, Entrepreneurship and Innovation, Health Care Management, International Business, Management Information Systems, Marketing, and Risk Management and Insurance


## Undergraduate Program Requirements

Students may be graduated upon completion of 121 semester hours, including:

- University Core Curriculum and requirements.
- Necessary courses to complete a major in accounting, economics, entrepreneurship and innovation, finance, international business, management information systems, marketing, or risk management and insurance.
- No fewer than 40 semester hours in courses numbered 300 or higher.
- An international business course or experience.

At least 50 percent of the required hours in business and economics must be taken at Butler University. Furthermore, the last 30 hours of the required 121 must be taken at Butler unless the student has the advance permission of the Dean. Students must meet several grade requirements as well.

- Overall GPA must be 2.0 or higher.
- Students must receive a grade of at least C-in the introductory course or courses of their majors. These courses are listed specifically in the curriculum guides available in the College.
- Students must obtain a GPA of 2.3 or higher in the courses specifically in the major. These details also appear in the curriculum guides.


## Student Learning Objectives

The faculty of the COB has identified the following objectives for all students completing its undergraduate curriculum. They address what students should know, be able to do, and value.

- Describe and explain how generalized business knowledge is used to make decisions and solve business problems
- Recognize and apply specialized, functional business knowledge to make decisions and solve business problems
- Identify contemporary, global macroenvironmental trends and issues, and describe opportunities and threats they present to businesses
- Display knowledge and skills in the areas of teamwork and leadership
- Display clear, concise, and professional communication skills
- Display critical-thinking skills, including the ability to integrate and analyze information, make decisions, and solve problems
- Demonstrate knowledge of ethical and American law principles and concepts, and practice ways to develop and evaluate sound legal and ethical decision-making in life and business

Specific student learning objectives for each major appear along with the descriptions below.

## Curriculum

Essential elements of the undergraduate curriculum are the University Core Curriculum, common business studies, professional development, and majors. Curriculum guides, which list the specific courses required for each major and their sequencing, may be obtained from the COB office. All students complete the following four modules:

## University Core Curriculum

The purpose of the core is to build broad interests and knowledge as a foundation for a
change-oriented business career and useful life.
Roughly half of the hours required for graduation are in liberal arts and sciences. The largest portion of the core is taken when the student is a first-year student or sophomore.

## Common Business Studies

These courses provide students with a thorough understanding of business basics. The component comprises approximately 50 credit hours of accounting, economics, marketing, finance, business law, operations management, organizational behavior, and information technology courses. A capstone academic experience also is required in addition to practical experiences. Most of this element is taken in the sophomore and junior years.

## Professional and Career Development Program

This portion of the program helps the student develop a career interest, a sense of emerging professionalism, problem-solving skills, and communication experience, as well as aid in attaining entry-level employment. This program includes two required internships as well as a series of experiential courses and career development courses and activities.

## Majors-The Fourth Module

## Accounting

The accounting major focuses on developing the knowledge and skills necessary to become a successful professional. Knowledge includes coursework in a variety of accounting topicsfinancial, managerial, tax, auditing, and information systems. The program emphasizes the development of intellectual, communication, and interpersonal skills. Graduates may prepare themselves to sit for professional exams, including the CPA and CMA exams, and are equipped to become professionals in diverse environments including public accounting, private business, government, and other organizations.

## Accounting Student Learning Objectives

Graduates will be able to:

- Explain and apply GAAP and identify the authoritative sources in which they are found.
- Explain the basic purpose of financial reporting and the theoretical concepts that underlie GAAP as described in the Financial Accounting Standards Board's Conceptual Framework.
- Identify and describe the information system's internal control procedures as required by external accounting regulators.


## Economics

The major in economics builds on the ninehour requirement of economics taken by all business students and focuses on the behavior of both large and small decision-making units. It provides the student with problem-solving and data-gathering skills to make informed decisions in a variety of settings (e.g., business, government, and nonprofit) and for a variety of job responsibilities, from an entry-level position in a management training program, on the one hand, to a CEO of a corporation, on the other. A student with a major in economics may enter many professions, including financial services, government, journalism, banking, and general business. Further, economics provides a useful background for students wishing to do graduate work in business administration, international relations, public policy, law, and economics.

## Economics Student Learning Objectives

Graduates will be able to:

- Determine how market structure affects market prices, quantities, and profitability
- Investigate the relationship of the international economy to the domestic economy, including the role of exchange rates
- Use econometric techniques to estimate underlying relationships in economic models and interpret the results


## Entrepreneurship and Innovation

The entrepreneurship and innovation major provides students with a fundamental understanding of the dynamic process of creating something unique and adding value by applying an innovative mindset and an actionoriented perspective, while taking calculated risks. It also equips students to apply this way of thinking and set of behaviors in new and existing organizations, whether for-profit or nonprofit. The program includes a foundational course in creativity and innovation as well as a required practicum where students run their own business. Additional electives include, but are not limited to, entrepreneurial finance, social entrepreneurship, and salesmanship. It prepares graduates to begin their careers as independent entrepreneurs, as managers of new-venture divisions of major corporations and other
innovative corporate endeavors, or in venture capital and investment banking activities.

## Entrepreneurship and Innovation Student Learning Objectives

Graduates will be able to:

- Identify and evaluate potential business opportunities
- Create and implement a business plan in an effective manner
- Explain how innovativeness, proactiveness, and calculated risk-taking contribute to the success of an organization


## Finance

The finance major is designed to provide students with a management-level understanding of contemporary philosophies and tools available to firms in acquiring and using capital. The program includes basic financial management, investment theory and practice, and management of financial institutions. Graduates are well prepared for careers in investments, corporate finance, bank management, insurance, and related fields.

## Finance Student Learning Objectives

Graduates will be able to:

- Explain investment decisions based on time value of money principles
- Appropriately structure a portfolio of investments applying the related concepts of diversification, portfolio theory, and asset allocation
- Incorporate the role of globalization in financial decision-making


## International Business

The international business major is designed to provide students with a multidisciplinary degree focused on the international business world. Students gain knowledge and skills to prepare them for the global environment of business. To facilitate their career, a concentration is encouraged, but not required, in a functional area of business such as marketing or finance. Study abroad is a highly recommended and integral part of the major. Graduates are well prepared for entry-level positions in the discipline of focus and often pursue careers with corporations with international divisions or aspirations. Some work for nonprofits, governments, or start their own businesses. Most begin their careers in a U.S.-based organization that does business around the world.

## International Business Student Learning Objectives

Graduates will be able to:

- Identify contemporary, global macroenvironmental trends and issues, and describe opportunities and threats they present to businesses
- Demonstrate the ability to conceptualize business from a global perspective
- Demonstrate the ability to communicate in a second language


## Management Information Systems

MIS majors are able to combine a foundational knowledge of computer programming and information systems with a broad business background. In large firms, graduates can bridge the gaps between formally trained computer scientists and functional-area employees. In smaller firms, Butler graduates can manage MIS systems, perhaps designing and maintaining computer-based systems that provide information throughout the firm. They also can act as support personnel and are able to effectively communicate with suppliers, consultants, and service professionals.

## Management Information Systems Student Learning Objectives

Graduates will be able to recognize and apply the necessary balance between people, processes, and technology in order to implement a successful management information system.

## Marketing

Marketing encompasses all the activities undertaken by organizations to design and deliver products and services that satisfy customer needs and wants. The marketing curriculum at Butler helps students understand these activities in the context of the other functions of the organization as well. Basic areas of study include marketing management, marketing research, advertising and promotions, personal selling, and strategic planning of marketing programs. Students are prepared for careers in sales, retailing, marketing research, product management, and related areas.

## Marketing Student Learning Objectives

Graduates will be able to:

- Analyze and create a strategic marketing plan, including mission and objective development, situational analysis, target
marketing development, marketing mix, and control and evaluation
- Implement multiple marketing strategic frameworks


## Risk Management and Insurance

The risk management and insurance major provides students with a fundamental understanding of the effect of risks, especially pure risks, on individuals and organizations. It also equips them to properly evaluate these risks and devise a plan for addressing risks with the tools available to the modern risk manager. The program includes a foundation course in risk management as well as electives in insurance company operations, types of insurance, the use of derivatives, and other skills-related courses. It prepares graduates for most entry-level jobs in an insurance company, in the management of employee benefits, and in corporate risk management.

## Risk Management and Insurance Student Learning Objectives

Graduates will be able to:

- Explain the effects of risk, especially pure risk, on the lives of individuals and organizations
- Properly evaluate risks and select the appropriate risk management tool to deal with those risks


## Minors in Business

Students with primary majors in other colleges may pursue a variety of minor programs (18 to 21 credit hours) in business. The College offers minors in business law, entrepreneurship and innovation, health care management, international business, management information systems, marketing, and risk management and insurance, as well as a general business minor. There are separate minor programs in health care management and management information systems designed for students with a major in business. Details and curriculum guides are available in the College of Business office and online.

## Accounting Courses

AC100S, Volunteer Income Tax Assistance: This is a service-learning course which allows students to learn the basics of income tax return preparation prior to working as a volunteer to assist low-income individuals in preparing their tax returns. The course is open to every student in the university. ( $\mathrm{P} / \mathrm{F}$ )(U)(1) Spring.

## AC203, Introduction to Accounting:

Introduction to financial accounting and reporting and the accounting process and concepts. Emphasis on the accumulation and reporting of data for external use by corporations. Topical areas include assets, current liabilities, and partnerships. Prerequisite: sophomore standing; or 15 hours and MA106 or MA125. (U) (3) Fall, spring, and summer.

AC204, Introduction to Accounting II: Introduction to management accounting systems with special emphasis on cost behavior, cost determination, planning, and control. Prerequisite: AC203. (U)(3) Fall, spring, and summer.

AC301, Intermediate Accounting I: The course provides a practical approach to the accounting cycle, and a conceptual approach to the valuation uses underlying the construction of external financial statements. It is the foundation upon which extensive research and application practice will be based in AC302. Problem solving is heavily emphasized in this course. The assignments, exams, and group activities are designed to develop students' critical-thinking and creative problem-solving skills, and written and oral communication skills. Prerequisites: AC203 and AC204. (U)(3) Fall and spring.

AC302, Intermediate Accounting II: This course introduces the applied professional research process and offers the student the opportunity to develop effective and productive research skills at the introductory level. Students will learn to apply the research process to selected financial accounting issues, use the research findings to determine proper accounting treatments, and communicate their results in professional memos. Required for Masters in Professional Accounting courses. Prerequisite: AC301. (U)(3) Spring.

## AC310, Advanced Managerial Accounting:

Focuses on managerial accounting topics related to the information needs of individuals within organizations. Concentrates on identifying problems and analyzing relevant information within specific situations. Prerequisite: AC204. (U)(3) Spring.

AC320, Auditing: Auditing standards, professional ethics duties and liabilities, and techniques for examination of the internal control, records, and operations of a firm for the purpose of expressing an informed opinion as to the fairness of its financial statements. Prerequisite: AC301 or permission of instructor. (U)(3) Fall.

## AC325, Accounting Information Systems:

Focuses on analyzing, designing, implementing, evaluating, and auditing the accounting information systems within a firm. Prerequisites: AC204, MS265, and junior status. (U)(3) Fall and spring.

## AC342, Financial Statement Analysis:

Presents financial statement analysis from the point of view of the primary users of financial statements: credit and equity analysts. Focuses on how analysis is used to understand the economic processes of a business, which allows users to make various judgments. Prerequisites: AC203, AC204, and FN340. (U)(3) Occasionally.

AC401, Independent Study. (U)(1) Occasionally.

AC402, Independent Study. (U)(2) Occasionally.

AC403, Independent Study. (U)(3) Occasionally.

## AC406, Fundamentals of Income Taxation:

Course involves the evolution, theory, and structure of federal income taxation common to all taxpayers. Social, economic, and political considerations and influence on taxation are examined. Emphasis is on theory of taxation, income concepts, exclusions, deductions, and credits. Application of fundamental tax concepts, researching, and reporting conclusions are stressed. Prerequisite: AC204. (U)(3) Fall.

AC495, Special Topics in Accounting: Seminar in selected accounting topics. Course content will vary from semester to semester. (U)(3) Occasionally.

AC499, Honors Thesis. (U)(3) Occasionally.

## College of Business Courses

COB101, Professional and Career
Development I: This yearlong course will introduce students to learning about themselves and their interests, skills, and strengths. It will also introduce students to their career mentors, who will help guide them through their fouryear professional and career development. Prerequisite: COB Major. (P/F) (U)(0) Fall and spring.

## COB201, Professional and Career

Development II: This yearlong course will continue to encourage students to learn about themselves and their interests, skills, and strengths. It will further strengthen the relationship with students' career mentors, who help students develop job strategies. This course will also help students begin to conduct research
about career paths, industries, and educational qualifications. Prerequisites: COB major and COB101 or COB201. (P/F)(U)(0) Fall and spring.

## COB300, Career Planning and Development:

This career seminar will focus on development of career goals and a professional-looking résumé, employer identification, the interview process, and a strategic approach to job selection and career planning. Prerequisites: COB201 and 44 hours. (U)(1) Fall and spring.

## COB301, Professional and Career

Development III: This yearlong course will continue to encourage students to develop career goals in preparation for internships. Students will also develop sound job search strategies, including résumé and cover letter development, networking skills, business etiquette, and interviewing skills. These offerings complement COB300. Prerequisites: COB Major and COB201 or COB301. Pass/fail. (U)(0) Fall and spring.

COB401, COB Internship I: A one-semester experience with a business firm or businessrelated organization. The student will work part-time during a regular semester or full-time during the summer and will complete a series of academic assignments. Limited to COB students in good standing. Prerequisites: 60 credit hours, a grade of at least C-in both MS265 and the first 300-level major course, and at least 12 hours of 300- or 400-level COB courses. (U)(3) Fall, spring, and summer.

COB402, COB Internship II: A second experience, similar to COB401. The student is encouraged to broaden his or her experience by working at a different firm or in a different function and/or by pursuing tasks and challenges truly different from the first experience. COB majors in good standing only. Prerequisite: COB401. (U)(3) Fall, spring, and summer.

## Core Courses Offered by Economics

## SW220-EC, The Economy and Society:

This course examines important concepts of microeconomics and macroeconomics and analyzes issues such as energy prices, prescription drug costs, pollution, and globalization of markets using these concepts. It explores how economic life is intertwined with a society's culture, politics, values, and history. Further, it considers the limitations of the economic methodology to place economics in a context with the other social sciences. (U)(3) Fall and spring.

SW221-COB, Sustainability in Institutions: There is an emerging body of thought that argues that institutions of all sorts, including
but not limited to businesses, in order to be successful in the long run need to take into account economic performance, environmental impacts, and social justice. The course will explore what these concepts mean and the challenge of implementing a workable integration of these concepts. The course is cross-disciplinary and will get into issues of science, social science, ethics, and economics. Historically, environmental and social impacts have been considered, if at all, as costs to be ignored, minimized, or externalized as much as possible. This new body of thought argues that environmental quality and social performance should be integrated into institutional strategy. This course will introduce students to economic and ethical analysis in order to help them to have appropriate bases for making judgments. The course will then explore the challenge of minimizing environmental and social impacts. (U)(3) Occasionally.

## Economics Courses

EC231, Principles of Microeconomics: This course examines the economic behavior of individuals, firms, and markets. The course provides basic concepts of economics and the analytical tools for students to understand how and why people make economic choices. Prerequisite: Sophomore standing; or 15 hours and MA106 or MA125. (U)(3) Fall, spring, and summer.

EC232, Principles of Macroeconomics: This course studies aggregate output, employment, trade, government fiscal and monetary policies, and other national and international economic issues. It provides a framework for understanding and evaluating economic policy choices made by political leaders throughout the world. Prerequisite: EC231. (U)(3) Fall, spring, and summer.

## EC332, Intermediate Macroeconomics:

Discusses measures of national income; it also examines causes of growth and fluctuations in national income. Prerequisites: EC231 and EC232. (U)(3) Annually, term varies.

## EC336, Comparative Economic Systems:

An inquiry into the underlying principles and operational methods of national economic systems throughout the world. Focuses on the transition of the former socialist countries to market economies, and reviews the alternative models of central planning, market socialism, and market capitalism. Compares the economic policy choices (and consequences) that countries adopt to further national objectives. Prerequisite: SW220 or EC231. (U)(3) Occasionally.

EC339, Economic History of the United
States: Study of the economic development of the United States, emphasizing both theoretical and quantitative tools of analysis. Prerequisite: SW220 or EC231 (U)(3) Occasionally.

EC342, Law and Economics: This course looks at law and crime from an economic perspective. Topics include property law, contract law, torts, and crime. The course examines theory as well as many actual cases. It also explores the evolution and economic impacts of our laws and legal structure. Prerequisite: EC101 or SW220, or EC231 and EC232. (U)(3) Occasionally.

EC346, Health Care Economics: The course will apply economic tools and methods to better understand the current health care system and possible reform policy initiatives. It is intended to be discussion-based and should be attractive to students with a diverse academic background. Prerequisite: EC231 (U)(3) Fall and spring.

EC351, Urban Economics: The application of economic analysis to urban affairs, e.g., ghetto redevelopment, growth, and fiscal management. Theory and policy both are considered in analyzing urban economic problems. Prerequisite: SW220 or EC231. (U)(3) Occasionally.

EC352, Personnel Economics: This course presents an economic approach to a variety of human resource issues, including recruitment and hiring, turnover, motivating workers to high levels of productivity, and job assignment. Basic microeconomic theory is applied to these topics to gain a better understanding of how to successfully manage people. Prerequisites: EC231 and EC232. (U)(3) Spring.

EC354, Intermediate Microeconomics: Economic theory and management decision making. Specific topics include demand determinants, cost-output functions, and pricing theory. Credit will not be given for both EC350 and EC354. Prerequisites: EC231, EC232, and MA125 or MA106. (U)(3) Annually, term varies.

EC355, Money and Banking: The study of the U.S. monetary system, including the role of the Federal Reserve System. The functions and operations of commercial banks and other depository institutions also are examined. Credit will not be given to both EC355 and FN371. Prerequisites: EC231, EC232. (U)(3) Occasionally.

## EC391, Environmental and Natural

Resources: The economics of externalities and their relation to property rights. Alternative strategies for dealing with environmental
problems. Analysis of problems of allocating natural resources over time. Prerequisite: SW220 or EC231. (U)(3) Occasionally.

EC401, Independent Study. (U)(1)
Occasionally.
EC402, Independent Study. (U)(2) Occasionally.

EC403, Independent Study. (U)(3) Occasionally.

EC433, International Economics: Examines theories of international trade, tariffs, and regional economics integration; also examines foreign trade financing, international investment, and balance of payments adjustment. Prerequisites: EC231, EC232. (U)(3) Fall, spring, and summer.

EC434, Public Finance: Systems of expenditure, taxation, borrowing, and budgeting of national, state, and local governments. Theories and principles of taxation. Prerequisite: EC101 or EC231. (U)(3) Occasionally.

EC438, Economic History of Europe: A study of the economic development of selected European states since 1500. Emphasis on economic, demographic, political, social, and cultural forces affecting production and distribution. Prerequisite: SW220 or EC231. (U) (3) Occasionally.

EC462, Mathematical Economics: This course is an introductory exploration of mathematical economics. It examines economics through mathematical models and operations and explores basic issues in economics-supply and demand, profit and utility maximization, monetary and fiscal policy-using formal mathematical models. Students will not simply go over mathematical economic models but will develop an appreciation for how formal economic models are constructed. Prerequisites: EC231, EC232, MA106 or equivalent. (U)(3) Occasionally.

EC464, Quantitative Methods-Econometrics: Applications of statistical methods to economic analysis and forecasting. Examines methods of hypothesis testing, linear regression, and time-series analysis, and applies these to issues of micro- and macroeconomics. Prerequisites: EC231, EC232, and MS264 or MA260. (U)(3) Spring.

EC495, Special Topics in Economics: Seminar in selected economics topics. Course content will vary from semester to semester. Prerequisite: SW220 or EC231. (U)(3) Occasionally.

EC499, Honors Thesis. (U)(3) Occasionally.

## Entrepreneurship and Innovation Courses

EI101, First-Year Business Experience:
Introduces first-year students to the global business environment. Exposes students to the basic business disciplines while emphasizing self-awareness, critical thinking, problem solving, teamwork, and business ethics. Provides students with a variety of integrated, experiential learning opportunities including simulations, case studies, field trips, guest speakers, and career counseling. Prerequisite: First-Year students only. (U)(3) Fall and spring.

EI201, Real Business Experience 1: This class teaches students how to develop a real business plan. Working in teams, students identify a business initiative, develop business strategies, write a business plan report, and make a major presentation. Teams potentially receive funding for a (follow-up class) real business start-up. Prerequisite: EI101 (formerly MG101) or sophomore standing. (U)(3) Fall and spring.

EI202, Real Business Experience 2: A continuation of EI201. Students will launch a start-up business and operate it throughout the semester. Prerequisite: EI201. (U)(3) Fall and spring.

EI315, Creativity and Innovation: This one-semester writing-intensive course is designed to develop personal creativity skills and entrepreneurial mindset while learning the impact of innovation strategies across industries and organizations. Students will be exposed to concepts and principles engaged in mind mapping, creative problem solving, leadership, and self-reflection. Prerequisites: EC231 or SW220 and EI201 and junior standing (U)(3) Annually, term varies.

EI325, Social Entrepreneurship: This course examines how entrepreneurial skills are used to create innovative approaches to societal problems. Social entrepreneurship applies to both profit and nonprofit firms that have programs designed to meet the double bottom line of being financially sustainable while creating social value. Students will be given the opportunity to apply the concepts of social entrepreneurship on a project within a local community. Prerequisites: EI201 and junior standing. (U)(3) Annually, term varies.

EI346, Entrepreneurial Finance: This course will examine the financial issues that are critical to entrepreneurs. Key topics include estimating capital requirements and risk,
identifying and evaluating sources of capital, business valuations, exit strategies, and liquidity events. The issues associated with structuring partnership arrangements and alliances will also be discussed. Prerequisites: FN340 (U)(3) Annually, term varies.

EI401, Independent Study. (U)(1) Occasionally.
EI402, Independent Study. (U)(2) Occasionally.
EI403, Independent Study. (U)(3) Occasionally.
EI495, Special Topics: Seminar in selected entrepreneurship and innovation topics. Course content will vary from semester to semester. (U) (3) Occasionally.

EI499, Honors Thesis. (U)(3) Occasionally.

## Finance Courses

FN340, Corporate Finance: Analysis of the process by which profit-seeking corporations acquire and use capital. Topics include financial statement analysis, capital structure, capital budgeting, dividend policy, and working capital management. Prerequisites: AC204, EC231, EC232, MS264, and MS265. (U)(3) Fall, spring, and summer.

## FN342, Financial Statement Analysis:

Presents financial statement analysis from the point of view of the primary users of financial statements: credit and equity analysts. Focuses on how analysis is used to understand the economic processes of a business, which allows users to make various judgments. Prerequisites: AC203, AC204, and FN340. (U)(3) Occasionally.

FN346, Entrepreneurial Finance: This course will examine the financial issues that are critical to entrepreneurs. Key topics include estimating capital requirements and risk, identifying and evaluating sources of capital, business valuations, exit strategies, and liquidity events. The issues associated with structuring partnership arrangements and alliances will also be discussed. Prerequisite: FN340. (U)(3) Annually, term varies.

FN347, Investments: Covers the theory and practice of bond analysis and common stock appraisal. Particular attention is paid to the behavior of capital markets and the analysis of investment values. Prerequisite: FN340. (U)(3) Fall, spring, and summer.

FN352, Real Estate Principles: An introduction to the investment characteristics of real property. Decision-making tools will be emphasized. Covers real estate appraisal and mortgage markets. Prerequisite: FN340. (U)(3) Fall.

FN3 ${ }^{\text {² }} 1$, Financial Institutions, Instruments, and Markets: A detailed analysis of the components of market yield and their relationships to asset value serves as the foundation for the study of financial institution characteristics and the risk-management techniques of interest to these institutions. Credit will not be given for both EC355 and FN3'71. Prerequisite: FN340. (U)(3) Fall.

FN401, Independent Study. (U)(1) Occasionally.

FN402, Independent Study. (U)(2) Occasionally.

FN403, Independent Study. (U)(3) Occasionally.

## FN450, Derivatives Securities and Risk

Management: This course provides an advanced treatment of options, futures, and other derivative securities, including their theoretical and numerical valuation. Goal is to understand these contracts in a variety of settings and understand their effect on risk exposure including exchange rate risk, interest rate risk, etc. Prerequisite: FN347. (U)(3) Spring.

FN451, International Financial Management: The course will develop a conceptual framework for understanding international financial arrangements and introduce specific tools for financial decision making. The operations of foreign exchange markets will be considered, along with their impact on the management of the firm's foreign exchange exposure. Prerequisite: FN340. (U)(3) Fall and spring.

## FN470, Applied Portfolio Management:

Students serve as managers of a real-dollar investment portfolio. The course provides hands-on experience in portfolio management, including investment policy statement preparation; economic, industry, and company analysis; hedging tactics; and investment strategy implementation. Students will report on their performance to the Endowment and Investment Committee of Butler University's Board of Trustees. Prerequisite: FN347. (U)(3) Fall and spring.

FN495, Special Topics in Finance: Seminar in selected finance topics. Course content will vary from semester to semester. Prerequisite: FN340. (U) Occasionally.

FN499, Honors Thesis. (U)(3) Occasionally.

## International Business Courses

IB201, International Business Experience: International study travel incorporating
international business topics. Course content will vary from semester to semester. (U)(1) Occasionally.

IB210, Business in the European Union: The course analyzes the business environment in the European Union while taking a look at the economic, political, legal, and cultural aspects of the European Union and selected member countries. It examines current economic, political, and social developments in the area and discusses implications for business inside and outside of Europe. (U)(3) Occasionally.

IB320, International Business Environment: Analyzes the global business environment, including geographical, cultural, and political elements. Examines critical issues such as the rise of Pacific Rim economies, the European Union and the move to regionalism, and the transition from centrally planned economies to just market economies. Considers effects of macroenvironmental changes on corporate strategies. Prerequisites: Junior standing and SW220, or EC231 and EC232. (U)(3) Fall and spring.

IB323, Contemporary Business in East Asia: Analyzes the business environment of China, Japan, and several newly industrialized nations in the East Asia region. Examines current economic, political, and social developments in the region, and discusses implications for businesses inside and outside of East Asia. Prerequisite: SW220 or EC232. (U)(3) Occasionally.

## IB336, Comparative Economic Systems:

An inquiry into the underlying principles and operational methods of national economic systems throughout the world. Focuses on the transition of the former socialist countries to market economies, and reviews the alternative models of central planning, market socialism, and market capitalism. Compares the economic policy choices (and consequences) that countries adopt to further national objectives. Prerequisite: SW220 or EC231. (U)(3) Occasionally.

## IB367, Legal Aspects of International

Business: Examines contemporary legal problems affecting international business transactions, including contract performance, licensing, delivery, payment, dispute resolution, export controls, and foreign corrupt practices. Other legal topics, including nationalization and expropriation, which are relevant to international business, also will be discussed. Prerequisite: LE365. (U)(3) Occasionally.

IB401, Independent Study. (U)(1) Occasionally.

IB402, Independent Study. (U)(2) Occasionally. IB403, Independent Study. (U)(3) Occasionally. IB433, International Economics: Theory of international trade; foreign trade financing both under gold standard and managed currencies; international investment; mechanisms of balance of payment adjustment; tariffs; and economic integration. Prerequisites: EC231, EC232. (U)(3) Fall, spring, and summer.

IB451, International Finance Management:
The course will develop a conceptual framework for understanding international financial arrangements and introduce specific tools for financial decision making. The operations of the foreign exchange markets will be considered, along with their impact on the management of the firm's foreign exchange exposure. Prerequisite: FN340. (U)(3) Fall and spring.

## IB460, International Organizational

Behavior: Designed to develop a sophisticated understanding of the issues in cross-cultural communication applied to the world of the international manager. Topics such as the selection of international managers, organization designs with multicultural staffing, cultural constraints, and different behaviors exhibited in negotiations are developed in detail. Prerequisite: MG360. (U)(3) Occasionally.

IB491, International Marketing: Centers on the development of international marketing strategies and tactics, analyzing the roles of culture, government, and economics. Important regions/markets are woven into the discussion and cases. Prerequisite: MK380 or MK280. (U) (3) Fall and spring.

## IB495, Special Topics in International

Business: Seminar in selected international business topics. Course content will vary from semester to semester. (U)(3) Occasionally.

IB499, Honors Thesis. (U)(3) Occasionally.

## Core Courses Offered by Law and Ethics

TI264-LE, Business Ethics: Examines the conceptual foundations for resolving ethical challenges associated with business activity. Areas addressed in the course include the economic arrangement of a business organization, the treatment of its stakeholders, and the treatment of the environment. Fall, spring, and summer.

## Law and Ethics Courses

LE263, Legal Environment of Business: Examines the sources of law, legal process, and dispute resolution; legal issues relevant to formation and operation of a business organization (including the legal roles of management and the providers of capital); and laws governing an organization's relationship with its employees and agents. Prerequisite: EI101 or sophomore standing. (U)(3) Fall, spring, and summer.

LE264, Business Ethics: Examines the conceptual foundations for resolving ethical challenges associated with business activity. Areas addressed in the course include the economic arrangement of a business organization, the treatment of its stakeholders, and the treatment of the environment. Prerequisite: MG101 or sophomore standing. (U) (3) Fall, spring, and summer.

LE365, Business Law 1: Examines various substantive areas of law affecting business organizations including contracts, sales of goods, products liability, property (personal, real, and intellectual), as well as other contemporary legal and ethical issues. Prerequisite: LE262 or LE263. (U)(3) Fall, spring, and summer.

LE495, Special Topics in Law and Ethics:
Seminar in selected law and ethics topics. Course content will vary from semester to semester. (U) Occasionally.

## Management Courses

MG303, Leadership London: Seminar-style, site-based course taught in London, which uses London's resources, institutions, and history to explore the cultural, international, historical, and ethical issues relevant to leadership. (U)(3) Summer.

MG311, Departmental Honors: This course will fulfill the departmental honors requirement for COB students in the University Honors Program. It is designed to prepare students to complete the honors thesis by teaching them the fundamentals of conducting academic research. Topics addressed will include developing a hypothesis, research design, and methods for collecting data. It will also familiarize students with research topics, methods, and library resources that are unique to the different areas of business. Prerequisite: Junior status and enrolled in Honors Program. (U)(2) Occasionally.

MG360, Organizational Behavior: Develops an understanding of individual and group behavior in organizations by examining both the
theories that explain human behavior and their application in business and other settings. Topics covered include personality, values, motivation, leadership, communication, work teams, and decision making. Experiential learning will be emphasized. Prerequisite: Junior standing. (U) (3) Fall, spring, and summer.

MG380, Health Care Administration: This course provides an overview of major health care system components such as health status, need for health care, access to health care and utilization, health care expenditures, health care facilities, personnel, alternative delivery systems, and health care ethical issues. Prerequisite: Junior standing. (U)(3) Annually, term varies.

MG401, Independent Study. (U)(1)
Occasionally.
MG402, Independent Study. (U)(2)
Occasionally.
MG403, Independent Study. (U)(3)
Occasionally.
MG490, Strategy Capstone: The tasks of the manager in formulating short- and long-run corporate strategy. Using the case method, a framework is developed for integrating skills learned in other required business courses. Prerequisites: Senior standing, CBA401, MS350, MG360, LE365, MK380, and FN340. (U)(3) Fall, spring, and summer.

## MG495, Special Topics in Management:

Seminar in selected management topics. Course content will vary from semester to semester. (U)
(3) Occasionally.

MG499, Honors Thesis. (U)(3) Occasionally.
MG501, Independent Study Management. Occasionally

## Core Courses Offered by Marketing

PCA261-MK, Aesthetics and Design: Art is everywhere, but few people acknowledge it in the form of everyday practical objects. This course will study the fundamental elements of art and the principles of design and their interaction to create both artwork and products of use. Students should expect hands-on experiences in creating artwork and product prototypes to demonstrate content learning. There is a secondary focus on developing a skill set in reflection, self-awareness, empathy, creativity, and critiquing. (U)(3) Annually, term varies.

## Marketing Courses

MK280, Principles of Marketing: A survey of marketing planning and implementation,
with special emphasis on product/service development and management, as well as distribution, pricing, and promotion practices. Not for majors in COB; not a substitute for MK380 in COB curricula. Background in economics and accounting helpful, but not required. (U)(3) Fall and spring.

## MK380, Introduction to Marketing

Management: An introduction to contemporary
marketing strategies and practices in dynamic competitive environments and the decisions marketing managers make to help their organizations find, get, and keep customers. Prerequisites: AC204, EC231, and MS264. (U)(3) Fall, spring, and summer.

MK381, Salesmanship and Sales Management:
An applied course to study the successful and efficient management of the personal sales process. The course will consist of the application of management and behavioral tools to the problem of managing a sales department. Prerequisite: MK280 or MK380. (U)(3) Fall and spring.

MK384, Marketing Analytics: This course reviews key concepts from accounting, finance, statistics, economics, and information systems that are especially relevant to marketing measurement and decision making. It develops knowledge of social science research methodology skills and helps the student use those skills to measure and assess a range of marketing phenomena such as personal selling, advertising/PR, new media, etc. Students will be better able to make informed decisions and assess others' decisions. Prerequisites: EC232, MS265, and MK380. (U)(3) Annually, term varies.

MK385, Marketing Research: Research design and collection, analysis and reporting of data, and findings relevant to marketing problems. Quantitative research methods, surveys and questionnaires, observation, lab experimentation and field market tests, techniques of data analysis, and reporting and presentation techniques. Prerequisites: MK380 and MS264. (U)(3) Fall and spring.

MK386, Health Care Marketing: This course covers the application of marketing principles to contemporary health care industry issues. It seeks to leverage and deepen knowledge from the marketing core by addressing how standard marketing techniques apply within the health sector. Prerequisites: MK280 or MK380 (U)(3) Spring.

MK401, Independent Study. (U)(3)
Occasionally.

MK402, Independent Study. (U)(2)
Occasionally.
MK403, Independent Study. (U)(3)
Occasionally.

## MK4'71, Advertising and Promotion

Management: An exploration of basic advertising and sales promotion concepts. Examines the design, management, and integration of a promotional strategy within the marketing effort of the firm. Prerequisite: MK380. (U)(3) Fall and spring.

MK473, Retailing: This class will address a comprehensive set of retailing-related items, such as store personnel management, merchandising, purchasing, location, layout, financial management, and advertising/ promotions. Class activities will include a mix of lectures, class discussions, case analyses, and guest speakers from the retailing industry. Prerequisite: MK380. (U)(3) Fall.

MK480, Marketing Management/Strategy: The capstone marketing course, designed for students in the last semester of their academic program, is an integrated study of all functional areas of marketing. The marketing plan is considered from a systems perspective with emphasis on system design and administration. Prerequisites: MK380, MK385, two marketing electives, FN340, MS350, and MG360. (U)(3) Fall and spring.

MK483, Consumer Behavior: Consumer behavior from the perspective of a marketing manager: 1) overview of the concepts, theories, and models that will help the student understand buyer behavior; and 2) information about consumers in analyzing marketing situations, and in developing and evaluating marketing strategies. Prerequisite: MK380. (U)(3) Spring.

MK491, International Marketing: Centers on the development of international marketing strategies and tactics, analyzing the roles of culture, government, and economics. Important regions/markets are woven into the discussion and cases. Prerequisite: MK380 or MK280. (U) (3) Fall, spring, and summer.

MK495, Special Topics in Marketing: Seminar in selected marketing topics. Course content will vary for the semester. (U)(3) Occasionally.

MK499, Honors Thesis. (U)(3) Occasionally.

## Management Science Courses

MS100, Basic Excel Skills for Business
Applications: Students learn how to develop
Excel spreadsheets to identify, define, and solve
business problems. They develop analytical skills by considering a problem and its solution through spreadsheet applications (functions, IF statements, formatting, charting, database functions, etc.) The final examination is based on the Microsoft Office User Specialist Level 1 certification. Pass/fail only. (U)(1) Fall, spring, and summer.

MS264, Statistics: Descriptive statistics (presentation of data, frequency distributions, measures of central tendency, and variation), probability theory, probability distributions, sampling, introduction to hypothesis testing, analysis of variance, linear regression, multiple regression, and correlation. Prerequisites: MS100, and MA106 or MA125 or any AR course. (U)(3) Fall, spring, and summer.

MS265, Information Technology: This course explores the role of information technology in global business today and emphasizes the importance of website, spreadsheet, and database technologies to information-based organizations. Focus is on the need for proper design and development of software applications. Intermediate and some advanced software skills are covered. Projects promote the application of these skills to a variety of business cases. Prerequisites: MS100, and MA106 or MA125 or any AR course. (U)(3) Fall, spring, and summer.

## MS350, Operations Management: The

 management of routine operations such as inventory for retailing/distribution and work force management for service enterprises. The tools needed such as forecasting, process analysis, and activity-based costing are applied. The emphasis is on service operations with background discussions of manufacturing applications. Prerequisites: Junior standing, AC204, EC231, MS100, and MS264. (U)(3) Fall, spring, and summer.
## MS370, Data Networks/Communication

Systems: The course will address networking and communication topics related to the efficient and effective flow of information within the organization. The following topics will be addressed: communications terminology and standards, the logical design of information flows within the organization, hardware and software configurations to solve business problems, and basic system trouble-shooting. Prerequisites: MS265 and SE267. (U)(3) Spring.

MS3'2, Database Design: The course will address database fundamentals and technology; theory and utilization of database management systems including assessment of data sources and uses; data modeling and applications
development for solving practical problems. Prerequisite: MS265. (U)(3) Fall and spring.

MS3 ${ }^{7} 4$, Web Design and E-Commerce: This course combines hands-on experience with website design, with knowledge of e-commerce and internet technologies. The focus is on the role of websites and e-commerce in decision making and business systems. Students will investigate how websites can be constructed to support a wide variety of objectives. Prerequisite: MS265. (U)(3) Fall and spring.

MS3 ${ }^{2} 5$, Systems Analysis and Design: This course will address information analysis and logical specification of the system. The following topics will be addressed: basic data structures and access methods, applied MIS development requirements, detailed logical design, physical design, data and process modeling, implementation planning, technology, and organizational behavior. Prerequisite: MS265; junior standing. (U)(3) Fall and spring.

MS377, Health Care Information and Technology Management: An introduction to information management and technology (IT) in the context of health care planning, managerial decision making, and strategic analysis. Specific topics addressed will include technology-related aspects of health care legislation such as HIPPA, application of electronic health records, decision support systems, integrated hospital information systems, and control techniques. Prerequisite: MS265. (U)(3) Spring.

MS3 ${ }^{7}$ 8, Data Analysis and Business Modeling:
This course will focus on developing advanced analytical and modeling skills for a business environment. Topics will include functions, financial analysis, importing data, sensitivity analysis, modeling growth, forecasting, and simulation. Prerequisite: MS265. (U)(3) Spring.

MS401, Independent Study. (U)(1) Occasionally.

MS402, Independent Study. (U)(2) Occasionally.

MS403, Independent Study. (U)(3) Occasionally.

MS465, Enterprise Information Systems:
This course focuses on key features of a generic ERP system; various ERP configurations related to servers, databases, and bolt-on software; some of the leading ERP software products. In addition, topics related to data warehousing, ERP implementation risks, and security issues will also be covered. Prerequisite: Any MS300 or MS400-level class or AC325. (U)(3) Fall.

MS495, Special Topics in Management
Science: Seminar in selected management science topics. Course content will vary from semester to semester. (U)(3) Occasionally.

MS499, Honors Thesis. (U)(3) Occasionally.

## Risk Management Courses

RM350, Introduction to Risk Management: The focus of the course is on the management of operational risks facing organizations. The sources, dimensions, and qualities of risk will be explored along with techniques used to manage risks. Prerequisites: AC203, EC231 or SW220, and MS264 or MA162 or MA360. (U)(3) Fall and spring.

## RM360, Insurance Company Operations:

This course is an in-depth study of management issues unique to insurance operations and companies from a functional perspective. Explores issues surrounding the operation of an insurance company by looking at underwriting strategy, choice of distribution system, reinsurance arrangements, investments, and claims. Prerequisite: RM350. (U)(3) Spring.

## RM3'70, Employee Benefits and Retirement

Planning: This course provides a foundation of knowledge regarding employee benefit plans. All major categories of benefits will be covered, with an emphasis on plan design, administration, relevant government regulations, and income tax implications. Prerequisites: AC203, EC232 or SW220, and MS264 or MA162. (U)(3) Fall.

RM401, Independent Study. (U)(1) Occasionally.

RM402, Independent Study. (U)(2) Occasionally.

RM403, Independent Study. (U)(3) Occasionally.

RM450, Derivatives Securities and Risk
Management: This course provides an advanced treatment of options, futures, and other derivative securities, including their theoretical and numerical valuation. Goal is to understand these contracts in a variety of settings and understand their effect on risk exposure including exchange rate risk, interest rate risk, etc. Prerequisite: FN347. (U)(3) Spring.

RM460, Commercial Property and Liability Insurance: This course provides a foundation of knowledge regarding commercial property and liability insurance lines. All major categories of insurance will be covered, including a discussion of the practical application of noninsurance loss prevention and control techniques.

Prerequisites: RM350 and LE365. (U)(3) Occasionally.

## RM495, Special Topics in Risk Management:

Seminar in selected risk management and Insurance topics. Course content will vary from semester to semester. (U)(3) Occasionally.

RM499, Honors Thesis: Risk Management and Insurance. (U)(3) Occasionally.

## Graduate Programs

For general information on applying and admission to any Butler graduate program or course, see Admission Information and Requirements chapter. College- and programspecific requirements are detailed below.

## Master of Business Administration

The Master of Business Administration (MBA) is a professional degree, offered primarily to earlyand mid-career professionals seeking career enhancement.

## Requirements for Graduation

An individual path to graduation is prepared for each incoming student based on his or her academic background.

The program requires 38 graduate credit hours. Students are required to demonstrate proficiency in six competency areas prior to starting the graduate core. Some of the competency areas may be waived based on the individual's undergraduate transcripts (certain requirements apply). If an automatic waiver is not granted, the student will be required to show competency by passing an exam in that topic area. To prepare, students can take an online, self-paced primer or face-to-face classes on a pass/fail basis. Students must accumulate a minimum of two global (G) points by completing a designated global elective course. Students are required to achieve a 3.0 GPA to graduate from the program.

As students progress through the program, they may choose to continue toward a general degree or earn one or more of these concentrations: Entrepreneurship and Innovation, Finance, International Business, Leadership, or Marketing.

## MBA Student Learning Objectives

The faculty of the COB has identified the following objectives for students completing its MBA curriculum. They address what students should know, be able to do, and value.

Identify the fundamental drivers of business and integrate such business knowledge to solve business problems

- Identify the dynamics affecting businesses in the international economy
- Display the ability to work effectively in teams
- Understand the use of power and influence in a professional setting
- Identify strategies for managing or implementing organizational change


## Curriculum

Two components comprise the MBA curriculum:

- The graduate core (30 required credit hours) offers an integrated framework on contemporary leadership perspectives and management practices.
- Concentration courses (8 credit hours) allow students to develop expertise in entrepreneurship and innovation, finance, international business, leadership, or marketing.


## MBA Courses

M410, Organizational Behavior: Provides a broad overview of the field to develop an understanding of the principles that govern human behavior in organizational settings. Will cover such issues as motivation, group dynamics, communication, leadership, change, and culture. Emphasis will be placed upon theory, practice, and the development of personal skills. (Z)(1) Fall, spring, and summer.

## M420, Financial and Managerial Accounting:

 Conceptual introduction to financial accounting with emphasis on wealth and income measurement, cash flows, and debt. Conceptual introduction to managements accounting with emphasis on basic management reports, cost patterns, and measurement, including marginal income and expense measurements and breakeven analysis. (Z)(2) Fall, spring, and summer.
## M425, Foundations in Economics:

Provides an overview of microeconomics and macroeconomics. Reviews basic economic concepts of supply and demand, marginal analysis, aggregate demand, the workings of markets and how prices, wages, and interest rates are determined. The economy as a whole is also considered with a focus on unemployment, inflation, and monetary and fiscal policies. (Z)(2) Fall, spring, and summer.

M430, Foundations in Finance: This course is an introduction to the basic principles of finance including shareholder wealth maximization, the time value of money, risk-return relationships,
and valuation. In addition, the course will apply these principles to such topics as capital budgeting, capital structure, dividend policy, and financial planning. Prerequisite: M420 must either be completed before taking M430 or taking M420 concurrently with M430. (Z)(1) Fall, spring, and summer.

## M435, Foundations in Marketing: An

 introduction to contemporary marketing strategies and practices. Content issues covered include marketing mix allocation; segmentation, targeting, and positioning; internal and ethical considerations in marketing; services marketing; and relationship marketing. (Z)(1) Fall, spring, and summer.M440, Statistical Analysis: This course will focus on applied statistical concepts of descriptive statistics, probability, hypothesis testing, simple/multiple regression, and forecasting models. The course will involve use of the computer and there will be an emphasis on learning and reinforcing computer skills for data analysis. (Z)(3) Fall, spring, and summer.

MPRIM410, Organizational Behavior Primer: Provides a broad overview of the field to develop an understanding of the principles that govern human behavior in organizational settings. Will cover such issues as motivation, group dynamics, communication, leadership, change, and culture. Emphasis will be placed upon theory, practice, and the development of personal skills.

MPRIM420, Financial and Managerial Accounting Primer: Conceptual introduction to financial accounting with emphasis on wealth and income measurement, cash flows, and debt. Conceptual introduction to managements accounting with emphasis on basic management reports, cost patterns, and measurement, including marginal income and expense measurements and break-even analysis.

## MPRIM425, Foundations in Economics

Primer: Provides an overview of microeconomics and macroeconomics. Reviews basic economic concepts of supply and demand, marginal analysis, aggregate demand, the workings of markets and how prices, wages, and interest rates are determined. The economy as a whole is also considered with a focus on unemployment, inflation, and monetary and fiscal policies.

MPRIM430, Foundations in Finance Primer: This course is an introduction to the basic principles of finance including shareholder wealth maximization, the time value of money, risk-return relationships, and valuation. In
addition, the course will apply these principles to such topics as capital budgeting, capital structure, dividend policy, and financial planning. Prerequisite: M420 exam must be completed before taking M430 exam.

## MPRIM435, Foundations in Marketing

Primer: An introduction to contemporary marketing strategies and practices. Content issues covered include marketing mix allocation; segmentation, targeting, and positioning; internal and ethical considerations in marketing; services marketing; and relationship marketing.

MPRIM440, Statistical Analysis Primer: This course will focus on applied statistical concepts of descriptive statistics, probability, hypothesis testing, simple/multiple regression, and forecasting models. The course will involve use of the computer and there will be an emphasis on learning and reinforcing computer skills for data analysis.

## MBA501, Independent Graduate Study in

Business: An individual research project or problem investigation under supervision of a faculty member. Designed to allow graduate students to pursue in-depth studies of areas or issues related to their areas of academic interest. Must have approval of program director and sponsoring faculty member prior to enrollment. Graduate elective: MBA degree-seeking students in good standing only; $1-3$ credits by agreement with sponsoring professor. Prerequisites: Demonstrated proficiency in all competency areas. (G)(1) Occasionally.

MBA502, Independent Graduate Study in Business: An individual research project or problem investigation under supervision of a faculty member. Designed to allow graduate students to pursue in-depth studies of areas or issues related to their areas of academic interest. Must have approval of program director and sponsoring faculty member prior to enrollment. Graduate elective: MBA degree-seeking students in good standing only; 2 credits by agreement with sponsoring professor. Prerequisite: Demonstrated proficiency in all competency areas. (G)(2) Occasionally.

MBA503, Independent Graduate Study in
Business: An individual research project or problem investigation under supervision of a faculty member. Designed to allow graduate students to pursue in-depth studies of areas or issues related to their areas of academic interest. Must have approval of program director and sponsoring faculty member prior to enrollment. Graduate elective: MBA degree-seeking students in good standing only; $1-3$ credits by agreement
with sponsoring professor. Prerequisite: Demonstrated proficiency in all competency areas. (G)(3) Occasionally.

MBA505, Gateway Experience: Provides students with an introduction to the integrated nature of business. Introduces the idea of experiential learning and develops expectations for the graduate core courses. The course will involve a hands-on experiential group exercise. P/F grading basis. Prerequisites: MBA degreeseeking status, demonstrated proficiency in all competency areas, with the exception of statistical analysis. (G)(1) Fall, spring, and summer.

MBA510, Leadership: Explores the history, art, science, and practice of leadership in organizational settings. Such issues as leadership history, change, visioning, coaching followership, and socio-technical concerns will be covered. Emphasis will be placed upon merging theory and practice and personal leadership skill development. Prerequisites: MBA degreeseeking status, demonstrated proficiency in all competency areas, with the exception of statistical analysis, and MBA505 must either be completed before taking MBA510 or taking MBA505 concurrently with MBA510. (G)(3) Fall, spring, and summer.

## MBA515, Legal and Ethical Operation of

Business: A course designed for managers to operate an entity in compliance with the legal system in an ethical manner. The focus is on the practice of preventive law and managing operations in such a way as to take advantage of the safeguards that the legal system provides. Prerequisite: MBA degree-seeking status, demonstrated proficiency in all competency areas, with the exception of statistical analysis. (G)(3) Fall, spring, and summer.

MBA520, Managerial Accounting: Application of managerial accounting concepts, techniques, and issues, emphasizing uses of internal accounting information for decision making, planning or budgeting, and evaluation/control. Topics include alternative cost measurement, accumulation, allocation methods, or analysis techniques (job, process, just-in-time, standard, activity-based costing, cost behavior, cost-volume-profit analysis, contribution approach) that are relevant to various managerial decisions (production, pricing, etc.) and related issues (behavioral implications). Prerequisites: MBA degree-seeking status, demonstrated proficiency in all competency areas, and MBA505 must either be completed before taking MBA520 or taking MBA505 concurrently with MBA520. (G) (3) Fall, spring, and summer.

MBA522, Business Practicum: Field-based, experiential learning program designed to provide Butler MBA students with real-world knowledge of select business and industry clusters, and the opportunity to interact with business leaders and experts. The practicum is intended to be highly experiential and engage successful community and business leaders and experts from economic development clusters. Students will draw on skills acquired in their core and elective courses, and supplemental readings, to engage in a three-day, industrylevel business analysis/challenge competition. Working in teams, students will analyze the business task to identify potential paths to success and recommend a solution. (G)(2) Fall, spring, and summer.

MBA525, Managerial Economics: A course in applied microeconomics with an emphasis on business decision making. Topics include market analysis and price determination; examination of managerial response to changing demand, cost, and industry conditions. Prerequisites: MBA degree-seeking status, demonstrated proficiency in all competency areas, and MBA505 must either be completed before taking MBA525 or taking MBA505 concurrently with MBA525. (G) (3) Fall, spring, and summer.

MBA530, Financial Management: An analysis of the theory and practice of financial management, this course expands on the topics covered in MBA430. In general, the course focuses on how firms properly acquire and invest funds in a corporate setting. Specific topics include capital budgeting, capital structure, dividend policy, derivatives, mergers and acquisitions, and bankruptcy. Prerequisites: MBA degree-seeking status, demonstrated proficiency in all competency areas, and MBA505 must either be completed before taking MBA530 or taking MBA505 concurrently with MBA530. (G)(3) Fall, spring, and summer.

## MBA535, Marketing Management and

 Research Methods: An integrated course designed to provide the student with marketing management skills, basic research methodology skills, and a framework to make decisions in a marketing context. Marketing management content issues include buyer behavior; market segmentation, targeting, and positioning; and management of the marketing mix. Research methodology topics include study design, data collection, and forecasting methods. Prerequisites: MBA degree-seeking status, demonstrated proficiency in all competency areas, and MBA505 must either be completed before taking MBA535 or taking MBA505concurrently with MBA535. (G)(3) Fall, spring, and summer.

## MBA540, Information Management and

Business Analytics: This course examines how information can be leveraged for competitive advantage in a global business environment. Three primary topics are discussed: the role of information technology (IT) and the IT department in an organization, analyzing business data with current software, and the role and analysis of data in operations management. The course is designed to help managers understand the challenges, opportunities, and risks involved in the analysis of data, as well as the use of information and associated systems. The course is designed for general managers, and no prior technical knowledge is assumed or required. Prerequisites: MBA degreeseeking status, demonstrated proficiency in all competency areas, and MBA505 must either be completed before taking MBA540 or taking MBA505 concurrently with MBA540. (G)(3) Fall, spring, and summer.

## MBA542, The Entrepreneurial Mindset:

This course examines the nature of innovation and how the entrepreneurial mindset is leveraged to identify and exploit new market opportunities. Detailed attention is given to the entrepreneurial process and how it applies to the entrepreneur, the evolving company, and the established company. Prerequisite: MBA degreeseeking status, demonstrated proficiency in all competency areas, and MBA505 must either be completed before taking MBA542 or taking MBA505 concurrently with MBA542. (G)(3) Fall, spring, and summer.

MBA545, Integrative Capstone Experience:
Designed to serve as a capstone experience in the graduate program. This course reviews key concepts from the individual disciplines (accounting, finance, marketing, leadership, production) and integrates them with new material on strategic management. The perspective is from the point of view of a general manager, division head, or CEO who holds responsibility for shaping the direction and character of the organization. The approach relies heavily on in-depth case analysis and class discussion. Prerequisites: MBA degree-seeking status, MBA505, MBA510, MBA515, MBA520, MBA522, MBA525, MBA530, MBA535, MBA540, MBA542. (G)(3) Fall, spring, and summer.

MBA551, People in Organizations: Generally, all businesses will state that human resources are its most important asset. Management of this asset is what, in large part, determines the success of the business. How people are
treated affects the bottom line. Topics include performance appraisals, communications, collective bargaining and the need for "win/ win" maintaining a positive employee relation's climate, and other related subjects. Prerequisite: MBA510. (G)(2) Occasionally.
MBA552, Managing People in Global Organizations: This course is designed to help leaders of international companies develop the knowledge and skills they will need to interact effectively with people from other cultures. The concept of culture, how cultures differ from one another, and how culture influences interactions between people in a global business environment will be examined. Particular emphasis will be placed upon understanding the implications of cultural differences for management practice in the areas of motivation, leadership, communication, negotiation styles, conflict resolution, and human resource policies. Prerequisite: MBA510. (G)(2) Occasionally.

## MBA553, Issues in Ethics and Social

Responsibility: Focuses on understanding how leaders go about the complex process of making decisions and solving problems. It deals with how situations get interpreted as problems and addresses why some issues get decided while others are ignored. It examines decision-making and problem-solving cycles to determine why some issues get immediate action while others go through a convoluted decision process. Finally, it examines the aftermath of these processes and explores why some problems never get solved. Prerequisite: MBA510. (G)(2) Occasionally.

## MBA556, Developing and Managing Teams:

Addresses the formation and development of self-managed or autonomous teams in organizational settings. Strong emphasis placed on the theory and skill development in such areas as interpersonal relations, process variables, group life cycles, decision making, leadership emergence, and conflict management. Attention to the effects of new communication technologies on group processes also will be addressed. Prerequisite: MBA510. (G)(2) Occasionally.

MBA557, Managing Change: Exposes students to the theory and practices necessary to plan, implement, and analyze the effectiveness of organizational change programs. Explores methods that promote autonomy, diversity, and continuous learning. Seeks to help students become effective internal and external change agents. Prerequisite: MBA510. (G)(2) Occasionally.

MBA558, Perspectives on Leadership: The objective of this seminar is to examine leadership
approaches/styles in an experiential, in-depth manner. The course includes a highly engaged and participative exploration of both business and not-for-profit organization leadership (including site visits), as well as a clarification of the students' personal styles. Prerequisite: MBA510. (G)(2) Occasionally.

MBA559, Venture Planning: This course will expose students to topics such as elements of a start-up, developing a business model, building a support team, developing a business plan, developing a branding and market positioning plan, developing a capital strategy, pursuing investors, being innovative, and becoming an effective leader. Prerequisite: MBA542. (G)(3) Occasionally.

MBA561, Financial Institutions and Markets:
This course covers the characteristics and management of financial institutions. As a foundation for this study, the course examines interest rate theory and interest rate risk management, the regulatory environment, and other features of the financial markets. Prerequisite: MBA530. (G)(3) Occasionally.

MBA562, International Finance: The course provides analytical financial tools to managers as they operate in the international economy. Hedging techniques are introduced and foreign investment and financing decisions are examined. Prerequisite: MBA530. (G)(3) Occasionally.

## MBA563, Seminar in Investment

Management: Examines the valuation of financial securities using traditional and modern financial theories. Given valuation results, it also examines portfolio construction related to maximizing return and minimizing risk. The case method is employed. Prerequisite: MBA530. (G) Occasionally.

MBA564, Derivatives: Futures, Options, and Swaps: The course provides an introduction to derivative markets. Specifically, students will receive a working knowledge of futures, options, and swaps. This course will emphasize the use of derivative instruments in the management of financial risk exposure. Calculus is not a prerequisite for this course. This course is a MBA finance elective. Prerequisite: MBA530. (G)(2) Occasionally.

## MBA565, Applied Portfolio Management:

Students serve as managers of a real-dollar (approximately $\$ 1$ million) investment portfolio. The course provides hands-on experience in portfolio management, including investment policy statement preparation; economic,
industry, and company analysis; and investment strategy implementation. Students will report on their performance to the Endowment and Investment Committee of Butler University's Board of Trustees. Prerequisite: MBA563. (G)(3) Occasionally.

MBA567, Financial Theory and Cases: This course builds on the corporate finance theory covered in MBA530. Additional topics such as option theory, risk and value creation in capital budgeting, investment-financing interactions, and signaling theory are addressed. The case method is extensively employed to stress application of theory and limits of theory in aiding decision making. Prerequisite: MBA530. (G)(3) Occasionally.

## MBA568, Entrepreneurial Finance:

This course focuses on how entrepreneurs appropriately manage the financial aspects of potential business ventures. Specifically, how entrepreneurs evaluate and value attractive business opportunities, estimate the resources necessary to undertake such opportunities, secure resources on favorable terms, and manage financial resources. Key topic areas include estimating capital requirements and risk, identifying and evaluating sources of capital, managing financial liquidity, performing business valuations, and understanding exit strategies. Prerequisites: MBA530 and MBA542. (G)(3) Occasionally.

MBA571, Global Business Experience: This course introduces students to the business and cultural environments of a particular foreign country through pre-trip work, a short-term study trip, and the preparation of a reflective paper. Designed to serve as a 2-credit elective course, it may be counted toward any of the areas of concentration and satisfies the two $G$ points MBA program requirement. Prerequisites: Completion of 7 hours of 500-level coursework. (G)(2) Annually, term varies.

## MBA581, International Marketing:

Systematically analyzes the design of international marketing strategies and tactics from the perspectives of both multinational corporations and small-to-medium sized exporters. Highlights and integrates the roles of culture, government, and demography in the development of comparative and competitive advantages. Discussions of current global events and important regions/markets are woven into the analyses and discussions. Practical methods of doing international marketing research are included. Prerequisite: MBA535. (G)(3) Occasionally.

MBA582, Advertising and Promotion
Management: The traditional promotion marketing mix elements (i.e., advertising, sales promotion, public relations, and personal selling) are explored as components of an integrated marketing communications (IMC) strategy, with primary emphasis on advertising. The course is designed to provide an exposure to the concepts, theories, and frameworks helpful in understanding the elements of IMC such that students are able to formulate case analysis and strategic planning. Additional attention is paid to the increasing role of technology in effective consumer communication strategy. Prerequisite: MBA535. (G)(2) Occasionally.

## MBA583, Buyer Behavior and Customer

Driven Strategies: Introduce students to the field of buyer behavior from the perspective of a marketing manager who needs such knowledge to develop, evaluate, and implement effective, customer-oriented strategies. The course is designed to provide an overview of the concepts, theories, and models that will help the student understand buyer behavior; provide exposure to the various research tools that organizations use to listen to the voice of the customer; and develop the ability to use this information in formulating and evaluating marketing strategies. Prerequisite: MBA535. (G)(2) Occasionally.

MBA584, New Product Development: This course focuses on the challenges and decisions new-product managers face as they take ideas through the new-product development process. Organizations need to create, develop, and market new products and services continually to compete effectively in a rapidly changing environment. The course provides an overview of new-product development, with an emphasis on customer involvement and consideration throughout the process. It also provides detailed insights on such topics as new-product strategy, idea generation, idea selection and evaluation, concept development and testing, product development and testing, and market testing. Prerequisites: MBA535 and MBA542. (G)(3) Occasionally.

MBA587, Marketing Research: A course designed to acquaint the student with basic marketing research methodology skills. Among content issues addressed in this class are exploratory, descriptive, and experimental research designs; primary and secondary data (including scanner data) collection sources and methods; hypothesis formulation and testing (qualitative and quantitative analysis methods); and survey design. Ethical matters and international issues are incorporated across
most content areas. Course content includes both parametric and non-parametric statistical procedures. In addition, the course places heavy emphasis on how marketing managers can effectively interact with researchers, and how marketing managers can use research results as part of the decision-making process in sustainable establishing competitive advantage. Prerequisite: MBA 535. (G)(3) Occasionally.

MBA590, Pharmaceutical Management Seminar 1. (G)(1) Occasionally.

MBA591, Pharmaceutical Management Seminar 2. (G)(1) Occasionally.

MBA592, Pharmaceutical Management Rotation 1. (G)(4) Occasionally.

MBA593, Pharmaceutical Management Rotation 2. (G)(4) Occasionally.

MBA594, Special Topics: Seminar in selected topics. Course content will vary each semester. Prerequisites: MBA degree-seeking status, demonstrated proficiency in all competency areas. (G)(2) Occasionally.

MBA595, Special Topics: Seminar in selected topics. Course content will vary each semester. Prerequisites: MBA degree-seeking status, demonstrated proficiency in all competency areas. (G)(3) Occasionally.

## Master of Professional Accounting

The College of Business offers the Master of Professional Accounting (MPAcc) program for those students choosing to pursue a career in public or corporate accounting. It is primarily designed for students who already hold an undergraduate degree in accounting. Nonaccounting majors are eligible to apply only if they have completed all of the prerequisite courses. The MPAcc degree, when combined with an undergraduate business degree, will enable students to meet the CPA certification requirement of 150 hours of post-secondary education, mandated by most states.

## Requirements for Graduation

The program requires 30 graduate credit hours, divided into three categories: core ( $1^{17}$ credit hours), concentration (nine credit hours) and electives (four credit hours). Students must complete at least one of the designated global concentration or elective courses. Students are required to achieve a 3.0 GPA to graduate from the program.

## MPAcc Student Learning Objectives

The faculty of the COB has identified the following learning objectives for students completing its MPAcc curriculum. They address what students should know, be able to do, and value.

- Demonstrate general knowledge of advanced financial accounting, managerial accounting, auditing, law, tax, and other accounting-related business concepts
- Demonstrate specialized knowledge of various accounting concepts, including international or multi-state financial accounting or tax concepts
- Demonstrate broad-based professional business and decision-making skills, such as critical thinking, problem solving, and oral and written communication
- Display teamwork and leadership skills
- Apply appropriate ethical standards in professional decision-making


## Curriculum

The MPAcc curriculum comprises three components:

- Core (17 credit hours): provides the necessary foundation in financial accounting and reporting, managerial applications, auditing, and taxatio.
- Concentration (9 credit hours): allows students to develop fluency and expertise in financial reporting or taxation
- Elective (4 credit hours): gives students an opportunity to explore areas beyond their concentration, such as law, nonprofit and government, or international accounting


## MPAcc Courses

MPA501, Independent Graduate Study in Accounting: An individual research project under supervision of a faculty member. Designed to allow graduate students to pursue in-depth studies of areas or issues related to accounting. Must have approval of graduate program director and sponsoring faculty member prior to enrollment. Course is $1-3$ credits by agreement with sponsoring faculty member. Prerequisites: MPA degree-seeking status and permission of graduate program director. (G)(1) Occasionally.

## MPA502, Independent Graduate Study in

Accounting: An individual research project under supervision of a faculty member. Designed to allow graduate students to pursue in-depth studies of areas or issues related to accounting. Must have approval of Graduate Program Director and sponsoring faculty member prior to enrollment. Course is $1-3$ credits by agreement with sponsoring faculty member. Prerequisites:

MPA degree-seeking status and permission of Graduate Program Director. (G)(2) Occasionally.

## MPA503, Independent Graduate Study in

 Accounting: An individual research project under supervision of a faculty member. Designed to allow graduate students to pursue in-depth studies of areas or issues related to accounting. Must have approval of graduate program director and sponsoring faculty member prior to enrollment. Course is $1-3$ credits by agreement with sponsoring faculty member. Prerequisites: MPA degree-seeking status and permission of graduate program director. (G)(3) Occasionally.MPA508, Leadership: This course explores the history, art, science, and practice of leadership in organizational settings. Such issues as leadership history, change, visioning, followership, small-team leadership, and the role of middle management will be covered. Emphasis will be placed upon merging theory and practice, and personal leadership skill development. The application portions of this course will focus on situations and scenarios common to new accounting professionals. Prerequisite: MPA degree-seeking status or permission of graduate program director. (G)(3) Spring.

## MPA511, Accounting for Business

## Combinations and International Operations:

This course introduces students to financial reporting issues faced by publicly held corporations. Course topics include financial statement translation and remeasurement, consolidations, segment reporting, the content of the management discussion and analysis, and financial statement notes. Students will be expected to apply the requirements of U.S. and international generally accepted accounting principles and the U.S. Securities and Exchange Commission rules and regulations. Prerequisites: AC301 and AC302 or equivalent, and senior status. (G)(3) Fall.

MPA512, Accounting for Government, Not-for-Profit, and Other Entities: This course introduces students to four different accounting environments: governmental, not-for-profit, partnerships, and new basis. Students will apply governmental accounting standards, as promulgated by the Governmental Accounting Standards Board, and financial accounting standards written by the Financial Accounting Standards Board to not-for-profit and troubled for-profit situations. Accounting for partnerships and other non-corporate structures are also included in the course. Prerequisite: MPA degree-seeking status. (G)(2) Spring.

MPA513, Applied Financial Accounting:
The focus is on students learning to apply professional financial accounting standards, at an in-depth level, to complicated financial transactions. Their understanding of financial accounting measurement and reporting issues will be enhanced by the application of GAAP to a variety of problems. Prerequisites: AC302 and senior status, or equivalents. (G)(3) Spring.

MPA515, Taxes and Business Strategy: This course uses an economics-based approach to consider how tax and non-tax factors affect business decisions. The framework developed is highly integrative: investment strategies and financing policies within firms are linked through taxes. The first part of the course develops the fundamental concepts that represent building blocks of the framework, including tax characteristics of alternative savings vehicles, marginal tax rates, implicit/ explicit taxes, clienteles, and decision making under uncertainty. The second part applies the framework to specific decision settings such as compensation planning, choice of organizational form, capital structure, tax shelters, mergers and acquisitions, and multi-jurisdictional tax planning. Critical thinking and written/oral communications skills are enhanced through class discussions as well as case analysis and presentation. Understanding of advanced tax topics is evaluated using in-class examinations. Prerequisite: MPA degree-seeking status or permission of graduate program director. (G)(3) Fall.

MPA527, Advanced Managerial Accounting:
This course uses a case-based approach to examine the use of managerial accounting information in various business decisions. A wide range of managerial accounting topics, including costing systems, budgeting issues, cost behavior, and performance evaluation methods, are covered. The course structure develops critical thinking, business writing, and oral communication skills through class discussions, written reports, and presentations. In-class examinations may be used to measure understanding of managerial accounting topics. Prerequisite: MPA degree-seeking status or permission of graduate program director. (G)(2) Fall.

MPA5 ${ }^{7}$ 3, Auditing and Forensic Accounting:
This course will cover a variety of facets related to Information Technology (IT) auditing and forensic accounting, especially fraud audits. The course will present tools, concepts, and techniques necessary to properly audit IT. It also covers forensic accounting processes and tools
used in the detection and prevention of fraud against the company. Prerequisite: MPA degreeseeking status or permission of graduate program director. (G)(3) Spring.

MPA578, Advanced Auditing: A strategic analysis-based auditing course in which students learn to evaluate the client firm from its executive to its operation levels, and to use the evaluation results as the basis to assess risk and corporate performance. Prerequisite: Undergraduate degree in accounting or its equivalent. (G)(3) Fall.

MPA5 ${ }^{7} 9$, Advanced Taxation: Taxation, sale, reorganization, and liquidation of regular corporations, subchapter S corporations, limited liability organizations, and partnerships. This course also integrates advanced tax research. Prerequisites: Undergraduate business degree or equivalent and undergraduate tax and audit or equivalent. (G)(3) Occasionally.

## MPA581, International Corporation

 Governance and Financial Reporting:The course compares corporate governance structures in different countries, and emphasizes how legal environments affect the enforcements of contracts and regulations. It highlights ownership structures and their implications for protecting minority shareholders. The course will relate the legal environments and ownership structures to reporting quality. Study abroad may be required. Prerequisite: MPA degree-seeking or permission of graduate program director. (G) (3) Spring.

## MPA583, International and Multi-state

Taxation: This course provides an overview of international, state, and local tax laws related to individuals and corporations. The primary goals are to provide students with basic understanding of the international taxation of individuals and domestic and foreign corporations, and the effects of state taxation businesses. Prerequisite: MPA degree-seeking status or permission of graduate program director. (G)(3) Occasionally.

MPA585, Tax Research, Accounting Periods and Methods, Exempt Entities: This course provides students with a working knowledge of the successful tax practitioner's methodology applied to the solution of both routine and complex tax problems. Students will also gain familiarity with the reporting requirements for exempt entities. Prerequisite: MPA degreeseeking status or permission of graduate program director. (G)(3) Occasionally.

MPA587, Taxation of Corporations and Partnerships: This course expands on the general concepts of federal income taxation and covers tax rules related to $C$ corporations and partnerships. Students will be able to identify and evaluate tax issues associated with business entity decisions. This class further develops critical thinking and oral/ written communication skills through classroom discussions and written case assignments. Finally, this class allows students to gain familiarity in preparing corporate and partnership tax returns. Prerequisite: MPA degree-seeking status or permission of graduate program director. (G)(3) Fall.

MPA589, Advanced Law: This course includes the following topics needed by candidates taking the CPA examination: corporate and other organizational structures, debtor creditor relationships, secured transactions, bankruptcy, securities laws, and negotiable instruments. Prerequisite: MPA degree-seeking status or permission of graduate program director. (G)(2) Occasionally.

MPA590, CPA Examination Review: This course prepares students for the Financial Accounting and Reporting, Regulation, Auditing and Attestation, and Business Environment sections of Uniform Certified Public Accountants examination. The topics include those listed in the content specification outline as published by the American Institute of Certified Public Accountants (AICPA). Prerequisites: MPA508, MPA511, MPA513, MPA515, MPA527, MPA578, or permission of graduate program director. (G)(2) Summer.

MPA594, Special Topics: Seminar in selected topics. Course content will vary each semester. Prerequisite: MPA degree-seeking status or permission of graduate program director (G)(2) Occasionally.

MPA595, Special Topics: Seminar in selected topics. Course content will vary each semester. Prerequisite: MPA degree-seeking status or permission of graduate program director (G)(3) Occasionally.


# COLLEGE of PHARMACY and HEALTH SCIENCES 

## Administration

Mary H. Graham, PharmD, Dean; Bruce D. Clayton, PharmD, Associate Dean; Bonnie K. Brown, PharmD, Associate Dean for Student Affairs; Pamela L. Crowell, PhD, Department Chair of Pharmaceutical Sciences; Julia M. Koehler, PharmD, Associate Dean for Clinical Education and External Affiliations; Jane M. Gervasio, PharmD, Department Chair of Pharmacy Practice; Jennifer A. Snyder, PhD, PAC, Director of the Physician Assistant Program; Laurie L. Pylitt, MHPE, Director of Assessment (ex officio); Amy Sutton Peak, PharmD, Director of Undergraduate Health Sciences Programs

## Professors

Mary H. Graham, PharmD; Bonnie K. Brown, PharmD; Bruce D. Clayton, PharmD; Pamela L. Crowell, PhD; Sudip K. Das, PhD; Jane M. Gervasio, PharmD; Julia M. Koehler, PharmD; Jennifer A. Snyder, PhD, PA-C; Michael A. Vance, PhD; Jeanne H. Van Tyle, PharmD

## Associate Professors

Erin L. Albert, PharmD, MBA, JD; Jarrett R. Amsden, PharmD; Alex J. Ansara, PharmD; Meghan M. Bodenberg, PharmD; Kendra M. Damer, PharmD; Patricia S. Devine, PharmD; Nandita G. Das, PhD; Mikaela Drake, PhD; Alexandre M. Erkine, PhD; Donald R. Frosch, MS, PA-C; Dennis C. Gardner, PharmD; Todd W. Hrubey, PhD; Joseph K. Jordan, PharmD; Laurence A. Kennedy, PhD; Chad A. Knoderer, PharmD; Carrie M. Maffeo, PharmD; Sarah A. Nisly, PharmD; Emily C. Papineau, PharmD; Amy Sutton Peak, PharmD; Laurie L. Pylitt, MHPE; Brenda L. Quincy, PhD; Darin C. Ramsey, PharmD; Carriann E. Richey-Smith, PharmD; Laura F. Ruekert, PharmD; Lindsay M. Saum, PharmD; Dane L. Shiltz, PharmD; Tracy L. Sprunger, PharmD; Kevin M. Tuohy, PharmD; Alison M. Walton, PharmD; Jennifer S. Zorn, MS, PA-C

## Assistant Professors

Kimberly M. Beck, PhD; Tracy J. Costello, PharmD; Lauren M. Czosnowski, PharmD; Stephanie L. Enz, PharmD; Hala M. Fadda, PhD; Samuel L. Gurevitz, PharmD; Jennifer R. Guthrie, MPAS, PA-C; Weimin C. Hong, PhD; Carolyn M. Jacobs-Jung, PharmD; Chioniso P. Masamha, PhD; Jennifer A. McCann, PharmD; Annette T. McFarland, PharmD; Kristen R. Nichols, PharmD; Angela V. Ockerman, PharmD; Sheel M. Patel, PharmD; Cathy M. Ramey, PharmD; Jason T. Range, JD, PhD; David J.

Reeves, PharmD; Chris T. Roman, MA, MMS, PA-C; Priscilla T. Ryder, PhD; Daniel P. Sturm, MMS, PA-C; Jessica S. Triboletti, PharmD; Kali Veness, MPAS, PA-C; Jessica E. Wilhoite, PharmD; Deborah S. Zeitlin, PharmD Instructors
Lisa Berra, PA-C; Mark Bochan, MD; Michael Pauszek, MD; James Pike, DO; Lauren Rau, MD; Leila Reed, PA-C; Emily Skeeters, PAC; Margaret S. Stratford, PharmD; Ashley Townsend de Lara, PharmD; Larry VanderMolen, MPAS, PA-C; Lori Vasquez, PA-C

College Website
www.butler.edu/cophs

## Mission

The mission of the College of Pharmacy and Health Sciences (COPHS) is to provide effective educational experiences in the health sciences. By so doing, the College facilitates the development of lifelong learners with a liberal arts foundation who are able to serve society as dedicated, competent health professionals and community leaders.

## Values

- Professionally focused-inspire with excellence in teaching and model lifelong learning. We have a passion for our life work and have dedicated our careers to training the next generation of health care providers and educators. We look for new ways to improve learning, and we adapt to the need for new knowledge, skills, and attitudes. We share our practical experiences with our students so that what they learn is directly connected to actual patient care or to our scholarship. We utilize real-life experiences wherever possible so that students develop an appreciation for the patient and societal variables that add complexity to the care of an individual or of a population. As faculty, we have developed a collaborative learning environment and are respectful and supportive of one another.
- Student focused-dedicated to our students. We are dedicated to our students and are committed to their development, both inside and outside the classroom, with teaching, advising, project oversight, and experiential learning.
- Patient focused-dedicated to our patients and our professions. We are experienced health care practitioners and investigators who exude a high regard for patient care that is transmitted to our students. We teach others so our professions can excel and provide better patient care and research each day.


## Goals

- Education and Practice. Advance the practice of our health care professions and emphasize the importance of an interdisciplinary approach by providing effective and innovative programs for undergraduate, graduate, and professionallevel learners.
- Research and Scholarly Activity. Conduct focused research and scholarly activity that is consistent with our expertise and tied to student experiences.
- Public Health, Service, and Leadership. Foster leadership and service for students, faculty, and staff through public healthrelated community outreach, University and College service, and involvement in professional organizations.
- Employer of Choice. Create an employment environment that provides leadership, personal growth, and resources to be a desired place of employment for the ongoing vitality of our programs.
- Collaboration. Develop collaborations to increase the reach and effectiveness of our programs and public health initiatives.


## Conduct Code

In addition to complying with the Rights and Responsibilities section of the Butler University Student Handbook (www.butler.edu/campus-life/student-handbook), students enrolled in College of Pharmacy and Health Sciences programs will also be expected to comply with the Professional Conduct Code outlined in the COPHS Student Handbook, available at www. butler.edu/cophs/student-resources.

## Accreditation

The College of Pharmacy and Health Sciences is a member of the American Association of Colleges of Pharmacy and the Physician Assistant Education Association. The Pharmacy program is fully accredited by the Accreditation Council for Pharmacy Education through June 2020. The Physician Assistant program holds Accreditation-Continued status from the Accreditation Review Commission on Education for the Physician Assistant (ARC-PA), granted
when a currently accredited program is in compliance with ARC-PA Standards. For this program, the next validation review is expected to be in March 2017.

## Degree Programs

The College of Pharmacy and Health Sciences offers the doctor of pharmacy (PharmD) degree that provides eligibility for licensure as a pharmacist. The College also offers a doctor of pharmacy with pharmaceutical science or patient care research emphasis, a doctor of pharmacy with medical Spanish emphasis, a doctor of pharmacy/master of science in pharmaceutical sciences dual degree, a doctor of pharmacy/master of business administration dual-degree program that awards both the PharmD and MBA degrees upon simultaneous completion of the respective degree requirements, and a graduate program leading to a master of science in pharmaceutical sciences.

The College offers the master of physician assistant studies degree (MPAS) that provides eligibility for licensure as a physician assistant.

The College of Pharmacy and Health Sciences also offers a bachelor of science in health sciences (BSHS). Two majors are offered within the BSHS program. The Health Science major is more clinically focused and serves as the direct admit pathway into the MPAS program. The new major Healthcare and Business will be offered in collaboration with the College of Business beginning in fall 2016.

For general information on applying and admission to any Butler graduate program or course, see Admission Information and Requirements chapter. College- and programspecific requirements are detailed below.

## Doctor of Pharmacy

www.butler.edu/cophs/pharmd-program
The doctor of pharmacy (PharmD) degree program prepares students to become pharmacy practitioners who possess the knowledge and skills required to function as authorities on the use of medicines, and who can apply pharmaceutical and biomedical science to the practical problems of drug therapy. Pharmacists are capable of contributing to the interdisciplinary delivery of primary health care and can function as drug therapy specialists. Students also are prepared for specialty professional studies and for graduate study in the pharmaceutical sciences.

## Admission

- Applicants to the pre-professional or professional program who are non-native English speakers are required to submit the results of the Test of Spoken English (TSE-A) or Test of English as a Foreign Language (TOEFL).
- The doctor of pharmacy curriculum requires that students complete two preprofessional years and four professional years of study. Acceptance into the professional phase of the program allows students to begin the first professional year (P1) coursework. Students entering the fall semester of P1 must satisfactorily complete all math/science and other pre-professional coursework required as prerequisites for enrollment in P1 professional courses.
- Acceptance into the professional pharmacy program by either the automatic advancement option, the internal application option, or the PharmCAS application option is contingent upon enrollment capacity limitations of the program.
- The College of Pharmacy and Health Sciences reserves the option to modify its pharmacy program admission and advancement procedures at any time.


## Automatic Advancement for Pre-Pharmacy Students Entering as First-Year Students

Students enrolling as first-year students at Butler University and declaring pre-pharmacy as their initial major are eligible to be automatically admitted to the P1 year of the pharmacy program upon completion of their third semester of Butler enrollment if they meet the following criteria:

- Cumulative grade point average (GPA) at Butler University of 3.0 or higher.
- GPA greater than 3.0 in nine selected, critical pre-pharmacy courses listed below.
- No grade less than C-in any of the prepharmacy courses stipulated below. A student may repeat a course to satisfy a subsequent course prerequisite. (Note: Withdrawals during the first student year will have no effect on the GPA calculation, but courses must be completed. A withdrawal during the fall semester, sophomore year, from one of the nine classes used in the automatic advancement formula will result in loss of automatic advancement.)
- Successful completion of an in-person standardized interview, including evaluation of verbal communication and interpersonal skills, ethical and professional characteristics, intellectual
curiosity, leadership and emotional maturity, respect and empathy for others, and creativity.
- Successful completion of a standardized writing prompt.

Courses That Determine the Automatic Advancement GPA<br>CH105, General Chemistry<br>CH106, General Chemistry<br>MA106, Calculus and Analytical Geometry BI105, Introductory Cell Biology<br>FYS101, First Year Seminar 1<br>FYS102, First Year Seminar 2<br>CH351, Organic Chemistry<br>PX100, Health Sciences Seminar<br>PX326, Anatomy and Physiology 1

Eligibility for automatic advancement into the P1 year of the pharmacy program ceases after the student's review for professional phase admission at the end of his or her third semester at Butler University.

A student seeking pharmacy program admission by the automatic advancement option may not count more than three courses transferred from another university or awarded through advanced placement (AP) or the International Baccalaureate (IB) program toward the calculation of his or her automatic advancement GPA.

A student failing to automatically advance to the professional pharmacy program will be considered for admission to the program on a competitive, space-available application basis. Applications are available from the Student Affairs Office (Pharmacy and Health Sciences Building, room 102). This process considers the student's cumulative GPA for all coursework completed at all universities, completion of the standardized writing prompt, and an attribute assessment through an interview.

## Transfer Students and Internal Applicants Not Classified as Pre-Pharmacy

Students who enter Butler University with 12 or more credit hours completed after high school graduation are classified as transfer students. Students entering Butler as transfer students and declaring pre-pharmacy as their intended major are not eligible for admission to the P1 year of the pharmacy program via the automatic advancement option. Pre-professional transfer students, as well as Butler University students not classified as pre-pharmacy upon entry into the University as first-year students (including changes of majors), may apply for admission into the P1 class on a competitive, space-available basis. Applications are available
from the Student Affairs Office (Pharmacy and Health Sciences Building, room 102). This process considers the student's cumulative GPA for all coursework completed at all universities, completion of a standardized writing prompt, and an attribute assessment through an interview.

## Requirements

- Students are required to complete the program of study with a minimum of 210 credit hours ( 213 credit hours for first-year students matriculating beginning in 2015).
- Successful completion of the professional curriculum requires that the student not exceed five hours of coursework with earned grades less than C (2.0) in PX and RX courses numbered 300 or higher. Additionally, the student's professional GPA must be 2.0 or higher. The professional curriculum consists of those courses designated PX and RX. The proper sequence of courses must be maintained and the prerequisites for each course satisfied. The student is responsible for making certain that he or she has completed all required courses in the curriculum.
- All didactic coursework, all earned IPPE hours (Introductory Pharmacy Practice Experience), and University Core Curriculum requirements must be completed before beginning the advanced experiential rotations (APPE) in the P4 year of the curriculum.
- Only students admitted to and currently enrolled in the professional pharmacy program of the College of Pharmacy and Health Sciences may register for courses offered as part of the curriculum numbered with RX designators. Such students must maintain their eligibility to continue in the pharmacy program.


## Student Learning Outcomes

- Apply knowledge and skills to make appropriate decisions regarding the safe and effective use of medications or the need for referral to other health care providers. These decisions should include consideration of social, economic, and cultural factors.
- Find, understand, analyze, evaluate, and use information to make informed and rational decisions.
- Effectively communicate pharmaceutical and health-related information and collaborate with other health care professionals to ensure the provision of quality patient care.
- Practice independent learning and modify ideas and behaviors based on newly acquired knowledge.
- Manage pharmacy operations including human, facilities, and fiscal resources to deliver quality patient care.
- Demonstrate ethical conduct in personal and professional settings and respect and exhibit empathy for patients' differences, values, and preferences.
- Promote health improvement, wellness, and disease prevention.


## Curriculum for First-Year Students Matriculating Beginning 2015

The College reserves the right to change the Doctor of Pharmacy curriculum at the discretion of the faculty.

First Year-Pre-Pharmacy Credit Hours Courses (Fall Semester)
FYS101, First Year Seminar 3
CH105, General Chemistry 5
BI105, Intro Cell Biology 3
Core (TI, PCA, or SW)* 3
Liberal Education Elective 3
PX100, Health Sciences Seminar 1
Total Semester Hours 18
Courses (Spring Semester)
FYS102, First Year Seminar 3
CH106, General Chemistry 5
MA106, Calc and Analytical Geom I 5
Core (TI, PCA, or SW) * 3
PWB, Physical Well-Being 1
Total Semester Hours 17

* TI = Texts and Ideas, PCA = Perspectives in the Creative Arts, SW = Social World. Students (except previously degreed students) must take at least one core course in each of the divisions listed.

Second Year-Pre-Pharmacy Credit Hours
Courses (Fall Semester)
GHS201-209, Global and Historical Studies 3
PX326, Human Anat \& Physiol 14
CH351, Organic Chemistry 5
PX325, Ethical Issues in Health Care 3
PX281, Intro to Pharm Sciences 1* 3
Total Semester Hours 18
Courses (Spring Semester)
GHS201-209, Global and Historical Studies 3
BI325, Pathogenic Microbiology 3
CH352, Organic Chemistry 5
PX327, Human Anat \& Physiol $2 \quad 4$
PX282, Intro to Pharm Sciences 2* 3
Total Semester Hours 18

* Professional phase transfer applicants should contact COPHS regarding possible PX281 and PX282 equivalencies.
First Professional Year (Third Year) Credit Hours Courses (Fall Semester)
RX316, Pathophysiology 4
BI323, Immunology 2
RX361, Pharm Practice \& Health Admin 13
\#RX381, Pharmaceutics 1: Dosage Forms 4
\#RX383, Pharmacy Skills Lab $1 \quad 2$
\#RX391, Clinical Biochemistry for Health Sci 3
Total Semester Hours 18
Courses (Spring Semester)
RX362, Pharm Practice \& Health Admin 23
\#RX382, Pharmaceutics 2: Adv Dosage Forms 4
\#RX384, Pharmacy Skills Lab $2 \quad 2$
\#RX392, Prin of Med Chem \& Pharmacology 3
\#RX394, Molec Genetics, Genomics, \&
Bioinformatics
3
Core (TI, PCA, or SW) 3
Total Semester Hours 18

Second Professional Year Credit Hours
Courses (Fall Semester)
RX461, Pharm Practice \& Health Admin 3
\#RX471, Therapeutics 1
\#RX473, Integ Cases \& Prof Skills Lab $1 \quad 3$
\#RX481, Intro P'Kinetics \& Biopharmaceutics 3
\#RX491, Prin of Drug Action 13
Total Semester Hours 16
Courses (Spring Semester)
RX462, Pharm Practice \& Health Admin 43
\#RX472, Therapeutics 2 4
\#RX474, Integ Cases \& Prof Skills Lab 23
\#RX492, Prin of Drug Action 23
RX6xx, Professional Elective 2
Liberal Education Elective 3
Total Semester Hours 18
Third Professional Year Credit Hours
Courses (Fall Semester)
\#RX561, Pharm Practice \& Health Admin 53
\#RX571, Therapeutics 344
\#RX573, Integ Cases \& Prof Skills Lab 3
\#RX591, Prin of Drug Action 3
RX6xx, Professional Elective 3
Total Semester Hours 16
Courses (Spring Semester)
\#RX562, Pharm Practice \& Health Adm 63
\#RX572, Therapeutics 4 4
\#RX574, Integ Cases \& Prof Skills Lab 4
\#RX592, Prin of Drug Action 43
RX6xx, Professional Elective 3
Total Semester Hours 16
\# = Tentative Planned Course Numbers

Fourth Professional Year
RX 650-699-10 Experiential
On-Site Rotations (4 hours each)
6 Required Pharmacy Rotations

- 1 General Medicine Rotation
- 2 Acute Care Rotations
- 2 Community Pharmacy Rotations
- 1 Ambulatory Care Rotation

4 Elective Rotations (maximum of 2 non-patientcare electives)

Total credit hours required for graduation: 213

## Curriculum for First-Year Students Matriculating Before 2015

The College reserves the right to change the doctor of pharmacy curriculum at the discretion of the faculty.

| First Year-Pre-Pharmacy | Credit Hours |
| :--- | ---: |
| Courses (Fall Semester) |  |
| FYS101, First Year Seminar | 3 |
| CH105, General Chemistry (with lab) | 5 |
| MA106, Calc and Analytical Geom I | 5 |
| Core (TI, PCA, or SW)* | 3 |
| PX100, Health Sciences Seminar | 1 |
| Total Semester Hours | 17 |
| Courses (Spring Semester) |  |
| FYS102, First Year Seminar |  |
| CH106, General Chemistry (with lab) | 5 |
| BI105, Intro Cell Biology | 5 |
| Elective | 3 |
| Core (TI, PCA, or SW)* | 1 |
| PWB, Physical Well-Being | 3 |
| Total Semester Hours | 1 |
|  | 16 |

Total Semester Hours 16
Second Year-Pre-Pharmacy Credit Hours
Courses (Fall Semester)
GHS201-209, Global and Historical Studies 3
PX326, Human Anat \& Physiol $1 \quad 4$
CH351, Organic Chemistry (with lab) 5
PX325, Ethical Issues in Health Care 3
Core (TI, PCA, or SW)* 3
Total Semester Hours 18
Courses (Spring Semester)
GHS201-209, Global and Historical Studies 3
BI325, Pathogenic Microbiology 3
CH352, Organic Chemistry (with lab) 5
PX327, Human Anat \& Phys $2 \quad 4$
PX200, Intro to Pharmacy Practice 1
Total Semester Hours 16

* TI=Texts and Ideas, PCA=Perspectives in the Creative Arts, SW=Social World. Students (except previously degreed students) must take at least one core course in each of the divisions listed.
First Professional Year (Third Year) ..... Credit
Hours
Courses (Fall Semester)
RX312, Clinical Biochemistry ..... 4
RX316, Pathophysiology ..... 4
BI323, Immunology ..... 2
RX361, Pharm Practice \& Health Admin 1 ..... 3
Liberal Education Elective ..... 3
Total Semester Hours ..... 16
Courses (Spring Semester)
RX314, Pharmaceutical Biotechnology ..... 3
RX318, Intro to Principles of Drug Action ..... 5
RX362, Pharm Practice \& Health Admin 2 ..... 3
RX324, Clinical Assessment ..... 2
RX351, Basic Pharmaceutics ..... 4
Total Semester Hours ..... 17
Second Professional Year Credit Hours
Courses (Fall Semester)
RX403, Therapeutics 1 Case Studies ..... 1
RX411, Prin of Drug Action 1 ..... 4
RX413, Therapeutics 1 ..... 3
RX415, Self-care and Health Promotion 1 ..... 2
RX421, Introduction to Dosage Forms ..... 4
RX461S, Pharm Pract \& Health Admin 3 ..... 3
Total Semester Hours ..... 17
Courses (Spring Semester)
RX404, Therapeutics 2 Case Studies ..... 1
RX412, Prin of Drug Action 2 ..... 4
RX414, Therapeutics 2 ..... 3
RX416C, Self-care and Health Promotion 2 ..... 3
RX422, Advanced Dosage Forms ..... 4
RX462, Pharm Practice \& Health Admin 4 ..... 3
Total Semester Hours ..... 18
Third Professional Year Credit HoursCourses (Fall Semester)
RX432, Personnel \& Financial Mgmt ..... 3
RX503, Therapeutics 3 Case Studies ..... 1
RX511, Principles of Drug Action 3 ..... 4
RX513, Therapeutics 3 ..... 3
RX522, Pharmacokinetics and Biopharmaceutics ..... 3
RX6xx, Professional Electives ..... 3
Total Semester Hours ..... 17
Courses (Spring Semester)
RX500, Intro to Exper Rotations ..... 1
RX517W, Therapeutics \& Case Studies 4 ..... 4
RX523, Clinical Pharmacokinetics ..... 3
RX526, Pharmacy, Policy, and the Law ..... 3
Liberal Education Elective ..... 3
RX6xx, Professional Electives ..... 2
Total Semester Hours ..... 16
Fourth Professional Year Credit Hours
RX 650-699-6 Required Pharmacy Rotations 24
- 1 General Medicine Rotation- 2 Acute Care Rotations
- 2 Community Pharmacy Rotations
- 1 Ambulatory Care Rotation

4 Elective Rotations (maximum of 2 non-patientcare electives) 16
RX607, PharmD Senior Seminar I ..... 1
RX608, PharmD Senior Seminar II ..... 1
Total Hours ..... 42
Total credit hours required for graduation: 210
Doctor of Pharmacy with Pharmaceutical Sciences Research EmphasisThe elective pharmaceutical sciences researchtrack within the doctor of pharmacy curriculumwill provide students an opportunity toparticipate in pharmaceutical sciences-focusedresearch. The track comprises 12 credit hoursof pharmaceutical sciences research, at leasttwo credit hours of independent study, andtwo credit hours of pharmaceutical sciencesresearch seminar topics. The research activitywill be completed in a pharmaceutical scienceslaboratory and will be performed under thedirect supervision of a COPHS faculty member.

## Student Learning Outcomes

- Conduct a thorough literature review and write a concise summary of the literature relevant to a research project using appropriate critical-thinking and analysis skills
- Using one or two laboratory techniques, conduct laboratory experiments with sufficient proficiency so as to function with minimal supervision
- Generate, evaluate, and interpret experimental data using the principles of scientific research integrity
- Create and present an oral presentation summarizing the background, methods, results, and conclusions of the conducted research


## Curriculum

Years 1-3 as above

## Second Professional Year Credit Hours

Courses (Fall Semester)
RX403, Therapeutics 1 Case Studies 1
RX411, Prin of Drug Action 14
RX413, Therapeutics $1 \quad 3$
RX415, Self-care and Health Promotion 12
RX421, Introduction to Dosage Forms 4
RX461S, Pharm Practice \& Health Admin 3
RX601/602 Independent Study 1-2
Total Semester Hours 18-19

Courses (Spring Semester)
RX404, Therapeutics 2 Case Studies 1
RX412, Prin of Drug Action $2 \quad 4$
RX414, Therapeutics $2 \quad 3$
RX416C, Self-care and Health Promotion 23
RX422, Advanced Dosage Forms 4
RX462, Pharm Practice \& Health Admin 43
RX601, Independent Study (optional) 1
Total Semester Hours
18-19
Third Professional Year Credit Hours
Courses (Fall Semester)
RX432, Personnel \& Financial Mgmt 3
RX503, Therapeutics 3 Case Studies 1
RX511, Principles of Drug Action 34
RX513, Therapeutics 3
RX522, Pharmacokinetics and
Biopharmaceutics
RX6xx, Pharmaceutical Science Elective 2-3
RX634, Seminars in Pharm Sci 1
Total Semester Hours 17-18
Courses (Spring Semester)
RX500, Intro to Exper Rotations 1
RX517W, Therapeutics \& Case Studies $4 \quad 4$
RX526, Pharmacy, Policy, and the Law 3
RX523, Clinical Pharmacokinetics 3
Liberal Education Elective 3
RX601/602, Indep Study or Pharm Sci Electives 1-2
RX633, Current Topics in Pharm Sci $\quad 1$
Total Semester Hours 16-17
Fourth Professional Year Credit Hours
3 Research Rotations** ( 12 weeks total)-May
through July
7 Patient Care Rotations

- 1 General Medicine
- 2 Acute Care
- 1 Ambulatory Care
- 2 Community Practice
- 1Patient Care Elective

RX607, PharmD Senior Seminar I 1
RX608, PharmD Senior Seminar II 1
Total hours 42
** Prerequisite for research rotations: grade of C or better in research track basic science courses; all three research rotations are to be completed consecutively.

Total credit hours required for graduation: 212

## Doctor of Pharmacy with Patient Care Research Emphasis

The elective patient care research track within the doctor of pharmacy curriculum will provide students an opportunity to participate in patientcare focused research. The track comprises 12
credit hours of patient care research, at least two credit hours of independent study, and two credit hours of patient-care research seminar topics. The research activity will be completed in a clinical practice setting and will be performed under the direct supervision of a COPHS faculty member.

## Student Learning Outcomes

- Conduct a thorough literature review and write a concise summary of the literature relevant to a research project using appropriate critical-thinking and analysis skills
- Generate, evaluate, analyze, and interpret patient-care data using the principles of scientific research integrity
- Prepare and submit an IRB application or complete an IRB continuing review for the research project
- Use knowledge gained through independent study and research seminar courses to conduct a patient-care research study with minimal supervision
- Create and present a written manuscript and oral presentation summarizing the background, methods, results, and conclusions of the conducted research


## Curriculum

Years 1-3 as above
Second Professional Year Credit Hours
Courses (Fall Semester)
RX403, Therapeutics 1 Case Studies 1
RX411, Prin of Drug Action $1 \quad 4$
RX413, Therapeutics $1 \quad 3$
RX415, Self-care and Health Promotion 12
RX421, Introduction to Dosage Forms 4
RX461S, Pharm Practice \& Health Admin 3
RX601/602 Independent Study 1-2
Total Semester Hours 18-19
Courses (Spring Semester)
RX404, Therapeutics 2 Case Studies 1
RX412, Prin of Drug Action 244
RX414, Therapeutics $2 \quad 3$
RX416C, Self-care and Health Promotion 23
RX422, Advanced Dosage Forms 4
RX462, Pharm Practice \& Health Admin 43
Total Semester Hours 18
Third Professional Year Credit Hours
Courses (Fall Semester)
RX432, Personnel \& Financial Mgmt 3
RX503, Therapeutics 3 Case Studies 1
RX511, Principles of Drug Action 34
RX513, Therapeutics 3
RX522, Pharmacokinetics and
Biopharmaceutics

RX6xx, Professional Elective 2-3
RX634, Seminars in Pharm Sci 1
Total Semester Hours
Courses (Spring Semester)
RX500, Intro to Exper Rotations 1
RX517W, Therapeutics \& Case Studies $4 \quad 4$
RX526, Pharmacy, Policy, and the Law 3
RX523, Clinical Pharmacokinetics 3
Liberal Education Elective 3
RX6xx, Professional Elective 3
RX633, Current Topics in Pharm Sci 1
Total Semester Hours 17
Fourth Professional Year Credit Hours
Rotations
3 Patient Care Research Rotations 12
7 Patient Care Rotations

- 1 General Medicine
- 2 Acute Care
- 1 Ambulatory Care
- 2 Community Practice
- 1 Patient Care Elective

RX607, Pharm D Senior Seminar I 1
RX608, PharmD Senior Seminar II 1
Total hours
Total credit hours required for graduation: 212

## Doctor of Pharmacy with Medical Spanish Emphasis

Pharmacy students may declare the medical Spanish track upon successful completion of RX617, Advanced Medical Spanish. Students must formally register for the track by adding it as a minor using the Butler University Major/ Program Change Form. Successful completion of the medical Spanish track requires a minimum of 12 credit hours of medical Spanish coursework having the RX course designator. The 12 credit hours must include an APPE rotation with a Spanish-language focus. RX617, Advanced Medical Spanish, or permission of the instructor, is a prerequisite for the APPE rotation.

## Student Learning Outcomes

- Effectively communicate with Spanishspeaking patients to elicit an accurate medical history, including relevant drug information
- Effectively communicate in Spanish (both verbal and written) to provide requisite drug information to Spanish-speaking patients
- Effectively incorporate his or her understanding of Hispanic/Latino cultural influences into patient care activities, including therapeutic recommendations and patient counseling activities with Hispanic/Latino patients


## Curriculum

The following courses may be used to satisfy completion of the medical Spanish track:

RX615, Introduction to Medical Spanish (3 credit hours)
RX617, Advanced Medical Spanish (3 credit hours)
RX619, Medical Spanish Service Learning (3 credit hours) (The service-learning portion of this course is currently completed at Alivio Clinic or an equivalent learning experience.) RX611-68, Spanish Language Immersion trip to Mexico (100-300 level) (3 credit hours) RX6xx, APPE rotation with Spanish language emphasis

## Doctor of Pharmacy/Master of Business Administration

www.butler.edu/cophs/dual-degrees
In collaboration with the College of Business, the College of Pharmacy and Health Sciences offers the PharmD/MBA dual degree upon simultaneous completion of the respective degree requirements. See website for detailed information.

## Doctor of Pharmacy/ Master of Science in Pharmaceutical Sciences

www.butler.edu/cophs/dual-degrees
One of the factors that limit many doctor of pharmacy (PhramD)students from pursuing advanced degrees is the time commitment of eight or nine years required to complete the PharmD degree, plus an advanced pharmaceutical sciences degree. The objective of this program is to provide students with a time- and financially-efficient way to meet their professional goals. The curriculum for the PharmD/MS dual degree integrates the existing curricula of the PharmD and the MS in pharmaceutical sciences.

The PharmD degree allows students to work in many facets of the practice of pharmacy. Offering a PharmD/MS dual degree allows PharmD students to pursue additional training in the area of pharmaceutical sciences research. Having a PharmD/MS dual degree aids in the recruitment and retention of outstanding pharmacy students with a strong interest in research, and makes graduates more competitive for positions in the pharmaceutical industry or for academic positions.

## Summer Research Following P1 Year <br> Students will engage in summer research and receive independent study credits (five credits). The intention is to have students get started on their respective projects. The summer research experience will last the entire summer.

## Second Professional Year <br> Credit Hours

Courses (Fall Semester)
RX403, Therapeutics 1 Case Studies 1
RX411, Prin of Drug Action $1 \quad 4$
RX413, Therapeutics $1 \quad 3$
RX421, Introduction to Dosage Forms 4
RX415, Self-Care and Health Promotion 12
RX461S, Pharm Practice \& Health Admin 3
RX634, Seminars in Pharmaceutical Sci 1
RX 601, Independent Study 1
Total Semester Hours 19
Courses (Spring Semester)
RX404, Therapeutics 2 Case Studies 1
RX412, Prin of Drug Action 24
RX414, Therapeutics 23
RX416C, Self-Care and Health Promotion 23
RX422, Advanced Dosage Forms 4
RX462, Pharm Practice \& Health Admin 43
RX633, Current Topics in Pharm Sci 1
RX601, Independent Study 1
Total Semester Hours 20
Entry into the graduate program
Summer Research Following P2 year
RX 705/706 Research and Thesis
3

Third Professional Year Credit Hours
Courses (Fall Semester)
RX432, Personnel \& Financial Mgmt 3
RX503, Therapeutics 3 Case Studies 1
RX511, Prin of Drug Action 34
RX513, Therapeutics 3
RX522, Pharmacokinetics and
Biopharmaceutics 3
RX713, Biostatistics and Research Design 3
RX781, Seminars in Pharmaceutical Sci 1
RX783, Intro Pharmaceutical Research 2
Total Semester Hours 20
Courses (Spring Semester)
RX500, Intro Experiential Rotations 1
RX517\% W, Therapeutics \& Case Studies $4 \quad 4$
RX523, Clinical Pharmacokinetics 3
RX526, Pharmacy, Policy, and the Law 3
Liberal Education or Graduate-Level Electives 5
RX701, Research and Thesis 1
RX785, Biopharmaceutical Analysis 3
Total Semester Hours 20
Fourth Professional Year Credit Hours
3 Graduate-Level Research Rotations 12

7 Patient Care Rotations

- 1 General Medicine Rotation
- 2 Acute Care Rotations
- 2 Community Pharmacy Rotations
- 1 Ambulatory Care Rotation
- 1 Patient Care Elective Rotation

RX607, PharmD Senior Seminar I
RX608, PharmD Senior Seminar II 1
RX782, Ethics in Research 1
RX780, Current Topics 1
Total Semester Hours 44
Completed thesis to be submitted May of graduating year.

Total credit hours required for graduation: 232

## Pharmacy Licensure and Experience Requirements

To become a licensed pharmacist in Indiana, a person must obtain a passing grade on the North American Pharmacy Licensure Examination (NAPLEX) or, with Pharmacy Board approval, reciprocate an existing license that was obtained through examination in another state. To qualify for the NAPLEX examination, a person must be a graduate of an ACPE-accredited pharmacy program, be at least 18 years of age, and be of good moral character. Persons convicted of a felony may not be eligible for licensure in Indiana. In order to participate in the experiential portion of the curriculum, students are required to submit the results of a background check for felony and/ or misdemeanor convictions conducted by an independent agency. Students may be restricted from participating at certain experiential sites as a result of this information.

## Master of Science in Pharmaceutical Sciences

www.butler.edu/cophs/ms-pharmaceuticalsciences

The College of Pharmacy and Health Sciences offers the master of science in pharmaceutical sciences in five areas of emphasis: pharmaceutics, pharmacology, medicinal chemistry, pharmacy administration, and clinical sciences. The mission of the program is to educate students for pursuing research careers in the pharmaceutical/biomedical industry or in academia, and/or in obtaining advanced degrees.

## Admission

Applicants are required to possess a basic degree in chemical, biological, or pharmaceutical sciences, or other appropriate degrees. Following admission, any applicant identified to be deficient by the Research and Graduate Review

Committee with a bachelor's-level background in chemical or biological sciences will be required to take courses in the respective areas in addition to the MS in pharmaceutical sciences requirements.

## Requirements

- Bachelor's degree in appropriate discipline with a minimum 3.0 GPA or equivalent (official transcript required).
- Aptitude tests (official scores must be received from Educational Testing Services).
- Test of English as a Foreign Language (TOEFL) (not required of anyone with a U.S. bachelor's degree). A TOEFL score of 213 (computer-based test), or 79 (internetbased test) meets Butler University's English language proficiency requirements. Butler's TOEFL school code is 1073 .
- Graduate Record Examination (GRE) score. The minimum GRE cutoff score for admission for each year will be determined by the Research and Graduate Review Committee.
- Brief résumé.
- Personal statement indicating a specific area of research interest and career goals.
- Three letters of recommendation evaluating the applicant's ability to complete the program successfully.
- International students must meet the financial independence criteria established by the University.
Each applicant is evaluated based on a comprehensive review of undergraduate transcripts, statement of purpose, letters of recommendation, previous research experience, and GRE score. International applicants will be interviewed over the telephone, and domestic candidates may be invited for a campus interview. Quality publications or other scholarly experience, although not required, serve to strengthen the application. For international students, admission is valid subject to obtaining appropriate visa credentials. Meeting minimum admission requirements does not ensure admission.

The admission process follows two steps: preliminary inquiry and formal application with required nonrefundable fees. The response to the preliminary inquiry will be issued by either the Butler University Office of Admission or the Department of Pharmaceutical Sciences; however, the formal application can only be made to the Office of Admission. After initial screening, the Office of Admission will forward the eligible applications to the Department of

Pharmaceutical Sciences for the decision. The director of the COPHS graduate program, in discussion with the interested research faculty, will send the recommendations to the Office of Admission.

## Student Status

Full-time: A full-time student must take a minimum of nine and a maximum of 12 credits of graduate-eligible courses per semester. If a graduate student is registered only for research and thesis courses ( $\mathrm{RX}^{\text {r }}$ 01-RX706) that apply toward the completion of the research projects, the student is considered to be enrolled full time, although the number of credits enrolled may be below the normal full-time course load. A Reduced Course Load authorization form must be submitted by F-1 graduate students under any circumstance when such students are taking fewer than nine credits. A maximum of four years is allowed to complete all the degree requirements.

Part-time: Working professionals may pursue the MS in pharmaceutical sciences on a parttime basis. The conditions are:

- Applicants must comply with all admission requirements.
- Professionals admitted into the program must take a minimum of three credits per semester and complete all degree requirements within a maximum of seven years, with the didactic coursework being completed within five years of entry into the program.
- Research toward the MS thesis must be independent of research projects ongoing at the student's place of employment and must be publishable under an affiliation with Butler University.
- Research must be conducted during the course of the program.
- Part-time students will not be eligible for any financial assistance from Butler University.
- The research advisor must be a full-time COPHS faculty member.


## Financial Assistance

The College of Pharmacy and Health Sciences does not normally provide scholarships or tuition waivers for MS students. Depending on the availability of external funding, a limited number of partial-tuition stipends in the form of graduate assistantships will be provided to qualified, fulltime graduate students conducting research in COPHS laboratories. Graduate assistants will be required to work up to 20 hours per week on campus on projects assigned by the Director
of the Graduate Program, subject to valid immigration status. A full-time student must maintain a minimum cumulative GPA of 3.0 and show satisfactory progress in his or her research project to qualify for financial assistance. Tuition stipends will be competitively awarded every year, with previously awarded students given preference. Graduate assistantships will be limited to a two-year period for each recipient. Each student is required to pay regular tuition or discounted tuition and maintain approved health insurance during the course of study. There is no assurance of financial assistance for any admitted applicant.

The freedom to leave the program, for any reason and at any time, will be available to all students; however, untimely withdrawal from the program causes financial and emotional distress to the University community. Therefore, to protect the University's investment, it is the policy that any student accepting the tuition stipend as a graduate assistant is expected to complete the MS program. Any such student leaving the program prior to completion and without compelling reasons will be required to pay back the full amount of the stipend that has been awarded by the University, with the only exception being compelling medical reasons.

## Curriculum

The master's program is an intensive curriculum of didactic courses and thesis research. Successful completion of the MS in pharmaceutical sciences degree will require at least 30 semester credit hours with not fewer than six hours of research credit. The findings of the research must be compiled into a thesis and defended with an oral presentation and an oral examination by the thesis committee. Coursework is as follows:

## Required Core Courses for Emphasis Areas of Pharmaceutics, Pharmacology, and Medicinal Chemistry (total 12 credits)

RX780, Current Topics in Pharm Science* 1 (2 semesters)<br>RXr781, Seminars in Pharm Sci* 1<br>(2 semesters)<br>RX782, Ethics in Research<br>RX783, Introduction to Pharm Research 2<br>RX784, Exp Design \& Data Analysis<br>2<br>RX785, Biopharmaceutical Analysis

her master's program, one of which may be the thesis defense. Students must enroll in RX781 during the semester in which their seminar presentation will take place, and $R X 780$ during the remaining semesters. Regardless of the course in which the student is enrolled, all graduate students are required to attend all graduate seminars presented in COPHS.

## Elective Courses (minimum six credits)

RX630, Advanced Toxicology<br>RX632, Drug Abuse-Pharmacol, Chem, and Soc Aspects<br>RX'729, Cancer Pharmacology 3<br>RX'787, Industrial Pharm: Pref/Prod Dev 3<br>RX'786, Advanced Drug Delivery 3<br>RX788, Molecular Biology/Pharmacology 3

Additional elective courses will be included as per the recommendation of the Research and Graduate Review Committee.

Deficiencies in curricular background may be addressed by requiring appropriate undergraduate courses as determined by the thesis committee and/or director of the graduate program. Additional coursework and/ or research credits to fulfill the requirements of the MS degree will be determined by the thesis committee.

## Academic Progress

The Research and Graduate Review Committee will evaluate the academic progress of MS students. Master's students must maintain a minimum cumulative GPA of 3.0 for satisfactory continuation of study. Students with a cumulative GPA below 3.0 will be placed on probation. Any appeal for non-research course grade disputes and/or disciplinary action should be submitted to the Research and Graduate Review Committee. A decision can be appealed to the COPHS Academic and Professional Affairs Committee. A decision of the thesis committee on the thesis and the thesis defense will be considered final.

A grade of incomplete will be assigned for Research and Thesis (RX'701-RX706) at the end of the respective semester until the thesis defense is complete, as it is difficult to justify the research outcomes based on the student's performance for a particular semester.

## Research Proposal

A research proposal summarizing the goals, objectives, and timeline of the research project must be submitted within one year of admission. The proposal must be approved by the thesis committee and the director of the graduate program.

## Classified or Proprietary Study

Each MS student is required to submit a thesis and present an open seminar on his or her research findings. In addition, the student is required to disseminate the research findings at national meetings and submit manuscript(s) for publication. Therefore, in order to protect the student's interest, it is not advisable to involve him or her in any classified or proprietary research.

## MS Thesis

Each student is required to submit a thesis prepared on the research findings. The thesis should be compiled following the format provided.

## Publication

The research project should aim at publication of the findings in peer-reviewed research journals and submission of the work as preliminary data for extramural funding by the research advisor.

## Thesis Defense

The student will present an open seminar and appear for an oral examination by the thesis committee. The committee will recommend the graduation of the student to the faculty and to the dean of COPHS subject to satisfactory completion of the didactic courses and other requirements. A student failing in the open seminar or the oral examination may appear for a second opportunity to complete the specific part of the thesis defense.

## Student Ownership of Intellectual Property

For students who help create a copyrightable work or patentable invention with one or more University employees (faculty and/or staff), the following guidelines from the University's Intellectual Property Manual may help determine when the University has certain rights in a work or invention the student has been involved in producing while at Butler. If the work or invention was created or conceived with the "substantial use" of University resources, then the work or invention may be subject to University ownership and control, with the student and/or faculty member having certain rights as described in the University Intellectual Property Policy.

For example, rights in a patentable invention arising from a student's participation in a faculty research project that makes "substantial use" of University resources will be owned by the University, with any income from the patents
being shared between the University, faculty, and student as set forth in the University Intellectual Property Policy. The policy thereby establishes the means and incentive for commercialization of the invention. The rights vest with the University. However, the ownership of copyrightable works that are not produced at the direction of the University, even those created with "substantial use" of University resources, will generally continue to be owned by the creators of the work with some rights being reserved for the University.

While the above is a general overview with some examples, do not hesitate to ask a faculty member for guidance, or refer to the Butler University Intellectual Property Manual, at www.butler. edu/birs, for specific guidelines. Additionally, the Butler Institute for Research and Scholarship is a valuable resource to help with questions related to these matters, and can help ensure that any intellectual property is properly protected and given the best opportunity to be commercialized.

## Master of Physician Assistant Studies

www.butler.edu/physician-assistant
The College of Pharmacy and Health Sciences offers a master of physician assistant studies (MPAS) degree for those completing the requirements of the physician assistant (PA) program. Physician assistants are wellrecognized and highly sought-after members of the health care team. Working interdependently with physicians, PAs provide diagnostic and therapeutic patient care in virtually all medical specialties and settings. They take patient histories, perform physical examinations, order laboratory and diagnostic studies, develop patient treatment plans, and provide patient education. In all 50 states, PAs have the authority to write prescriptions.

PAs practice in all specialty fields; 33 percent of all PAs provide primary care services, especially in family and general internal medicine. Their job descriptions are as diverse as those of their supervising physicians, and also may include nonclinical roles such as medical education, health administration, and research. While these positions do not involve patient care, they depend on a strong clinical knowledge base.

The MPAS curriculum is 24 consecutive months designed to provide an understanding of the knowledge, skills, and attitudes used as a physician assistant. The first 12 months of the MPAS program are devoted to didactic studies in the basic medical, clinical, and behavioral
sciences, and the remaining 12 months are largely focused on the clinical experiences in primary care, medical, and surgical specialties.

The didactic curriculum is integrated to introduce the student to medical sciences as they relate to specific organ systems and clinical problems. Learning strategies include the traditional lecture format and basic science laboratory, hybrid, small-group tutorials, and patient case discussions. Regular patient contact is an important part of the first-year curriculum. Students begin to see patients during the didactic year. Standardized patient evaluations, through simulation and actors, are also a part of the didactic curriculum. As part of the clinical curriculum, students participate in rotations and didactic coursework. Students are required to take core rotations in emergency medicine, family medicine, general surgery, internal medicine, mental health, pediatrics, and women's health. Students also choose an elective rotation. In the clinical year, students also participate in Core Topics, Issues of Professional Practice, and the Summative Practicum.

## Goals/Student Learning Outcomes

- Select highly qualified applicants through the admission process, who will successfully complete our physician assistant program
- Provide a quality educational experience that provides students with the knowledge, skills, and attitudes for entry-level practice as physician assistants
- Provide an educational experience that prepares our graduates to provide primary care in a wide variety of clinical settings
- Help our students develop a sensitivity that will allow them to effectively work with patients who are different than themselves
- Maintain our status as the longest accredited PA program in the state of Indiana
- Promote professionalism, service, and leadership of students and faculty


## Eligibility and Admission

There are two admission pathways to gain entry to the PA program: the direct admit pathway and the standard admission pathway. After reading the information regarding the admission process, contact PAadmissions@butler.edu for any additional questions.

## Direct Admit Pathway

The direct admit pathway, designed for incoming University first-year students who wish to become physician assistants, is a competitive process. Students will complete a bachelor of
science (four-year) degree in health sciences (BSHS). This degree is designed to meet all PA program prerequisites and provide a strong foundation for a career in a health profession. Students selected in this pathway who successfully complete all requirements will be offered a seat in the PA program. These students will not be required to complete the standard admissions process (AE or NAE evaluations).

Students within the direct admit pathway are required to fulfill all criteria listed below to maintain eligibility for direct admission. A student who fails to meet any of these requirements will lose direct-admit status, but will be able to apply to the PA program using the standard admission process. The requirements are:

- Maintain a cumulative GPA of 3.4 at Butler University by January 15 of year of matriculation
- Earn no grade of C- or less in any course on first attempt
- Complete the BSHS degree by the end of the fifth academic year from start of matriculation
- Maintain full-time enrollment during fall and spring semesters
- Remain free of conduct code violations (per COPHS and Butler University policies)
Interested Applicants. To be admitted via the direct admit pathway, applicants will be required to meet the minimum entry requirements for Butler University and the College of Pharmacy and Health Sciences with regard to GPA and standardized test scores (SAT/ACT). The minimum entry requirements are 3.3 GPA, 1200 SAT, and/or 26 ACT. However, the average GPA for those actually being accepted is 4.18 on a 4.0 scale; the mean ACT is 31.5 and the mean SAT is 1274 . The Office of Admission also considers a student's nonacademic involvement (e.g., early application, extracurricular involvement, service, discernment, personal statement, etc.). The number of students admitted to this program will be approximately 30 per year, and offers of admission will be based on a competitive process. Students should apply to Butler University as a senior in high school and identify that they are interested in applying to the PA program as a direct admit student. It is strongly recommended that applications be submitted as early in the admissions process as possible, as offers are extended in a modified rolling admission process. Questions should be directed to Aimee RustScheuermann at arust@butler.edu in the Office of Admission.


## Standard Admission Pathway

Students not meeting the direct admit pathway criteria may apply to the standard admission pathway. Admission to the Butler University physician assistant program requires online application through the Central Application Service for Physician Assistants (CASPA), at portal.caspaonline.org. The application is available from April 17. In addition to completing and submitting the web-based application by August 1, candidates must also submit:

- CASPA application fee.
- Official transcripts from all colleges/ universities (including Butler University) and other post-secondary institutions attended. A baccalaureate degree from an accredited institution is required. College seniors are eligible to apply, provided they receive the baccalaureate degree prior to the May starting date for the PA program.
- Graduate Record Exam (GRE) scores (general test) submitted no later than August 1 for the year prior to matriculation (Butler University's GRE Code: 1073). No other test scores are accepted in lieu of the GRE. Scores must be sent directly from Educational Testing Services to Butler University.

The standard admission pathway comprises an academic evaluation and a nonacademic evaluation, described below. Note: The PA program has the right to change interview processes as it deems appropriate.

Academic Evaluation. The academic evaluation (AE) is determined through a combination of collegiate GPA based on any college course at the 200 level or above and the composite GRE score. These items are weighted, and candidates are rank-ordered based on these markers. The top AE candidates are selected for an on-campus nonacademic evaluation. Rankings from the AE will be zeroed, and candidates moving into the next phase will be considered equal at the start of the nonacademic evaluation.

The minimum eligible overall GPA for coursework is 3.4. The median GPA for those students matriculating each year is dependent on the cohort; however, in 2014, it was 3.77. The PA program currently does not use a minimum GRE score; however, the current mean score is 308 . The GRE score must be provided to CASPA at the time of application.

Nonacademic Evaluation. Multiple miniinterviews are used in the nonacademic evaluation (NAE). Candidates complete a series of task-oriented stations that are evaluated by PA program faculty, alumni, active preceptors,
and/or community-based PAs. The stations are designed to demonstrate characteristics necessary to be successful within the program and/or discernment appropriate for the PA profession.

## Special Considerations

- The Butler University PA program recognizes the special heritage to our profession provided by the U.S. Armed Services. A minimum of one seat in the program will be "reserved" for either a veteran or active military member (Active Duty, Reserve, and National Guard). The military candidate must meet all minimum AE criteria and must complete the NAE.
- While the program does not require health care experience for consideration of admission, it is recommended to help with the discernment process.
- International students are important to the fabric of the Butler student community; however, no special consideration is granted for an international student. If you are a student planning to study in the United States under an F-1 or J-1 visa, we hope you will consider Butler University. International students must have a TOEFL score and evaluation of any international transcripts. Please note that this takes additional time, and that deadlines will not be extended for these purposes. A TOEFL score of 550 (paper-based test), 213 (computer-based test), or '79 (internetbased test) meets Butler University's English language proficiency requirements. Butler's TOEFL school code is 1073. Contact Emily Robison at erobison@ butler.edu for additional guidance and/or questions.

Offers of Admission. After the NAE process, selected candidates will be extended a conditional offer of admission into the Butler University PA program. The candidate will have one week from the date of the offer to either accept or reject the seat. The candidate must meet all University and PA program prerequisites and requirements. Upon acceptance of the offer, the candidate will have one additional week to provide a nonrefundable \$1,000 deposit to secure admission.

## Background Check

Candidates offered admission to the Butler physician assistant program will undergo a criminal background check during orientation and at least once during enrollment. Continuation within the program is dependent on an acceptable background check that
would allow completion of the program and credentialing requirements.

## Application Timeline

The PA program has the right to change timelines as it deems appropriate; however, the following timeline should provide guidance to interested applicants. Contact PAadmissions@butler.edu for additional admission questions.

April 17: CASPA application available
August 1: All material must be received and verified by CASPA
August 1-September 1: Academic evaluation of candidates
Mid-October (generally): Nonacademic evaluations
Following NAE: Offers of admission to top candidates extended until class filled

## Prerequisites

Students must complete the following course prerequisites with a grade of C or better to be considered for admission to the PA program.
Earned Advanced Placement exam scores of 4 or 5 may substitute for prerequisite courses. Scores less than 4 are not acceptable. Appropriate earned AP scores may replace no more than two prerequisite courses. Applicants should submit copies of exam scores to PAadmissions@butler. edu.

## Chemistry

- Inorganic (general) with lab (2 semesters)
- Organic with lab (1 semester)
- Additional chemistry course at or above 300 level (1 semester)


## Biology

- Any biology-related course at or above 200 level ( 5 semesters). Examples might include but are not limited to anatomy, physiology, kinesiology, genetics, microbiology, immunology, physics, bioengineering, biomedical science, exercise science, neuroscience, zoology, and nutrition.


## Statistics/Biostatistics

- Any course (1 semester)


## Social Sciences

- Psychology or sociology courses or combination (2 semesters)

For information about transfer credits and course equivalencies, contact the PA program at PAadmissions@butler.edu.

## Degree Requirements

Students are required to complete 108 semester hours to be awarded the MPAS degree. The proper sequence of courses must be maintained.

The student is responsible for making certain that he or she has completed all required courses in the curriculum. The curriculum is offered in two sections (didactic and clinical years) that are individually indivisible and to be taken in an uninterrupted sequence over two years. Therefore, it is expected that students first matriculated into the AP- or MPAS- didactic year will maintain simultaneous enrollment in all courses offered as a component of each year's curriculum. Students may not progress to the coursework in the next year of the program until they have successfully completed all courses within the current year. PA students must earn a grade of B- or better in all courses. PA students may be dismissed from the College following failure of any two AP- or MPAS-designated courses, in addition to not adhering to the policies listed in the COPHS Student Handbook.

A PA student, after presenting a written request to the dean of the College (with a copy to the PA program director), may be granted an official leave of absence for personal, medical, or academic reasons for a period not to exceed one calendar year. If the leave of absence is approved, the dean provides written notification including applicable beginning and ending dates to the student, the University registrar, and the director of the Office of Financial Aid. The student must notify the program director in writing of his or her wish to return to the program or to extend the personal leave at least 60 calendar days prior to the anticipated date of reentry. The student desiring an extension beyond one calendar year may be required to apply for readmission to the program. When a leave of absence is taken, the program director may require the student to repeat some or all of the courses completed prior to the leave of absence. In all cases of leave of absence, the student is required to complete the full curriculum to be eligible to earn the BS and/ or MPAS degree.

Any student who is absent from clinical rotations for three months or more must perform and pass an observed history and physical examination (on a real or simulated patient) before being allowed to return to clinical rotations. The student will have two opportunities, evenly spaced over a two-month period of time, to pass this assessment. If unsuccessful, the student will be dismissed from the College.

For purposes of deferring repayment of student loans during a school-approved leave of absence, federal regulations limit the leave to six months. All questions regarding financial aid or student loans should be directed to the Office of Financial Aid.

## Curriculum

The program reserves the right to change the curriculum at the discretion of the faculty. A student must successfully complete all courses in each didactic semester before being allowed to advance to the next semester. Only students admitted to and currently enrolled in the PA program of the College of Pharmacy and Health Sciences may register for courses offered as part of the curriculum numbered with AP or MPAS designators. Such students also must maintain their eligibility to continue in the PA program.

## AP Curriculum-Bachelor of Science in Health Science Curriculum

Note: This curriculum is being phased out over 2015-2017 and will be replaced with a graduateonly MPAS curriculum below.

## Didactic Coursework

## First Year

Credit Hours
Fall Semester
AP301, Physiology for PAs
5
AP350, Clinical Quality Improvement 1
3
AP307, Pathophysiology 1
AP308, Pharmacology for PAs 1
AP313, Social and Behavioral Medicine
Spring Semester
AP302, Anatomy for PAs
4
AP309, Pathophysiology 2
4
AP310, Pharmacology 2
3
AP351, Clinical Quality Improvement 2

## Second Year <br> Credit Hours

Fall Semester
AP402, Health Care Communications $1 \quad 1$
AP404, History and Physical Assessment 13
AP406, Diagnostic and Therapeutic Procedures 13
AP413, Therapeutics for PAs 1
AP421, Clinical Medicine for PAs 1
AP408, Clinical Integration
AP410, ECG Interpretation
Spring Semester
AP403, Health Care Communication 2
AP405, History and Physical Assessment 23
AP414, Therapeutics for PAs 2 5
AP417,Diagnostic and Therapeutic Procedures 23
AP422, Clinical Medicine for PAs $2 \quad 6$
AP409, Clinical Integration 2

## MPAS Curriculum-Didactic Coursework

First Year (program initiated in May 2015)
Summer Semester
MPAS504, Human Anatomy for PAs (with lab) 4
MPAS506, Physiology for PAs
MPAS508, 12-Lead ECG Interpretation 1

MPAS512, Interpretation of Imaging
Studies for PAs2
MPAS514, Pharmacology for PAs ..... 4
Fall Semester
MPAS516, History and Physical Exam (with lab) 1 for PAs ..... 3
MPAS520, Clinical Medicine and Therapeutics for PAs 1 ..... 7
MPAS524, Clinical Procedures (with lab) 1 ..... 2
MPAS528, Health Promotion, Disease
Prevention, and Nutrition ..... 2
MPAS530, Social and Behavioral Medicine ..... 3
MPAS532, Pediatric Medicine ..... 1
MPAS534, Health Care Communications 1 ..... 1
Spring Semester
MPAS518, History and Physical Exam(with lab) 23
MPAS522, Clinical Medicine and Therapeutics for PAs 2 ..... 7
MPAS526, Clinical Procedures (with lab) 2 ..... 2
MPAS550, Orthopedics and Rheumatology ..... 1
MPAS552, Women's Health ..... 2
MPAS538, Medical Literature
Interpretation and Evidence-Based Medicine ..... 2
MPAS536, Health Care Communications 2 ..... 1
Eligibility for Clinical Year
To qualify for clinical rotations, studentsmust have successfully completed all didacticcoursework, prerequisite coursework, andother requirements (e.g., physical examination,immunity status, BLS, ACLS) before beginningclinical rotations.

## Clinical Year

The clinical phase of the program is largely composed of four- or eight-week core rotations. Core rotations include behavioral medicine, emergency medicine, family medicine, internal medicine, general surgery, and women's health. Pediatrics, also a core rotation, is three weeks in length. At the conclusion of each core rotation, students will be required to take an examination. There is not an associated exam with the elective rotation. There is one four-week limited-elective rotation. All questions regarding rotations for PA students should be directed to the Office of Experiential Education.

## Advising and Registration

Students must participate in early advising for clinical rotations. Further, students must be officially registered for all clinical rotations/ experiences for the professional liability insurance policy carried by the University to cover them in the clinical portion of the curriculum. Students participating on rotations/ experiences without registering will be referred
to the Academic and Professional Affairs Committee for appropriate action (e.g., warning, probation, suspension, dismissal).

## End-of-Rotation Examinations

The Butler University PA program faculty utilizes the Physician Assistant Education Association (PAEA) written End of Rotation (EOR) Examinations and endorses the objectives utilized to develop these exams as imperative to enter into practice as a physician assistant. Students will take an examination at the end of each supervised clinical practice experience.

In order to be permitted to sit for the required EOR exam, each student must:

1. Successfully complete the required rotation as scheduled
2. Complete patient encounter logs using E -Value by noon on the day preceding the EOR meeting
3. Complete the E-Value student evaluation of the preceptor by noon on the day preceding the EOR
4. Receive approval from the director of experiential education and/or program director

Failure to meet the above requirements may result in a report to the Academic and Professional Affairs Committee for appropriate action (e.g., warning, probation, suspension, dismissal).

## Clinical Year Coursework

All rotations must be completed. Individual student rotation schedules will be determined by the director of experiential education and are subject to change at any time. Rotations are assigned within a designated radius of Butler University. Students are responsible for providing their own transportation to these sites. Topic lists are provided to direct student learning and should be used in combination with the objectives of the end-of-rotation examinations.
MPAS626, Issues of Professional Practice ..... 2
MPAS630, Pediatric Rotation ..... 3
MPAS634, Elective Rotation (Pass/Fail) ..... 4
MPAS636, Summative Practicum (Pass/Fail) ..... 1
MPAS648, Family Medicine Rotation 1 ..... 4
MPAS650, Internal Medicine 1 Rotation ..... 4
MPAS652, Internal Medicine 2 Rotation ..... 4
MPAS654, Community Mental Health Rotation 4
MPAS656, Women's Health Rotation ..... 4
MPAS658, Emergency Medicine 1 Rotation ..... 4
MPAS660, Emergency Medicine 2 Rotation ..... 4
MPAS662, Family Medicine 2 Rotation ..... 4
MPAS664, InterprofessionalExperience (Pass/Fail)1
MPAS670, General Surgery Rotation ..... 4

## MPAS678, Core Topics 1 (Pass/Fail) <br> Total program curriculum: 108 credit hours <br> Licensure and Experience Requirements

Physician assistants who graduate from an accredited program must pass the Physician Assistant National Certifying Exam (PANCE), administered by the National Commission on Certification of Physician Assistants, and receive licensure from the state where they wish to practice.

## Bachelor of Science in Health Sciences

Health Sciences Major

The undergraduate health sciences program (bachelor of science in health sciences, BSHS) blends basic sciences, health sciences, and health care-related courses to form an excellent foundation for students pursuing graduate programs in the health care field or non-licensed health-related careers in which an entry-level bachelor's degree is appropriate.

Beginning in 2014, incoming first-year students who qualify for the master of physician assistant studies (MPAS) direct admission program are health science majors in their undergraduate phase and must fulfill the following criteria to be eligible for direct admission into the MPAS program (see the Direct Admit Pathway information in the Eligibility and Admission Requirements portion of the Master of Physician Assistant Studies section above).

## Student Learning Outcomes

- Demonstrate ethical, professional, collaborative, and culturally sensitive behaviors within the health care setting
- Integrate knowledge and skills from natural, formal, and social sciences with health care fundamentals to solve complex problems and optimize health outcomes
- Locate, critically analyze, and apply data in a manner that supports evidence-based health care
- Communicate effectively with laypersons and health care professionals on a variety of health-related topics


## Curricular Requirements

In addition to Butler's Core Curriculum, health sciences majors earn more than 40 hours of science coursework, more than 30 hours of health care-related coursework, and at least 12 hours of elective health sciences coursework. A minimum of 120 credit hours is required for graduation. The following science courses are required, or may be used to meet science requirements: CH105/106 (or CH10r), CH351/352, BI210, BI220, BI325, PX334, PX335, PH107, BI230, BI323, and RX316. Required health care courses include BSHS110, BSHS215, BSHS225, BSHS230, BSHS340, BSHS360, BSHS450, BSHS460, BSHS470, and RX647. A wide variety of courses may be used to fulfill elective course requirements. See www.butler. edu/cophs for the most detailed and up-to-date curricular information, including the extensive list of potential elective courses.

## Health Care and Business Major

(First Class Beginning Fall 2016)
The new undergraduate health care and business program is a collaboration between the College of Pharmacy and Health Sciences and the College of Business. This program is designed for students who are pursuing a career in the business of health care, as opposed to the clinical provision of health care, for which a bachelor's degree is the appropriate entry point into the workforce; or students who plan to pursue graduate programs related to health care and business.

## Student Learning Outcomes

- Demonstrate ethical, professional, collaborative, and culturally sensitive behavior in business and health care settings
- Integrate natural and social sciences and health care fundamentals with business principles
- Locate, critically analyze, and apply data in a manner that supports evidence-based health care
- Communicate effectively with laypersons and health care professionals on healthand business-related topics


## Curricular Requirements

In addition to Butler's Core Curriculum, health care and business majors earn more than 45 credit hours of health care/health science courses, more than 30 credit hours of business courses, and at least 12 credit hours of elective coursework. A minimum of 120 credit hours
is necessary for graduation. Required courses include BSHS 110, BSHS 215, BSHS 225, BSHS 230, BSHS 232, BSHS 340, BSHS 360, BSHS 450, BSHS 460, CH 105/106 (or CH107), BI105, BI325, PX326, PX327, MA125, MS100, AC203, AC204, EC231, EC346, EI201, MS264, MS265, MS377, MK380, and MK386. A wide variety of courses may be used to fulfill elective course requirements. Qualified students may be eligible for accelerated graduate programs. See www. butler.edu/cophs for the most complete and up-to-date curricular information and graduate program partnerships.

## Core Courses Offered by Pharmacy

SW261S-RX, Health Disparities: This course will allow undergraduate students to examine current population-level health issues and the unequal distribution of health through an introduction to the broad and exciting field of public health and health equity. The course will explore the varying historical, environmental, social, cultural, and political determinants of the health of the people of the United States, emphasizing health of vulnerable populations. It will provide students with a unique opportunity to think critically about ways of identifying and addressing current health issues and the unequal distribution of health status throughout the population. In this interactive course, students are encouraged to explore public health issues in their area of study and examine solutions for the same. (U)(3) Annually, term varies.

TI262S, Self and Service: In this course, students will read texts that explore the self and the concept of service. Readings will examine the world of children and senior citizens. Sample authors include Alexie, Updike, and Junot Diaz. Students will create oral and written histories of themselves and a person (child or senior) they serve. This 3-credit-hour course is designated service learning (at least 20 hours service required) with a child or senior. (U)(3) Fall.

## Pre-Professional Health Sciences Courses

PX100, Health Sciences Seminar: The purpose of the course is to get students involved early with the College and their major and to develop success skills that are applicable to all future learning experiences. Emphasis is placed on use of campus resources, developing communication skills, and examining career choices and options. Requisite: This course is required of all COPHS students without a previous degree. Open to COPHS students only. (U)(1) Fall.

PX200, Introduction to Professional Practice:
This course is designed to develop and enhance patient communication skills, professional attitudes, and independent learning. The course brings awareness of socioeconomic and cultural diversity and how it affects health outcomes. (U) (1) Fall and spring.

PX206, Poverty and Modern Day Slavery-A Local and Global Crisis: This course will develop awareness and understanding of the modern day slave trade. We will cover related factors such as poverty, education, health care, and economic opportunity. Students will partner with local organizations that are working in areas of poverty serving the poor and marginalized in our society. (U)(2) Fall.

PX281, Intro to Pharmaceutical Sciences 1: An introductory course sequence designed to prepare students for upper-level pharmaceutical sciences coursework. First-semester topics include radioactivity, fluid dynamics, thermodynamics, spectroscopy, solution chemistry, graphing, conversions, and basic genetics. Prerequisites: CH106 and BI105 (or equivalents). (U)(3) Fall.

PX282, Intro to Pharmaceutical Sciences 2: An introductory course sequence designed to prepare students for upper-level pharmaceutical sciences coursework. Second-semester topics include basic statistical calculations, solution chemistry, functional groups in drugs and biomolecules, receptor structure and function, drug transporters, signal transduction, and neurotransmission. Prerequisite: PX281 (U)(3) Spring.

PX325, Ethical Issues in Health Care: This course will provide students with an awareness of current ethics issues in health care, and an appreciation of the gravity of these issues. The associated body of knowledge will be discussed, and students will formally devise their own ethical position. Prerequisites: Pre-pharmacy 2 (no first-year students), pharmacy majors, STS majors, ethics minors, or permission of the instructor. (U)(3) Fall and spring.

## PX326, Human Anatomy and Physiology

1: A two-semester lecture course without lab designed for pre-professional health students. This course begins with basic concepts and progresses through the organ systems with emphasis placed on those aspects of human anatomy and physiology that are most important to an understanding of homeostasis, pathophysiology, and disease. Prerequisite: Sophomore standing or permission. (U)(4) Fall.

PX327, Human Anatomy and Physiology
2: A two-semester lecture course without lab designed for pre-professional health students. This course begins with basic concepts and progresses through the organ systems with emphasis placed on those aspects of human anatomy and physiology that are most important to an understanding of homeostasis, pathophysiology, and disease. Prerequisite: Sophomore standing or permission. (U)(4) Spring.

PX334, Human Anatomy and Physiology 1:
A two-semester lecture and laboratory course designed for pre-professional health students. This course begins with basic concepts and progresses through the organ systems with emphasis placed on those aspects of human anatomy and physiology that are most important to an understanding of homeostasis, pathophysiology, and disease. Prerequisite: Sophomore standing or permission. (U)(5) Fall.

PX335, Human Anatomy and Physiology 2:
A two-semester lecture and laboratory course designed for pre-professional health students. This course begins with basic concepts and progresses through the organ systems with emphasis placed on those aspects of human anatomy and physiology that are most important to an understanding of homeostasis, pathophysiology, and disease. Prerequisite: Sophomore standing or permission. (U)(5) Spring.

PX340, Public Health: Law and Policy: Familiarize students with the legal and policy issues involved in public health. The United States has many pressing public health issues. Students will be exposed to major public health challenges and explore the laws that surround public health issues; and understand how to balance public needs versus individual private rights. Prerequisite: Junior standing. (2)(U) Spring.

## Bachelor of Science in Health Sciences Courses

BSHS110, Introduction to Health Care: This introductory-level course will help prepare students for a career in health care. It will formally introduce critical-thinking and problem-solving methods necessary for future health care professionals, foster behaviors necessary for success, introduce the language of health care, discuss major forces in health care today, and explore a variety of health care professions. (U)(2) Fall and spring.

## BSHS210, Topics in Health and Wellness:

This course will provide an in-depth exploration of key health-related topics of particular importance to college-age individuals. Topics covered in this class include nutrition, exercise, alcohol, infectious diseases, drug use/misuse, over-the-counter medications and supplements, personal safety, and chronic disease prevention. This class is designed for first-year students and sophomore students. (U)(3) Fall.

BSHS215, Medical Terminology: A onesemester hybrid online/classroom course designed for any student interested in learning the language of medical sciences. It is designed specifically for pre-professional health students to improve medical vocabulary, assist in future advanced science courses, and help prepare for professional school admission tests. (U)(3) Fall and spring.

## BSHS225, Interprofessional Health

Education: This course emphasizes the roles and responsibilities of other health professionals and will prepare health profession students to provide care in a collaborative team. (U)(2) Fall.

## BSHS230, Health Care Administration, Health Care Systems, and Public Policy for

 Pre-Professional Students: Health care reform is centered on improving quality and access of health care while managing costs. Future health care practitioners must consider these three factors when making health care decisions and providing care. This course is intended to help the student understand the health care environment and to provide an overview of how health care administration decisions are made with a focus on policy development. (U)(2) Fall.
## BSHS232, Health Care Systems and Policy

2: Health care reform is centered on improving quality and access of health care while managing costs. Students interested in combining health care and business need to have advanced awareness of health care systems and policy development. This course is intended to help these students build on the knowledge obtained in the Health Care System and Policy 1 course. Students will apply skills in policy making to specific topics. Prerequisite: BSHS230. (U)(2) Spring.

BSHS280, Emergency Medical Technician-
Basic Program: Designed to provide the student with the skills and knowledge to assess and manage patients who are acutely ill or seriously injured. The student will spend approximately 10-15 hours/week of selfdirected time studying online material and completing assignments. In addition, the class
meets once per week to practice hands-on skills, ask questions, and interact with an instructor. Clinical requirements consist of 12 hours on an ambulance and eight hours in the emergency department. Other requirements: each student must be 18 years of age prior to attaining certification as an EMT by the State of Indiana; have a high school diploma or GED equivalent by the end of the program; prior to the beginning of the program, the student must have successfully completed an American Heart Association Health Care Provider CPR class or the American Red Cross equivalent; not have been convicted of any felony crimes; read, write, and speak the English language fluently; obtain the proper immunizations prior to doing clinical time; each student must be capable of performing all physical skills in the course. (U)(6) Summer.

## BSHS340, Introduction to Health Care

Communication: This course explores concepts, theories, and communication skills specific to the health care setting. Interpersonal, group, and mass communication is discussed, with primary emphasis on interpersonal communication. Topics include cultural competence, health literacy, HIPAA and regulations affecting health communication, communications among health professionals and between health professionals and laymen, communicating difficult information, and communicating with difficult individuals. This course is appropriate for students desiring clinical and nonclinical careers in the health care field and will satisfy the Speaking across the Curriculum core requirement. Prerequisites: BSHS110, BSHS215, junior standing or above, enrollment in the health sciences/health care and business program or permission of the instructor. (U)(3) Fall.

BSHS360, Health Care Ethics: Students in this writing-intensive course will use a formalized process to examine a wide variety of ethical dilemmas encountered in health and medicine. Topics may include addiction management, allocation of limited health care resources, confidentiality, conflicts of interests, disparities in care, duty to report, end-of-life issues, informed consent/refusal, patient autonomy, pay-for-performance measures, medical tourism, quality-of-life issues, and more. Prerequisite: BSHS110, junior standing or above, or permission of the instructor. (U)(3) Fall and spring.

BSHS450, Health Care Biostatistics: This course is designed to prepare the health science student to apply the concepts of research design and statistical analysis within the health care
environment. Research skills developed in this course will emphasize a systematic and scientific approach to problem solving. The class will provide an overview of problem formulation, hypothesis generation, study design, measurement, data collection, and analysis. Additionally, there will be a focus on statistical concepts: descriptive analysis, univariate analysis, bivariate and multivariate analysis. This course is purposefully designed to be an appropriate course for undergraduate students pursuing either clinical or nonclinical careers in health care. Prerequisite: Junior standing or above, or permission of the instructor. (U)(3) Fall.

BSHS460, Evidence-Based Health Care: This course will provide students with fundamental skills related to the appropriate identification, retrieval, evaluation, and application of medical literature and promote the practice of evidencebased health care. Prerequisites: BSHS110, BSHS450, junior standing. (U)(3) Spring.

## Pharmacy and Pharmaceutical Sciences Courses

RX301, Introductory Pharmacy Practice
Experience 1: This is a seminar course which prepares pharmacy students for entrance into advanced rotations. Topics will vary according to section and may include professionalism, HIPAA, Indiana pharmacist intern registration, criminal background check, and ACPE graduation requirements. (U)(0)(P/F) Fall.

RX302, IPPE-Service Learning: This is a service-learning course which prepares pharmacy students through topic discussions and independent learning for entrance into advanced rotations. This course satisfies the Indianapolis Community Requirement through completion of service in a course-designed project that connects experience in the Indianapolis community with academic learning goals within the classroom. (U)(1) Spring.

## RX312, Clinical Biochemistry and

Metabolism: The application of biochemistry to an understanding of the pathogenesis of disease and treatment including the interpretation of clinical laboratory tests. Prerequisites: CH351 and CH352 with passing grades. (U)(4) Fall.

RX314, Pharmaceutical Biotechnology: A course exploring the application of biochemical and biotechnical methods in the treatment of human disease. Topics introduced include gene expression, recombinant DNA techniques, molecular immunology, protein pharmaceuticals, peptidomimetics, antisense oligonucleotide
therapies, and gene therapies. Prerequisites: Clinical Biochemistry, Human Physiology, and Microbiology. (U)(3) Spring.

RX316, Pathophysiology: A study of the pathophysiologic processes underlying selected disease states with emphasis on the alteration of normal physiologic processes caused by and contributing to their condition. Diseases are selected based on their frequency, urgency, and value as a model. Prerequisites: Human Physiology and Microbiology. Prerequisite or corequisite: Clinical Biochemistry. (U)(4) Fall.

## RX318, Intro to Principles of Drug Action:

 The course develops the concepts of how drugs produce their effects on cells and dose-effect and time-effect relationships. The chemistry and pharmacology of drugs that affect the autonomic nervous system are discussed. Prerequisites: RX312 Clinical Biochemistry, RX316 Pathophysiology. (U)(5) Spring.RX320, Delivery of Health Care: This is a seminar course designed to introduce students to multiple aspects of health care delivery. The purpose of this class is to understand terminology associated with delivery of health care, discuss current trends/events in health care, and identify resources to allow students to track, evaluate, and respond to the health care environment as future practitioners. (U)(3) Spring.

RX324, Clinical Assessment: Methods of physical assessment and interviewing skills are presented. Normal anatomical, physiological, and pathophysiological processes of the human body are presented. With case illustrations, students learn selected diseases and the interrelationship between patient interview, abnormal physical, and laboratory parameters and their application to the treatment and monitoring of pharmacotherapy. Prerequisites: Clinical Biochemistry and Pathophysiology, or equivalents. (U)(2) Spring.

## RX351, Basic Pharmaceutics and

Pharmaceutical Calculations: Knowledge and skill development focused on the pharmacist's role in receiving, interpreting, preparing, compounding, and dispensing prescriptions for patients. Skills in pharmaceutical calculations are also developed. Prerequisite: P1 student in good standing. (U)(4) Fall.

## RX352, COPHS Depart Honors for Student

Pharmacists: Honors students will explore research design in the pharmaceutical sciences and/or in pharmacy practice, in preparation for work on the honors thesis. A research question
is selected and examined utilizing laboratory experimentation, clinical experimentation, and/ or review of the published literature. A written summary of the question and results achieved will be assessed. Fulfills the departmental honors course requirement for the University Honors Program. (U)(1)

## RX353, Preparation for Honors Research:

An introduction to the basic concepts and skills needed to conduct research in the pharmaceutical sciences or pharmacy practice. This course fulfills the departmental honors course requirements for the University Honors Program. Prerequisite: University Honors Program students only. (U)(2)

RX361, Pharmacy Practice and Health Administration: The course introduces students to drug information, research design, statistical analysis to interpret data, multiple aspects of health care delivery, pharmaceutical care, pharmacy law, health literacy, and socioeconomic and cultural diversity and how it affects health outcomes. (U)(3) Fall.

## RX362, Pharmacy Practice and

Administration 2: The course introduces students to drug information, research design, and statistical analysis to interpret data, multiple aspects of health care delivery, pharmaceutical care, pharmacy law, health literacy, and socioeconomic and cultural diversity and how it affects health outcomes. Prerequisite: RX361. (U) (3) Spring.

## RX401, Introductory Pharmacy Practice

Experience 2: This seminar course prepares pharmacy students for entrance into advanced rotations. Topics will vary according to section and may include professionalism, HIPAA, Indiana pharmacist intern registration, criminal background check, and ACPE graduation requirements. Prerequisite: RX301. (P/F)(U)(0) Fall.

RX403, Therapeutics 1 Case Studies: This course uses a case-based approach to the development and monitoring of therapeutic plans for selected diseases. Corequisite: RX413. Prerequisite: RX324. (U)(1) Fall.

RX404, Therapeutics 2 Case Studies: This course uses a case-based approach to the development and monitoring of therapeutic plans for selected diseases. Corequisite: RX414. Prerequisite: RX413. (U)(1) Spring.

RX411, Principles of Drug Action 1: This course creates the drug knowledge base that can be applied to solve therapeutic problems of
patients. Selected drug categories are considered. Prerequisites: RX314, RX318. (U)(4) Fall.

RX412, Principles of Drug Action 2: This course creates the drug knowledge base that can be applied to solve the therapeutic problems of patients. Drug classes considered include cardiovascular and renal drugs, antihistamines, and nonsteroidal anti-inflammatory drugs. Prerequisites: RX314, RX318. (U)(4) Spring.

RX413, Therapeutics 1: A consideration of the pathophysiology and therapy of selected diseases that are commonly managed. Emphasis is placed on the provision of pharmaceutical care through the selection of appropriate therapy, therapeutic monitoring, and the prevention and identification of adverse drug reactions and interactions. Prerequisite: RX324; pre- or corequisite: RX403, RX411. (U)(3) Fall.

RX414, Therapeutics 2: This is a continuation of Therapeutics 1 and is a consideration of the pathophysiology and therapy of selected diseases that are commonly managed. Emphasis is placed on the provision of pharmaceutical care through the selection of appropriate therapy, therapeutic monitoring, and the prevention and identification of adverse drug reactions and interactions. Prerequisite: RX413 with a grade of C or higher; pre- or corequisite: RX 412; corequisite: RX 404. (U)(3) Spring.

RX415, Self-Care and Health Promotion 1: To develop, use, and evaluate self-care strategies to assist patients in assessing their health status to achieve and maintain optimal health. Topics include nutrition, exercise, immunizations, preventive screenings, vitamins, herbals, nonprescription medications, home monitoring techniques, nonpharmacological treatments, and adverse drug events (ADE) detection and reporting. Prerequisite: Second professional year standing. (U)(2) Fall.

RX416, Self-Care and Health Promotion 2: A continuation of Self-Care and Health Promotion 1. Prerequisite: RX415. (U)(3) Spring.

RX421, Introduction to Dosage Forms: This lecture and laboratory course correlates physical properties of drugs and additives to the design of solid, liquid, and semi-solid dosage forms. Prerequisite: RX351. (U)(4) Fall.

RX422, Advanced Dosage Forms: This course develops concepts and skills in designing and preparing rate-controlled drug delivery systems including sterile, parenteral dosage forms, and enteral nutrition formulations. Prerequisite: Introduction to Dosage Forms. (U)(4) Spring.

RX432, Personnel and Financial Management: Personnel and resource management and basic accounting and marketing skills essential for pharmacy practice management. Prerequisite: $\mathrm{P}-1$ standing in the professional pharmacy program. (U)(3) Spring.

## RX461S, Pharmacy Practice and

Administration 3-Service Learning: This is a service-learning seminar course which prepares students for advanced rotations and career exploration. It develops essential skills for drug information, research design, and statistical analysis usage. It exposes students to multiple aspects of health care delivery, pharmaceutical care, and socioeconomic and cultural diversity and how it affects health outcomes. Prerequisite: RX362. (U)(3) Fall.

## RX462, Pharmacy Practice and

Administration 4: This course continues to develop essential skills for drug information, research design, and statistical analysis usage. It exposes students to multiple aspects of health care delivery, pharmaceutical care, and socioeconomic and cultural diversity and how it affects health outcomes. Prerequisite: RX461. (U) (3) Spring.

RX500, Introduction to Experiential Rotation: This is a seminar course which prepares the pharmacy student for the final year of the professional curriculum. Topics are discussed which impact the practice of pharmacy, including new treatments and delivery systems, ethics, quality/risk management, malpractice/liability insurance, informed consent, management of medical information/patient confidentiality, third-party reimbursement, and pharmacist/ patient/physician relationships. Prerequisites: P-3 standing in pharmacy program and P-4 standing anticipated by May. (U)(1) Spring.

RX501, Introductory Pharmacy Practice Experience 3: This is a seminar course that prepares pharmacy students for entrance into the advanced rotations. Topics will vary according to section and may include professionalism, HIPAA, Indiana pharmacist intern registration, criminal background check, and ACPE graduation requirements. Prerequisites: RX301, RX401. (P/F)(U)(0) Fall.

## RX503, Therapeutics 3 Case Studies: A

 case-based approach to the development and monitoring of therapeutic plans for selected diseases. Corequisite: RX513. Prerequisite: RX414. (U)(1) Fall.RX511, Principles of Drug Action 3: The course creates the drug knowledge base that
can be applied to solve therapeutic problems of patients. Selected drug categories are considered. Prerequisites: RX318 Intro to PDA, RX314
Pharmaceutical Biotechnology. (U)(4) Fall.
RX513, Therapeutics 3: This course is a continuation of Therapeutics 2 with emphasis placed on the selection of appropriate therapy, therapeutic monitoring, and the prevention and identification of adverse drug reactions and interactions for selected diseases. Prerequisites: RX414, RX404 with a grade of C or higher. Pre- or corequisite: RX503, RX511, RX522. (U)(3) Fall.

## RX517, Therapeutics and Case Studies 4:

 Provision of pharmaceutical care with emphasis on the selection of appropriate therapy, therapeutic monitoring, and the identification and prevention of adverse drug reactions and interactions. A case-based approach is used for the assessment, development, and monitoring of therapeutic plans for selected disease states. Prerequisites: RX 513, RX503. Corequisite: RX523 (U)(4) Spring.
## RX522, Pharmacokinetics and

 Biopharmaceutics: A consideration of the biological and physico-chemical factors that affect the delivery of a drug to its site of action in the body and the basic principles of pharmacokinetics. Prerequisites: RX412 and RX422. (U)(3) Fall.RX523, Clinical Pharmacokinetics: Integrates serum drug concentrations in patients with the principles of biopharmaceutics, pharmacokinetics, and pharmacodynamics to achieve therapeutic goals for individual patients. Prerequisites: RX503, RX511, RX513, and RX522. Corequisite: RX517. (U)(3) Spring.

RX526, Pharmacy, Policy, and the Law:
Examines the legal constraints on pharmacy practice including state and federal laws and regulations. Laws affecting the business of pharmacy are examined along with legend drug and controlled substance laws. Issues of ordering, storage, distribution, and counseling are discussed. Policy analysis of pharmacy law issues are explored in this course. Prerequisite: P-3 standing. (U)(3) Spring.

RX527, Biostatistics and Research Design: The course develops the essential skills for designing research studies and for using statistical analysis to interpret data and to communicate inferences drawn from data interpretation. Prerequisite: P3 standing in the doctor of pharmacy program. (U) (3) Fall.

RX528, Advanced Drug Information and Literature Evaluation: The course develops the
skills essential for drug information retrieval and analysis and the formulating and communicating of written responses to drug information questions utilizing general references and primary literature. Prerequisites: RX513, RX52'7. (U)(2) Spring.

RX601, Independent Study: Pharmacy and Health Science: An opportunity for qualified students to pursue investigative work in pharmacy and health sciences. Prerequisite: Approval of COPHS Academic Affairs Committee. Students who are on professional or University probation are not eligible for independent study. (U/G)(1) Annually, term varies.

RX602, Independent Study: Pharmacy and Health Science: An opportunity for qualified students to pursue investigative work in pharmacy and health sciences. Prerequisite: Approval of COPHS Academic Affairs Committee. Students who are on professional or University probation are not eligible for independent study. (U/G)(2) Annually, term varies.

RX603, Independent Study: Pharmacy and Health Science: An opportunity for qualified students to pursue investigative work in pharmacy and health sciences. Prerequisite: Approval of COPHS Academic Affairs Committee. Students who are on professional or University probation are not eligible for independent study. (U/G)(3) Annually, term varies.

## RX60'7, Doctor of Pharmacy Senior Seminar

1: Students will improve formal presentation skills by observation and practice. Each student will prepare and present to faculty and peers a series of presentations including a formal seminar presentation and a poster presentation. Presentation preparation includes a critical review of the literature and case discussions pertaining to issues of pharmacy practice. Seminars are pass/fail offerings. Prerequisite: P-4 standing. (P/F)(U)(1) Fall.

## RX608, Doctor of Pharmacy Senior Seminar

2: Students will improve formal presentation skills by observation and practice. Each student will prepare and present to faculty and peers a series of presentations including a formal seminar presentation and a poster presentation. Presentation preparation includes a critical review of the literature and case discussions pertaining to issues of pharmacy practice. Seminars are pass/fail offerings. Prerequisite: P-4 standing. (P/F)(U/G)(1) Spring.

## RX609, Special Topics in Pharmacy and

Health Sciences: A course allowing students to explore contemporary topics in pharmacy and health sciences. Prerequisites and corequisites are dependent on the specific topic and level of presentation. (U/G)(1) Annually, term varies.

## RX610, Special Topics in Pharmacy and

Health Sciences: A course allowing students to explore contemporary topics in pharmacy and health sciences. Prerequisites and corequisites are dependent on the specific topic and level of presentation. (U/G)(2) Annually, term varies.

## RX611, Special Topics in Pharmacy and

Health Science: A course allowing students to explore contemporary topics in pharmacy and health sciences. Prerequisites and corequisites are dependent on the specific topic and level of presentation. (U/G)(3) Annually, term varies.

RX612, Clinical Drug Development: This course provides students with in-depth knowledge of the pharmacist's regulatory role in drug development and clinical investigation. Prerequisite: Permission of instructor. (U/G)(2) Spring.

RX613, Clinical Research Methods: This course introduces students to clinical researchinvestigations performed on human subjects in a clinical setting. Students will develop a clinical protocol, discuss issues encountered during protocol implementation, and write an abbreviated clinical study report. This course employs a "hands-on," application-oriented approach to learning the clinical research process. (U/G)(3) Annually, term varies.
RX614, Integrative/Holistic Medicine:
Introduction and exposure to holistic therapies used as medical treatments. The course will focus on nonconventional therapies and their use in preventive and therapeutic therapy as well as the quality evidence to support their use. Topics include nutrition, physical activity, medication, acupuncture, herbal, and alternative medicines. Prerequisite: P1: BSHS 3 Year Standing. (U)(2) Fall and spring.

RX615, Introductory Medical Spanish:
Course at the 200 level designed specifically for pharmacy students. The course will give the students the opportunity to become comfortable with conversational Spanish and medical terminology in various pharmaceutical contexts, illnesses, and medical conditions in the health care system. In this course, we will also approach the usage of daily Spanish language utilized by the professionals of this field. Prerequisites: SP204, permission of instructor. (U)(3) Fall and spring.

RX616, Critical Care: The purpose of this elective course is to develop a broad knowledge base of common critical care disease states and management strategies as they relate specifically to drug therapy. The course design will include a combination of both lecture and case-based classroom discussion with the focus being on case discussions. Prerequisite: Completion of all PharmD P-2 courses or permission of instructor. (U)(3) Annually, term varies.

RX617, Advanced Medical Spanish: The 300-level course is a continuation of the introductory course. At this advanced level, we continue to learn and practice how to communicate among professionals and patients in different settings as hospitals, clinics, and medical offices. Prerequisite: Completion of RX615. (U)(3) Fall and spring.

RX618, Nutritional Support: This course will provide exposure to the fundamentals and importance of healthy nutrition and lifestyle education in the community as well as fluids/ electrolytes and specialized nutrition support in the acute setting with emphasis on management of complex patients. Prerequisite: Completion of all PharmD P-1 courses or permission of instructor (U)(3) Annually, term varies.

RX619, Medical Spanish Service Learning: Supervised volunteer work ( 25 hours) in a medical clinic where Spanish is spoken as the primary language. Clinic activity is supported by two weekly meetings for discussion, advanced medical vocabulary, and grammar. Prerequisite: Completion of 200-level Spanish course or permission of instructor. (U)(3) Annually, term varies.

RX620, Teaching with Technology: Students will develop their knowledge and skills as possible future teachers using instructional technology to enhance student learning. Laptop or tablet PC with wireless access to the Butler network are required in class. Prerequisite: Professional phase standing in the pharmacy or physician assistant programs. (U)(2) Fall.

## RX621, Pharmacy-Based Immunizations:

This course will prepare the student to become a certified pharmacist-immunizer through successful completion of the American Pharmacists Association Pharmacy-Based Immunization Delivery certificate training program. Prerequisite: Current fourth year pharmacy student, active CPR certification, and willingness to practice injection technique on each other. (U)(2) Fall.

## RX622, Drug Disposition and Drug

Interactions: This course will focus on the fundamentals of drug disposition, especially as they relate to drug-drug interaction, individual response to drugs, genetic composition in relation to drug response, and factors that alter the body's ability to handle drugs. Prerequisite: P3 standing or permission of instructor. (U)(3) Spring.

## RX626, The Places You'll Go-Preparing for

 Life After Pharmacy School: This course starts with the principle of the popular Dr. Seuss book. Until now you may have been focused on getting through each semester or even just the next exam. But you may be starting to think about what is next. This seminar and project-based course will support you while you identify and share your personal goals and passions. Students will do in-depth investigation of traditional and nontraditional practice settings, discuss opportunities to stand out, and learn how to build mentorships. Projects include a personal reflection journal, topic research, presentation of a passion, and an interview for your dream job. This course is for students who haven't yet had a chance to focus their career interests. Prerequisite: P2 standing. (U)(2) Fall and spring.
## RX628, Pursuit of Postgraduate

Opportunities: This course will review postgraduate education opportunities for pharmacists with a focus on pharmacy residencies and fellowships. Students will learn about postgraduate opportunities within pharmacy and develop skills necessary in securing a position after graduation. A variety of learning techniques will be employed, which include lecture, class discussions, and in-class assessments. Students will be evaluated based on attendance, class participation, and completion of assignments. (U)(1) Spring.

RX629, Cancer Pharmacology: Molecular mechanisms of cancer etiology, diagnosis, and treatment, including carcinogenesis; comparisons between normal and cancerous tissue; oncogenes and tumor-suppressor genes; mechanisms of cancer chemotherapy; molecular approaches to cancer diagnosis and therapy; and personalized medicine. Prerequisite: RX314 or equivalent undergraduate biochemistry or genetics. (U)(3) Fall.

RX630, Advanced Toxicology: The principles of toxicological mechanisms or drugs and environmental chemicals in the biological systems. Prerequisite: Clinical biochemistry or equivalent, or permission of the instructor. (U/G) (3) Annually, term varies.

RX631, Molecular Biology/Pharmacology:
This course covers concepts of molecular biology in application to drug action and new drug development. Specific sections cover consecutive steps leading to normal and pathological gene expression, cellular signal transduction/malfunction, molecular biology of cancer, and pharmacogenomics. Course includes introduction to current research methodology and analysis of scientific data. (U)(3) Annually, term varies.

RX632, Drug Abuse-Pharmacology, Chemistry and Social Aspects: This course will examine from a multidisciplinary perspective the phenomenon of the recreational use of mindaltering drugs like alcohol, nicotine, opioids, cocaine, and hallucinogens. Prerequisite: One semester of college-level biochemistry. (U/G)(3) Annually, term varies.

## RX633, Current Topics in Pharm Sci:

Discussion of current research topics in pharmaceutical sciences. By permission only. (U) (1) Annually, term varies.

## RX634, Seminars in Pharmaceutical

Sciences: Presentation of research topics in pharmaceutical sciences by graduate students, faculty, and guest speakers. By permission only. (U)(1) Annually, term varies.

RX635, Internal Medicine Therapeutics: A capstone experience for students in their 3rd professional year of the curriculum, covering topics encountered in a "general medicine" setting, including community, ambulatory, and inpatient hospital settings. Focus is on practical implementation of general medicine principles directed at pharmacist's point of view. Corequisite: RX513. (U)(3) Annually, term varies.

RX636, Cardiovascular Therapeutics: This course will develop knowledge of treatment principles of major cardiovascular conditions with emphasis on reviewing and reading the landmark trials for why we treat cardiovascular diseases in clinical practice. Important clinical trials, treatment, guidelines, and several pharmacotherapeutic management strategies will be reviewed. Prerequisites: RX414 and RX404. (U)(3) Annually, term varies.

RX63 ${ }^{17}$, Drug-Induced Diseases: This course will introduce students to relevant adverse reactions that occur with medication therapies, focusing on identification of the drug-induced disease and evaluation of potential causes. Students will develop skills and thought processes designed to systemically evaluate disease states and understand treatment
algorithms. Corequisite: RX513. (U)(3) Annually, term varies.

## RX639, Principles of Psychiatric

Therapeutics: This course builds upon skills learned in Therapeutics 3, providing broader knowledge base of psychiatric and neurologic disease states. Students will learn to provide the psychopharmacologic and therapeutic management strategies to treat these disorders and unique patient counseling skills essential to the development of patient relationships. Prerequisites: RX503 and RX513. (U)(3) Annually, term varies.

RX640, Entrepreneurship in Life Sciences: Entrepreneurialism in pharmacy is a course designed for pharmacy students interested in learning more about the business of pharmacy and health care and how to assume ownership and responsibility for any position they choose to accept during their professional career, whether or not she or he technically own the venture. Prerequisite: Functional use of MS Excel. (U/G) (3) Annually, term varies.

RX641, Pediatric Pharmacotherapy: A course dealing with drug therapy in the pediatric population including neonates, infants, children, and adolescents. This course prepares the student to evaluate pediatric drug therapy regimens. Prerequisite: Completion of all fourthyear PharmD courses or permission of the instructor. (U/G)(3). Annually, term varies.

RX642, Geriatric Therapeutics: A study of the physiologic and pharmacokinetic changes that occur with aging and how these changes affect drug therapy. Management of disease will be discussed and evaluated. This course will provide the student with knowledge for making therapeutic decisions in the elderly. Prerequisite: Completion of all fourth-year PharmD courses or permission of instructor. (U/G)(3) Annually, term varies.

## RX643, Pharmacotherapy of Renal

Disease: This elective course addresses key pharmacotherapy principles associated with the prevention and treatment of acute and chronic renal disease. Topics will include drug-induced acute kidney injury, contrastinduced nephropathy, renal dosing adjustments, anemia of chronic kidney disease, secondary hyperparathyroidism, and many others. Students will also tour a dialysis center. (U)(2) Fall.

RX644, Women's Health Issues: This course will include discussions on health issues that primarily affect women. Topics include menopause, breast cancer, silicone
breast implants, systemic lupus, infertility, contraception, pregnancy, osteoporosis, women and heart disease, and other issues causing illness or death of women including domestic violence. Prerequisites: RX413, RX414. Pre- or corequisite: RX513. (U)(3) Annually, term varies.

RX645, Pharmaceutical Literature: An exploration of sources of information applicable to the pharmaceutical sciences and a systematic approach to literature searches. One class hour per week. Prerequisite: Completion of all fourth-year PharmD courses, or permission of instructor. (U/G)(1) Annually, term varies.

RX646, Ambulatory Care: The focus of this course will be on designing and developing ambulatory care pharmacy services, along with assessing and educating the ambulatory care patient. Students will be introduced to medication therapy management (MTM) and will be given the opportunity to interact and work with local ambulatory care pharmacists. (U)(3) Occasionally.

RX647, Exploring Public Health: In this interactive course, students are encouraged to examine, explore, and solve public health issues of interest and examine solutions for the same. It will allow students to think critically about how to identify and address current health issues from childhood immunizations to toxic exposures in the workplace. (U)(3) Annually, term varies.

RX648, Infectious Disease Pharmacotherapy:
This elective course is designed to enhance the student's knowledge, skills, and experience with infectious diseases pharmacotherapy. The course will employ the use of didactic lecture, case-based topic discussion, active learning assignments, and primary literature evaluation to enhance class interaction and facilitate understanding of lecture topics. (U)(3) Spring.

## RX649, Neurobiology of Stress and

Trauma: Students will learn to understand the neuropathological effects of stress from a systems, developmental, neurochemical, cellular, and molecular perspective. This course examines the phenomenology and neurobiological mechanisms associated with stress and trauma as they relate to the topics to be covered. (U)(3) Annually, term varies.

RX650, Academic Experience Rotation: This rotation provides the student pharmacist with experience in the role of the doctor of pharmacy in classroom teaching and with the operations of an academic institution. Prerequisite: P4 standing. (U)(4) Fall, spring, and summer.

RX651, Administration and Management
Rotation: This rotation provides the student pharmacist the opportunity to develop skills in fiscal, organization, and personnel management. Prerequisite: P4 standing. (U)(4) Fall, spring, and summer.

RX652, Advanced Ambulatory Care Rotation:
This rotation provides the student pharmacist with further experience in application of therapeutic principles to the patient in the ambulatory setting. Prerequisite: P4 standing. (U)(4) Fall, spring, and summer.

RX654, Advanced General Medicine Rotation: This rotation stresses the pharmacist's role in proper drug therapy, patient education, drug administration techniques, and delivery of pharmacy services to hospitalized and ambulatory patients. Prerequisite: P4 standing. (U)(4) Fall, spring, and summer.

## RX655, Prescription Compounding Rotation:

This rotation provides the student pharmacist experience in the extemporaneous compounding of medicinal products that will be used for the treatment and/or prevention of disease in humans. Prerequisite: P4 standing. (U)(4) Fall, spring, and summer.

RX656, Alt Comp Med Rotation: This rotation provides the student pharmacist with experience in the use of herbal, probiotic, nutritional, and other alternative modalities. Prerequisite: P4 standing. (U)(4) Fall, spring, and summer.

RX657, Ambulatory Care Rotation: This rotation develops the student pharmacist's knowledge and problem-solving skills in the application of therapeutic principles to the care of patients receiving care in the ambulatory medicine clinic. Prerequisite: P4 standing. (U)(4) Fall, spring, and summer.

RX658, Cardiology Rotation: This rotation develops the student pharmacist's knowledge and problem-solving skills in the application of therapeutic principles to the care of patients who have cardiovascular disorders. Prerequisite: P4 standing. (U)(4) Fall, spring, and summer.

RX660, Patient Care Research Rotation:
This rotation will provide students a blended opportunity for patient care and clinical research. Students will have the opportunity to utilize problem-solving skills in the application of therapeutic principles to patient care while stressing time-management and projectmanagement techniques. Students will have a hands-on experience in patient-care research and will conduct a patient-care research study with minimal supervision. Students will expand
their ability to generate, evaluate, analyze, and interpret patient-care data using the principles of scientific research integrity. Prerequisite: P4 standing, patient care research track. (U/G)(4) Fall, spring, and summer.

RX661, Community Practice Rotation: This course is concentrated on the basic operational skills necessary for practice in a community pharmacy setting. The primary focus of activities will be on distribution and workflow in a community setting. (U)(4) Fall, spring, and summer.

RX662, Critical Care Rotation: This rotation develops the student pharmacist's knowledge and problem-solving skills in the application of therapeutic principles to the care of patients whose health is in critical condition. Prerequisite: P4 standing. (U)(4) Fall, spring, and summer.

RX664, Drug Information Rotation: This rotation enhances the student's skills in communication, both verbal and written, and the student's skills in the retrieval, evaluation, and provision of drug-related information. Prerequisite: P4 standing. (U)(4) Fall, spring, and summer.

## RX665, Emergency Med/Trauma Rotation:

 This rotation provides the student pharmacist with experience in the special needs of patients receiving care in the emergency department. Prerequisite: P4 standing. (U)(4) Fall, spring, and summerRX666, General Medicine Rotation: A hospital-based rotation utilizing faculty experienced in general internal medicine and/ or family practice. The goal of this general rotation is to familiarize the student with those disease processes routinely managed by internal medicine and family practice in the acute care setting. Prerequisite: P4 standing. (U)(4) Fall, spring, and summer.

RX667, Geriatric Medicine Rotation: This rotation stresses the role of the pharmacist in the care of the geriatric patient through interdisciplinary activity. The student will interact with other health care professionals to optimize the care of the geriatric patient. Prerequisite: P4 standing. (U)(4) Fall, spring, and summer.

RX670, Home Health Care Rotation: This rotation develops the student pharmacist's knowledge and problem-solving skills in the clinical and distributive services in the home health care environment. Prerequisite: P4 standing. (U)(4) Fall, spring, and summer.

## RX671, Industrial Pharmacy Rotation:

The industrial pharmacy rotation will focus on developing an understanding of opportunities available for the pharmacist in the pharmaceutical industry. Prerequisite: P4 standing. (U)(4) Fall, spring, and summer.

RX672, Infectious Diseases Rotation: This rotation focuses on the proper selection of antimicrobial, antifungal, and antiviral therapy, understanding the associated disease states, patient education, and pharmacy administration issues associated with patients with infections. Prerequisite: P4 standing. (U)(4) Fall, spring, and summer.

RX674, Long-Term Care Rotation: This rotation is designed to develop the student pharmacist's knowledge and problem-solving skills in clinical and distributive services in the long-term care environment. Prerequisite: P4 standing. (U)(4) Fall, spring, and summer.

RX675, Managed Care Rotation: This rotation provides the student pharmacist experience with the medical treatment of patients in a managed care system. Prerequisite: P4 standing. (U)(4) Fall, spring, and summer.

RX677, Neurology Rotation: This rotation develops the student pharmacist's knowledge and problem-solving skills in the application of therapeutic principles to the care of patients who have neurological disorders. Prerequisite: P4 standing. (U)(4) Fall, spring, and summer.

RX678, Nutrition Support Rotation: This rotation focuses on nutritional assessment and requirements, parenteral nutrition, enteral nutrition, nutritional support for disease states, and nutritional support in specific patient populations. Prerequisite: P 4 standing. (U)(4) Fall, spring, and summer.

RX679, Oncology Rotation: This rotation develops the student pharmacist's knowledge and problem-solving skills in the application of therapeutic principles to the care of patients who have a malignancy. Prerequisite: P4 standing. (U)
(4) Fall, spring, and summer.

RX680, Pharmaceutical Sciences Research Rotation: This rotation will provide an opportunity for professional-phase pharmacy students to experience a dedicated longitudinal research experience. This rotation experience will be performed in a pharmaceutical science area. Students will expand their ability to generate, evaluate, analyze, and interpret data using the principles of scientific research integrity. Using one or two laboratory techniques, students will conduct laboratory experiments
with sufficient proficiency so as to function with minimal supervision. Students may also experience the opportunity of creating and presenting an oral presentation summarizing the background, methods, results, and conclusions of the conducted research. Prerequisite: P4 standing, pharmaceutical sciences research track. (U)(4) Fall, spring, and summer.

RX681, Neonatology Rotation: The rotation provides opportunities for the student pharmacist to participate in the care of neonates in the acute care setting. Prerequisite: P4 standing. (U)(4) Fall, spring, and summer.

RX682, Pediatric Rotation: This rotation focuses on illnesses of the pediatric population, the physiologic differences in infants and children and how this affects drug therapy, how to solve problems in pediatric therapeutics, and how to effectively communicate about pediatric issues. Prerequisite: P4 standing. (U)(4) Fall, spring, and summer.

## RX686, Pharmacy Systems/Tech Rotation:

This rotation provides the student pharmacist experience with the organization of a medication use system and the associated use of technology. Prerequisite: P4 standing. (U)(4) Fall, spring, and summer.

## RX687, Poison Control/Toxicology Rotation:

This rotation develops the student pharmacist's knowledge and problem-solving skills in the application of therapeutic principles to the care of patients who have ingested or have otherwise been exposed to toxic substances. Prerequisite: P4 standing. (U)(4) Fall, spring, and summer.

RX688, Pulmonary Rotation: This rotation develops the student pharmacist's knowledge and problem-solving skills in the application of therapeutic principles to the care of patients who have pulmonary disorders. Prerequisite: P4 standing. (U)(4) Fall, spring, and summer.

RX689, Veterinary Medicine Rotation: This rotation provides experience in the care of animals with an emphasis on the use of drug therapy to cure or prevent disease. Prerequisite: P4 standing. (U)(4) Fall, spring, and summer.

## RX690, Psychiatry and Neuropsychology

Rotation: This rotation is designed to provide the student experience in the specialized clinical area of psychiatry with an emphasis on the use of drug therapy in the group of patients. Prerequisite: P4 standing. (U)(4) Fall, spring, and summer.

RX691, Radiopharmaceutical Rotation:
This rotation provides the student pharmacist
experience with the use of radiopharmaceuticals in the diagnosis and treatment of medical conditions. Prerequisite: P4 standing. (U)(4) Fall, spring, and summer.

RX692, Indigent Care Rotation: This rotation provides the student pharmacist with an understanding of the special considerations involved in the delivery of health care to indigent populations. Prerequisite: P4 standing. (U)(4) Fall, spring, and summer.

## RX693, Pharmacy Board and Association

Rotation: This rotation develops the student pharmacist's understanding of the organizational structure of the pharmacy board and state pharmacy associations, their daily operation, and the manner in which they influence pharmacy practice. Prerequisite: P4 standing. (U)(4) Fall, spring, and summer.

RX694, Surgery Rotation: This rotation develops the student pharmacist's knowledge and problem-solving skills in the application of therapeutic principles to the care of patients who undergo surgery. Prerequisite: P4 standing. (U)
(4) Fall, spring, and summer.

RX695, Transplantation Rotation: This rotation develops the student pharmacist's knowledge and problem-solving skills in the application of therapeutic principles to the care of patients who have undergone organ transplantation. Prerequisite: P4 standing. (U) (4) Fall, spring, and summer.

RX696, Women's Health Rotation: This rotation develops the student pharmacist's understanding of the special needs associated with medical conditions affecting female patients. Prerequisite: P4 standing. (U)(4) Fall, spring, and summer.

RX698, Washington DC Rotation: The rotation experience provides an opportunity to participate in a three-month learning opportunity in the Washington, DC, area arranged through the Butler-Washington Semester Intern Program. The experiential learning portion of this program is arranged individually based on specific student interests. The College requires that students participating in this program also enroll in P0355 or AH110/AH202 and at least one 1-credit-hour Washington seminar course. Prerequisite: P4 standing. (P/F)(U)(12). Fall, spring, and summer.

RX699, Spec Topics: Pharmacy Practice
Rotation: An experiential course that allows students to explore new developments in delivery of pharmacy services. Rotation sites will vary depending upon the area of pharmacy practice
being investigated. Prerequisite: P4 standing. (U)
(4) Fall, spring, and summer.

## Master of Science in Pharmaceutical Sciences Courses

RX701, Research and Thesis: Research toward completion of thesis in pharmaceutical sciences. Prerequisite: GPA of 3.0 or above, exclusive of research and thesis credits. (G)(1) Annually, term varies.

RX702, Research and Thesis: Research toward completion of thesis in pharmaceutical sciences. Prerequisite: GPA of 3.0 or above, exclusive of research and thesis credits. (G)(1) Annually, term varies.

RX'703, Research and Thesis: Research toward completion of thesis in pharmaceutical sciences. Prerequisite: GPA of 3.0 or above, exclusive of research and thesis credits. (G)(2) Annually, term varies.

RX704, Research and Thesis: Research toward completion of thesis in pharmaceutical sciences. Prerequisite: GPA of 3.0 or above, exclusive of research and thesis credits. (G)(2) Annually, term varies.

RX'705, Research and Thesis: Research toward completion of thesis in pharmaceutical sciences. Prerequisite: GPA of 3.0 or above, exclusive of research and thesis credits. (G)(3) Annually, term varies.

RX706, Research and Thesis: Research toward completion of thesis in pharmaceutical sciences. Prerequisite: GPA of 3.0 or above, exclusive of research and thesis credits. (G)(3) Annually, term varies.

RX'720, Teaching with Technology: Students will develop their knowledge and skills as possible future teachers using instructional technology to enhance student learning. Laptop or tablet PC with wireless access to the Butler network is required in class. Discussion of bestpractice teaching is based on current literature on this topic. Student projects and presentations form the basis of learning assessment. (G)(2) Annually, term varies.

RX729, Cancer Pharmacology: Molecular mechanisms of cancer etiology, diagnosis, and treatment, including carcinogenesis; comparisons between normal and cancerous tissue; oncogenes and tumor-suppressor genes; mechanisms of cancer chemotherapy; molecular approaches to cancer diagnosis and therapy; and personalized medicine. Prerequisite: RX314 or equivalent undergraduate biochemistry or genetics. (G)(3) Fall.

## RX766, Advanced Topics in

Neuropharmacology: Discussions and formal presentations covering basic concepts and recent advances in clinical applications of pharmacology to psychogenic disorders. Prerequisite or corequisite: Permission of instructor. (G)(1) Annually, term varies.

## RX780, Current Topics in Pharm Science:

Discussion of current research topics in pharmaceutical sciences. (G)(1) Annually, term varies.

RX'781, Seminars in Pharm Sci: Presentation of research topics in pharmaceutical sciences by graduate students, faculty, and guest speakers. (G)(1) Annually, term varies.

RX'782, Ethics in Research: Discussion and case-based approaches in the ethics of research, publication, and reviewing of manuscripts and grants. Include core instructional areas recommended by the NIH Office of Research Integrity. (G)(1) Annually, term varies.

RX783, Introduction to Pharm Research:
An introduction to basic principles of pharmaceutical research including formation of hypothesis, literature search, scientific writing, and regulatory affairs. (G)(2) Annually, term varies.

RX784, Exp Design and Data Analysis: Approaches in experimental design and statistical analysis of data. (G)(2) Annually, term varies.

RX'785, Biopharmaceutical Analysis: Theory and practice of bioanalytical techniques in chemical and molecular biology-based analyses. Prerequisite: BS-level background in analytical chemistry. (G)(3) Annually, term varies.

RX'786, Advanced Drug Delivery: Critical assessment of drug carrier systems, including transport of drug molecules across membranes. Prerequisite: Instructor's permission. (G)(3) Annually, term varies.

RX787\%, Industrial Pharm-Pref/Prod Dev: Study of physicochemical principles of drugs and excipient for optimization of bioavailability. Case studies in formulation, production, and evaluation of pharmaceutical products. Prerequisite: Instructor's permission. (G)(3) Annually, term varies.

RX'788, Molecular Biology/Pharmacology: This course covers concepts of molecular biology in application to drug action and new drug development. Specific sections cover consecutive steps leading to normal and pathological gene expression, cellular signal
transduction/malfunction, molecular biology of cancer, and pharmacogenomics. Course includes introduction to current research methodology and analysis of scientific data. (G)(3) Annually, term varies.

## Bachelor of Science in Health Sciences Physician Assistant Didactic Courses

AP301, Physiology for PAs: This course emphasizes those aspects of human anatomy and physiology that are most important to an understanding of pathophysiology, physical diagnosis of disease, interpretation of patient clinical assessment, and treatment of disease. Prerequisite: First professional year standing in the PA program. (U)(5) Fall.

## AP350, Clinical Quality Improvement 1:

This course is part one of a two-part series designed to prepare the physician assistant student to apply the concepts of research design and statistical analysis within the clinical environment. Research skills developed in this course will emphasize a systematic and scientific approach to problem solving. The course will focus primarily on clinical quality improvement designs and analysis. The class will provide an overview of the various steps of the clinical research process such as problem formulation, hypothesis generation, study design, measurement, data collection, and analysis. Additionally, there will be a focus on statistical concepts. Prerequisite: Acceptance into the professional phase of the PA Program. (U)(3) Fall.

AP307, Pathophysiology 1: This course will emphasize normal structure/function of human organ systems and the physiology of disease, of disordered function, or derangement of function seen in human disease. Prerequisite: First professional year standing in the PA program. (U)(5) Fall.

AP308, Pharmacology 1: This course provides an introduction to the principles of drug absorption, distribution, metabolism, and excretion. In addition, the course includes a study of the mechanisms underlying the therapeutic and adverse effects of drugs used to treat human disease. Prerequisite: First professional year standing in the PA program. (U)(3) Fall.

AP313, Social and Behavioral Medicine: Introduction in the basic counseling skills necessary to help patients cope with illness and injury, follow prescribed treatment regimens, and modify patients' attitudes and behaviors
to more healthful patterns. This includes a functional understanding of personality development, normative responses to stress, psychosomatic manifestations of illness and injury, sexuality, responses to death and dying, and behavioral patterns related to the maintenance and restoration of health. Prerequisite: Professional phase status in the physician assistant program. (U)(3) Fall.

AP302, Anatomy for PAs: This course emphasizes those aspects of human anatomy that are most important to an understanding of pathophysiology, physical diagnosis of disease, interpretation of patient clinical assessment, and treatment of disease. Prerequisite: Grade of C or better in AP301. (U)(4) Spring.

AP309, Pathophysiology 2: This course is a continuation of AP30'7, Pathophysiology 1. Prerequisite: Grade of C or better in AP307. (U) (4) Spring.

AP310, Pharmacology 2: This course is a continuation of AP308, Pharmacology 1. Prerequisite: Grade of C or better in AP308. (U) (3) Spring.

## AP351, Clinical Quality Improvement 2:

 This course is part two of a two-part series designed to prepare the physician assistant student to apply the concepts of research design and statistical analysis within the clinical environment. Research skills developed in this course emphasize a systematic and scientific approach to problem solving. The course will focus primarily on clinical quality improvement designs and analysis with special attention on evidence-based medicine commonly used in clinical quality improvement students. Prerequisite: Acceptance into the professional phase of the PA Program. (U)(3) Spring.
## AP402, Health Care Communication I:

Prepares the physician assistant to do a complete history and physical examination. Prerequisite: PA fourth year standing and acceptance into the professional phase of the PA program. (U)(1)

## AP404, History and Physical Assessment I:

Prepares the physician assistant to do a complete history and physical examination. Prerequisite: PA fourth year standing and acceptance into the professional phase of the PA program. (U)(3) Fall.

## AP406, Diagnostic and Therapeutic

Procedures 1: This course will introduce the student to clinical skills of both diagnostic and therapeutic value in order to screen for, prevent, and treat disease entities. Prerequisite: Fourthyear standing in the PA program. (U)(3) Fall.

## AP413, Therapeutics for the Physician

Assistant 1: This course prepares the physician assistant to manage drug therapy for patients in certain health care settings. Prerequisite: Fourthyear standing in the PA program and corequisite of AP421 or permission of instructor. (U)(4) Fall.

## AP421, Clinical Medicine for PAs I: The intricacies of human disease are taught through

 a systems approach. Each unit begins with a review of related anatomy and physiology followed by a discussion of pathophysiology signs and symptoms, diagnostic methods, and management. Prerequisite: Fourth year standing. (U)(6) Fall.AP408, Clinical Integration I: This course provides students with an opportunity to manage virtual patients by applying the knowledge, skills, and attitudes developed in other professional physician assistant coursework. (U)(1) Fall.

AP410, ECG Interpretation: This course provides students with instruction in interpreting 12-lead electrocardiograms for heart rate, rhythm, conduction system blocks, electrical axis, hypertrophy, ischemia, injury, infarction, and miscellaneous drug, electrolyte, disease, and pacemaker effects. Prerequisite: Fourth-year standing in the PA program. (U)(1) Fall.

## AP403, Health Care Communications II:

 Prepares the physician assistant student to communicate within the health care setting, a continuation of AP402. Prerequisite: Acceptance into the professional phase of the PA program. (U)(1)
## AP405, History and Physical Assessment

II: Prepares the physician assistant to do a complete history and physical examination as a continuation of AP404. Prerequisite: Acceptance into the professional phase of the PA program. (U)(3) Spring.

## AP414, Therapeutics for the Physician

Assistant 2: A continuation of AP413. This course prepares the physician assistant to manage drug therapy for patients in certain health care settings. Prerequisites: AP413 Therapeutics for PA1, AP421 Clinical Medicine for PA1, AP406 Diagnostic and Therapeutic Procedures. Corequisite: AP423 Clinical Medicine for PA2 or permission of instructor. (U)(5) Spring.

## AP417, Diagnostic and Therapeutic

Procedures 2: A continuation of AP406, Diagnostic and Therapeutic Procedures 1. This course will introduce the student to clinical skills of both diagnostic and therapeutic value in order
to screen for, prevent, and treat disease entities. Prerequisite: Fourth-year standing in the PA program. (U)(3) Spring.

## AP422, Clinical Medicine for PAs II:

A continuation of AP421. Prerequisites: AP421 Clinical Medicine for PAs I, AP406 Diagnostic and Therapeutic Procedures, AP413 Therapeutics for PAs I. (U)(5) Spring.

AP409, Clinical Integration II: A continuation of Clinical Integration I. (Pass/Fail). (U)(1) Spring.

## Master of Physician Assistant Didactic Courses

## MPAS504, Human Anatomy for PAs with

Lab: This comprehensive course is designed to provide PA students with an extensive background in human anatomy through lecture, laboratory, virtual dissection, and independent learning exercises. The course will have a clinical emphasis. Lectures and labs will emphasize anatomy and anatomic relationships significant to common clinical medicine topics and surgical procedures. (G)(4)

MPAS506, Physiology for PAs: This course provides a foundation of basic science in cellular physiology, biochemistry, pathology, and immunology. Normal physiology, followed by the pathophysiology of diseases important to organ system, will be presented. Function, cellular changes, and pathological changes, including inflammatory aspects, infectious conditions, and any neoplastic presentations where appropriate, will be included. (G)(4)

## MPAS508, 12-Lead ECG Interpretation:

This course provides the physician assistant student with instruction in interpreting 12lead electrocardiograms for heart rate, rhythm, conduction system blocks, electrical axis, hypertrophy, ischemia, injury, and infarction. This course also provides instruction regarding the effects of various drugs, electrolyte disorders, diseases, and pacemakers. (G)(1)

## MPAS510, Interpretation of Laboratory

Studies: This course introduces the physician assistant student to the use and interpretation of laboratory studies used in the diagnosis, screening, and/or monitoring of disorders commonly encountered in clinical practice. (G) (3)

MPAS512, Interpretation of Imaging
Studies: This course introduces students to the basic principles of diagnostic imaging and interpretation in the management of patients. Examination of normal imaging studies is
followed by examination and discussion of abnormalities caused by both trauma and disease. (G)(2)

MPAS514, Pharmacology for PAs: The goal of pharmacology is to understand the principles of drug absorption, distribution, metabolism, excretion, and mechanisms of drugs to enable the rational use of effective agents in the diagnosis and treatment of disease. Major emphasis is placed on mechanism of action, indications, adverse effects, drug interactions. (G)(4)

MPAS516, History and Physical Exam with Lab 1: Students learn to perform history and physical examinations on patients. Normal, variations, and common abnormal findings will be introduced. An emphasis is placed on the relationship of major signs and symptoms to their physiologic or pathophysiologic origins. Students will utilize lecture, recordings, simulation, live demonstration, other students, and standardized patients. (G)(3)

## MPAS520, Clinical Medicine and

Therapeutics for PAs 1: Students are introduced to human health and disease encountered in the primary care setting. The course emphasizes a comprehensive approach including an integration of related anatomy and physiology, followed by pathophysiology, identifying risk factors, clinical findings, diagnostic methods, management including both medical and surgical, patient education, follow-up, and prevention. (G)(7)

MPAS524, Clinical Procedures with Lab 1:
This course is the first of a two-course series that provides the physician assistant student with the knowledge and skills required to perform diagnostic and therapeutic procedures commonly performed in clinical practice. (G)(2)

MPAS528, Health Promotion, Disease Prevention, and Nutrition: This course emphasizes intervention strategies, public health considerations in selected disease states, immunizations, environmental health, behavioral considerations in prevention and assessment of disease and health, implications for individual and population-based patient care, nutrition, provider education, and resource utilization. (G)(2)

MPAS530, Social and Behavioral Medicine:
This course emphasizes personality development, normative responses to stress, psychosomatic manifestations of illness, sexuality, responses to death/dying, and behavioral patterns related to the maintenance and restoration of health. It focuses on normal/
abnormal development of children, adults, and seniors; Students acquire skills in basic treatment/counseling, patient education, substance abuse, and violence screening. (G)(3)

MPAS532, Pediatric Medicine: This course is an introduction to common pediatric health problems from the newborn period through adolescence. The lectures focus on health promotion, disease prevention and screening, pathology identification and management, and patient education and counseling for the pediatric patient and his/her family. (G)(1)

MPAS534, Health Care Communications 1: This course encourages critical thought process. Students will develop interpersonal, oral, and written communication skills that result in the effective exchange of information and collaboration with patients, their families, and other health professionals. (G)(1)

## MPAS518, History and Physical Exam with

Lab 2: Students learn to perform history and physical examinations on patients. Normal, variations, and common abnormal findings will be introduced. An emphasis is placed on the relationship of major signs and symptoms to their physiologic or pathophysiologic origins. Students will utilize lecture, videotape, simulation, live demonstration, other students, and standardized patients. (G)(3)

MPAS522, Clinical Medicine and Therapeutics for PAs 2: Students are introduced to human health and disease encountered in the primary care setting. The course emphasizes a comprehensive approach including an integration of related anatomy and physiology, followed by pathophysiology, identifying risk factors, clinical findings, diagnostic methods, management including both medical and surgical, patient education, followup, and prevention. (G)(7)

## MPAS526, Clinical Procedures with Lab 2:

This course is the second of a two-course series that provides the physician assistant student with the knowledge and skills required to perform diagnostic and therapeutic procedures commonly performed in clinical practice. (G)(2)

## MPAS550, Orthopedics and Rheumatology:

Students are introduced to orthopedic and rheumatologic conditions encountered in the primary care setting. The course emphasizes a comprehensive approach including an integration of related anatomy and physiology, followed by pathophysiology, identifying risk factors, clinical findings, diagnostic methods, and management including both medical and
surgical, patient education, follow-up, and prevention. (G)(1)

MPAS552, Women's Health: Students are introduced to women's health issues encountered in the primary care setting, including obstetrics and gynecology. The course emphasizes a comprehensive approach including an integration of related anatomy and physiology, followed by pathophysiology, identifying risk factors, clinical findings, diagnostic methods, and management including both medical and surgical, patient education, follow-up, and prevention. (G)(2).

MPAS538, Medical Literature Interpretation and EBM: This course prepares physician assistant students to apply concepts of research design and statistical analysis within the clinical environment, emphasizing principles of evidence-based medicine. Research skills developed include a systematic and scientific approach to problem solving, database search techniques, interpretation of published research, and determining quality of published research to guide clinical practice decisions. (G)(2).

MPAS536, Health Care Communications 2: This course encourages critical thought process. Students will develop interpersonal, oral, and written communication skills that result in the effective exchange of information and collaboration with patients, their families, and other health professionals. (G)(1).

## Master of Physician Assistant Clinical Year Courses

MPAS626, Issues of Professional Practice:
This course provides the student with an introduction to the historical development and current trends of the PA profession, reimbursement, health policy, and public health issues as they pertain to the supervised practice of clinical medicine. It also provides the student with an introduction to medical ethics, coding and billing, cultural issues, PA certification, licensure, malpractice and risk management, financial planning, and PA organizations as they pertain to the supervised practice of clinical medicine. Prerequisites: Admission into the professional phase of the PA program and completion of the didactic phase of the PA program. (G)(3) Summer.

MPAS630, Pediatric Rotation: This pediatric rotation is designed to provide the physician assistant student with an intense exposure of primary care pediatric problems with the objectives of developing skills in well-child preventive care and the care of common pediatric
illnesses. Prerequisite: Completion of didactic courses in PA program. (G)(3) Fall, spring, and summer.

MPAS634, Elective Rotation: Four-week clinical rotation designed to provide the student with an elective opportunity in any of the following disciplines: dermatology, gastroenterology, medical or surgical subspecialty, cardiology, radiology, ENT, or urology. The discipline must be approved by the clinical coordinator. Prerequisite: Completion of didactic courses in PA program. (G)(4) Fall, spring, and summer.

MPAS636, Summative Practicum: In order to graduate from the PA program, students must demonstrate competency to practice medicine as an entry-level PA in primary care. In order to do so, students must successfully complete all components of the summative examination which is comprised of clinical skills and objective structured clinical examinations. Prerequisite: Completion of didactic courses in PA program. (G)(1) Spring.

MPAS648, Family Medicine Rotation 1: This rotation provides students with experience to refine their skills in performing a history and physical exam, ordering and interpreting diagnostic tests, and developing treatment plans for patients. The student participates in the broad spectrum of primary care by developing skills in acute and long-term management. Prerequisite: Completion of didactic courses in PA program. (G)(4) Fall, spring, and summer.

## MPAS650, Internal Medicine Rotation 1:

This rotation provides students with experience in caring for adult and geriatric patients in a clinical practice setting. Students will perform history and physical examinations, obtain diagnostic testing, and present their data along with proposed differential diagnoses and treatment plans. Students may have additional requirements associated with internal medicine. Prerequisite: Completion of didactic courses in PA program (G)(4) Fall, spring, and summer.

MPAS652, Internal Medicine Rotation 2: This rotation provides the student with experience in caring for adult and geriatric patients in a clinical practice setting. Students will perform history and physical examinations, obtain diagnostic testing, and present their data along with proposed differential diagnoses and treatment plans. Students may have additional requirements associated with internal medicine. Prerequisite: Completion of didactic courses in PA program. (G)(4) Fall, spring, and summer.

## MPAS654, Community Mental Health

Rotation: This rotation will provide students with an experience in caring for ambulatory or hospitalized patients with psychiatric disorders. The student will perform psychiatric evaluations and develop and support clinical management plans. Students may have additional requirements associated with community mental health. Prerequisite: Completion of didactic courses in PA program. (G)(4) Fall, spring, and summer.

MPAS656, Women's Health Rotation: Fourweek clinical rotation designed to provide the physician assistant student with an opportunity to develop proficiency in the unique medical history, physical examination, and treatment of the prenatal/gynecology patient. The student will also become familiar with tests and procedures unique to this patient population. Students may have additional requirements associated with women's health. Prerequisite: Entry into the experiential year of the PA program. (G)(4) Fall, spring, and summer.

MPAS658, Emergency Medicine 1: This rotation is designed to provide students exposure to and development of skills in managing patients in the emergency department setting. Skills will include those necessary for triage, stabilization, diagnosis, and management of patients that present to the emergency department. Students may have additional requirements associated with emergency medicine. Prerequisite: Completion of didactic courses in PA program. (G)(4) Fall, spring, and summer.

MPAS660, Emergency Medicine 2: This rotation is designed to provide students exposure to and development of skills in managing patients in the emergency department setting. Skills will include those necessary for triage, stabilization, diagnosis, and management of patients that present to the emergency department. Students may have additional requirements associated with emergency medicine. Prerequisite: Completion of didactic courses in PA program. (G)(4) Fall, spring, and summer.

MPAS662, Family Medicine Rotation 2: This rotation provides the student with an experience to refine their skills in performing a history and physical exam, ordering and interpreting diagnostic tests, and developing treatment plans for patients. The student participates in the broad spectrum of primary care by developing skills in acute and long-term management. Prerequisite: Completion of didactic courses in PA program. (G)(4) Fall, spring, and summer.

MPAS664, Interprofessional Experience:
This course prepares the PA student to work collaboratively within interprofessional patientcentered teams upon graduation. It provides the student with an opportunity to interact, communicate, and effectively understand the various roles of other non-physician health care providers. These providers may include at a minimum physical therapists, occupational therapists, respiratory therapists, speech/ language therapists, social workers, pharmacists, surgical technicians, radiologic technicians, dieticians, nurses, dentists, and various other licensed non-physician health care providers. It will give the student a better understanding of how health care workers interact with other health care workers. It will provide the student with an opportunity to learn how various health care workers provide both direct and indirect patient care to diverse patient populations and how that care fits within patient-centered teams. Prerequisites: Completion of the PA didactic curriculum and entry into the PA experiential year. (G)(1) Fall, spring, and summer.

MPAS670, General Surgery Rotation: This rotation is designed to prepare the physician assistant student to function as an assistant to the general surgeon in providing pre-operative, intra-operative, and post-operative care. The student will learn how to diagnose and manage common surgical disorders and learn when to make appropriate surgical referrals. Prerequisite: Completion of didactic courses in PA program.
(G)(4) Fall, spring, and summer.

MPAS678, Core Content 1: This self-study course is designed to guide and encourage the student's systematic preparation for the Physician Assistant National Certification Examination (PANCE) by means of monthly examinations; and to develop and assess the student's competency in each of the stated terminal outcomes of the PA program. Prerequisites: Admission into the professional phase of the PA program and completion of the didactic phase of the PA program. (G)(2) Summer.

MPAS680, Core Content 2: This self-study course is designed to guide and encourage the student's systematic preparation for the Physician Assistant National Certification Examination (PANCE) by means of monthly examinations; and to develop and assess the student's competency in each of the stated terminal outcomes of the PA program. Prerequisites: Admission into the professional phase of the PA program and completion of the didactic phase of the PA program. (G)(2) Fall.

MPAS682, Core Content 3: This self-study course is designed to guide and encourage the student's systematic preparation for the Physician Assistant National Certification Examination (PANCE) by means of monthly examinations; and to develop and assess the student's competency in each of the stated terminal outcomes of the PA program. Prerequisites: Admission into the professional phase of the PA program and completion of the didactic phase of the PA program. (G)(1) Spring.



## JORDAN COLLEGE of the ARTS

## Administration

Ronald Caltabiano, DMA, Dean; Michelle Jarvis, MA, Associate Dean

## Professors

Timothy R. Brimmer, DA; James Robert Briscoe, PhD; Lisa Brooks, DMA; Ronald Caltabiano, DMA; Marek Cholewa; Richard Clark, MM; Michael Colburn, MM; Stanley E. DeRusha, MM; Penny Dimmick, DA; William Fisher, BA; Jeffrey Gillespie, PhD; Michelle Jarvis, MA; Stephan Laurent, MFA; James Mulholland, MM; David Murray, MM; Cynthia Pratt, MFA; Owen W. Schaub, PhD; Michael Schelle, PhD; Laurence Shapiro, MM; Douglas E. Spaniol, DMA; Eric Stark, DMA; Diane Timmerman, MFA

## Associate Professors

Larry Attaway, BM; Elaina Artemiev, PhD; Daniel Bolin, EdD; Kathleen Boyd, DMA; Frank Felice, PhD; William Grubb, DMA; Melvin Jones, PhD; Mary Katherine Kelton, DMA; Robert Koharchik, MFA; Gail Lewis, DMA; Susan McGuire; Wendy Meaden, MFA; Elizabeth Mix, PhD; Matthew Pivec, DMA; Gautam Rao, MFA; Derek Reid, MA; Susan Zurbuchen, MA
Assistant Professors
Andrew Farina, PhD; Patrick Hinson, BA; Nicholas Johnson, PhD; Brenda Johnston, MA; Steve Nyktas, MFA; John Perkins, DMA; Thomas Studebaker, MM

## Instructors

Jon Crabiel, MA (artist in residence); Mary Anne Scott, BM

## College Website

www.butler.edu/jca
Jordan College of the Arts has a distinguished tradition extending from the year 1895, when the Metropolitan School of Music was founded. That school merged in 1928 with the Indiana College of Music and Fine Arts to become the Arthur Jordan Conservatory of Music. In 1951, after 23 years of close affiliation, the conservatory became a part of Butler University as Jordan College of Music. The name was changed to Jordan College of Fine Arts in 1978, and in 2012 the name was again changed to Jordan College of the Arts (JCA).

Jordan College of the Arts provides focused professional study and collaborative, creative experiences within the context of a strong liberal arts university. We emphasize the development of students as artist-citizens who will become leaders in arts and society. The five academic departments/programs-art, arts administration, dance, music, and theatre-focus
on specific areas of study within their fields, be it the intersection of art and design in the art program, classical ballet in the Department of Dance, or nonprofit arts management in the Arts Administration Department.

Through our community outreach program, the Butler Community Arts School, 100 Butler students teach music and other arts to almost 2,000 young people in Indianapolis, most of whom are on scholarship. All Jordan College of the Arts students-future artist-citizens-are involved in the arts both on campus and off, attending concerts and exhibitions throughout Indianapolis and Central Indiana, performing for diverse audiences at Butler and on tour, and working in arts organization throughout the country.

Jordan College of the Arts offers programs of study leading to the degrees of bachelor of arts, bachelor of music, bachelor of fine arts, bachelor of science, and master of music.

## Undergraduate Degree Programs

- Bachelor of Arts in Art + Design (BA)
- Bachelor of Arts in Dance-Pedagogy (BA)
- Bachelor of Arts in Music (BA)
- Bachelor of Arts in Theatre (BA)
- Bachelor of Fine Arts in DancePerformance (BFA)
- Bachelor of Music in Composition (BM)
- Bachelor of Music in Jazz Studies (BM)
- Bachelor of Music in Music Education (choral-general, instrumental-general, or area) (BM)
- Bachelor of Music in Performance (piano, voice, or instrumental) (BM)
- Bachelor of Music in Performance and Music Education (BM)
- Bachelor of Musical Arts (pending approval) (BMA)
- Bachelor of Science in Arts Administration (music, theatre, or general) (BS)
- Bachelor of Science in Dance-Arts Administration (BS)


## Admission

All prospective students must submit a Jordan College of the Arts program application in addition to the Application for First-Year Admission before an audition or interview will be scheduled except for prospective students in

Art + Design. Both applications must be on file two weeks prior to the audition or interview date. A personal audition is required for all dance, music, and theatre applicants. A personal interview and audition or portfolio presentation and interview is also available for theatre applicants. An interview is required for all arts administration general students. An electronic portfolio review is required for Art + Design students.

Information on fall and spring audition/ interview dates and requirements are available at www.butler.edu/jca.

Note that all students who wish to be considered for JCA talent awards should complete the audition, interview, or portfolio review process early in the year. For general information on applying and admission to any Butler graduate program or course, see Admission Information and Requirements chapter. College-specific requirements are detailed below.

## General Academic Regulations

In addition to the University academic regulations, the following are applicable to students registered in Jordan College of the Arts.

- All students in the College must fulfill the Core Curriculum requirements of the University.
- 40 upper-division credit hours (300-400 level) are required for graduation.
- Courses in the student's major or minor receiving a grade of C - or below or taken pass/fail will not count toward that major or minor.
- All students working toward a teaching license must meet additional requirements as outlined for licensing.
- All students are required to participate in departmental ensembles as required by the specific curricular and scholarship guidelines.
- As an essential component of a full and varied educational experience in the arts, undergraduate JCA majors are expected to attend arts events in their discipline and related areas throughout their tenure at Butler.


## Graduate Degree Programs

- Master of Music in Composition (MM)
- Master of Music in Conducting (choral or instrumental) (MM)
- Master of Music in Music Education (MM)
- Master of Music in Music History (MM)
- Master of Music in Performance (piano, voice, or instrumental) (MM)
- Master of Music in Piano Pedagogy (MM)


## Jordan College Courses

JC100, Arts Event Attendance: As an essential component of a full and varied educational experience in the arts, undergraduate JCA majors are expected to attend arts events in their discipline and related areas throughout their tenure at Butler. Pass/fail credit. (Note: these courses will not count toward the limit of permitted $P / F$ courses.) (U)(0) Fall and spring.

JC110, First Year Arts Experience: Exploration of the interconnectedness of the arts through observation and attendance of art, dance, music, and theatre events. Students will view, review, develop critical thinking, and enhance the underpinnings of their disciplines in the arts. The course will fulfill at least two Indianapolis Art Event Attendance Requirements. (P/F) (U) (1) Fall.

## JC150, Schrott Center for the Arts Stage

 Production Training: An experiential course consisting of formal training sessions and handson learning where students work alongside Schrott Center professionals to engage in all aspects of stage production crew work. Training sessions include safety, lighting, live audio, audio recording, stage equipment, and video projection and recording. (U)(1) Fall and spring.JC200, Arts Event Attendance: As an essential component of a full and varied educational experience in the arts, undergraduate JCA majors are expected to attend arts events in their discipline and related areas throughout their tenure at Butler. Pass/fail credit. (Note: these courses will not count toward the limit of permitted $\mathrm{P} / \mathrm{F}$ courses.) (U)(0) Fall and spring.

JC300, Arts Event Attendance: As an essential component of a full and varied educational experience in the arts, undergraduate JCA majors are expected to attend arts events in their discipline and related areas throughout their tenure at Butler. Pass/fail credit. (Note: these courses will not count toward the limit of permitted $P / F$ courses.) (U)(0) Fall and spring.

## JC350, Schrott Center for the Arts Stage

 Production Training: An experiential course consisting of formal training sessions and handson learning where students work alongside Schrott Center professionals to engage in all aspects of stage production crew work. Training sessions include safety, lighting, live audio, audio recording, stage equipment, and video projection and recording. Prerequisites: Junior standingand successful completion of at least one semester of JC150. (U)(1) Fall and spring.

## JC381, Creative Interdisciplinary Laboratory:

Special Seminar: This special seminar will center on the Butler ArtsFest theme. The seminar may include research papers, presentations, exhibitions, guest speakers, performances, and/ or related activities to the festival. Open to JCA majors and non-JCA majors by permission. (P/F) (U)(2)

JC400, Arts Event Attendance: As an essential component of a full and varied educational experience in the arts, undergraduate JCA majors are expected to attend arts events in their discipline and related areas throughout their tenure at Butler. Pass/fail credit. (Note: these courses will not count toward the limit of permitted P/F courses.) (U)(0) Fall and spring.

## Art + Design

## Administration

Michelle Jarvis, MA, Program Director Associate Professors
Elizabeth Mix, PhD; Gautam Rao, MFA
Assistant Professor
Steve Nyktas, MFA
Program Website
www.butler.edu/art

## Mission

The art program educates artists to acquire skills of the designer, and designers to attain the aesthetic eye of the artist, achieved through an innovative, hybrid curriculum that emphasizes sustainable, traditional, and digital materials.

- Integration. Every course in the program integrates art and design, utilizing a hybrid approach that combines critical thinking with processes pertinent for both arts and designers as well as methods of creation that are both traditional and digital.
- Creativity. Creativity is nurtured through emphasis in idea generation. Focused on responding to themes and processes rather than fulfilling assignments, students learn to trust their intuition and gain confidence as authors of their own work.
- Flexibility. The program is designed to be flexible in response to rapidly expanding career opportunities. Innovative coursework allows students to strategize with both traditional and nontraditional materials and customize projects to their specific interests.
- Sustainability. The program promotes the ecological practice of reuse and
repurposing of sustainable materials. Students are provided practical experiences and marketable skills to sustain a lifetime of creativity.
- Collaboration. Collaboration is a critical skill for future artists and designers. Collaborative environments prepare students to work professionally as part of a team-sharing, exchanging, and accepting divergent viewpoints. Required internships with nonprofit and corporate organizations expand students' range of collaborative abilities and provide career-building opportunities.
- Leadership. The art program offers the professional dexterity to promote leadership by setting high standards of achievement in initiative, innovation, and communication. Students are expected to develop, articulate, and realize a personal vision. In the classroom and beyond, students strive for excellence in artistic creation and professional practice.


## Art + Design Student Learning Outcomes

- Demonstrate an understanding of the basic principles of art and design, including visual vocabulary, and technical sensibility toward composition and materials
- Demonstrate innovative thinking, craft, and sophistication in terms of aesthetic and technical application of materials and processes of art and design
- Demonstrate an understanding of connectivity of a variety of art and design methods, materials, techniques, and technologies
- Demonstrate an understanding of the intellectual underpinning of art and design in terms of history, process, and theory
- Demonstrate the understanding and ability to critique artwork in terms of materials, processes, and concepts
- Demonstrate professional growth in review of portfolio development, internships, and/ or exhibition


## Degree Programs

- Bachelor of Arts in Art + Design (BA)
- Minor in Art + Design


## General Requirements

Applicants are admitted to the program on the basis of academic acceptance by the University and an electronic portfolio review.

## Requirements for the Major

The BA in Art + Design requires the completion of 126 credit hours. In addition to the University Core Curriculum, the student takes required and elective courses in art and design; minors, or secondary major in another discipline; and a wide variety of elective courses.

## Requirements for the Minor

The 21-credit Art + Design minor consists of four required courses plus three additional courses chosen from approved electives.

## Core Course Offered by Art

PCA200-ART, Introduction to Visual Art:
This course combines the study of visual art (art history, art criticism, and aesthetics) with studio art experience (the elements of art and the principles of design put into practice). A wide variety of media are considered, including those sometimes termed "popular culture" film, television, advertising art, and web design in addition to more traditional forms such as painting and sculpture. Students develop a critical awareness of art and develop a vocabulary with which to describe their own and others' work. The course work is primarily composed of class discussion, written assignments, and creative projects. Art + Design majors are not eligible for enrollment. (U)(3) Fall and spring.

## Art Courses

ART105, Introduction to Visual Culture: This lecture-based course provides a survey of art and visual culture from around the world from prehistory to postmodernism. It also presents an introduction to a variety of methods by which art and visual culture are customarily understood. It is designed to explore the relationship between art history and history, between objects and key episodes in political, social, and intellectual history. Prerequisite: Major or minor or permission of instructor. (U)(3) Fall.

ART10'7, Line and Value 1: An introduction to the fundamentals of drawing as a medium of expression. The course introduces design principles and an appreciation of the history and practice of drawing. Prerequisite: art + design major or minor or permission of instructor. (U) (3) Fall.

## ART108, Structure-Graphic Design +

 Identity Branding I: This course provides an introduction to design concepts from an artistic and structural perspective. Students are introduced to a range of design problems, with an emphasis on the interplay of image, text, andcreativity. Students develop an understanding of typographic design and interactivity from a graphic design perspective. They also develop client briefs and gain expertise in both vector and bitmap environments, and are exposed to 3D printing for graphic designers and laser cutting. Students use Adobe InDesign and Adobe Illustrator. Prerequisites: ART107, ART122, art + design major or minor (U)(3) Fall.

ART122, Color-Painting + Color Theory I: An introduction to color theory, exploration of painting techniques and media, and an introduction to mixed-media approaches. The class will expose the student to a broad range of ideas and approaches relating to color and the visual arts. Students use the Pantone Matching System and digital color palettes from a variety of software programs including Adobe Photoshop and Illustrator. Prerequisites: ART107, art + design major or minor. (U)(3) Fall.

ART20', Line and Value-Drawing + 2D Design II: Intermediate-level drawing and twodimensional design. Prerequisites: ART107, art + design major or minor. (U)(3) Fall.

## ART208, Structure-Graphic Design +

 Identity Branding II: Intermediate-level graphic design and identity branding. Prerequisites: ART108, art + design major or minor (U)(3) Fall.
## ART210, Process-Theory + Practice:

This course connects art + design practices and develops students' individual artistic sensibilities through projects including creating of a portfolio framework and creating a minithesis. Prerequisites: ART105 and ART107 or permission of instructor. (U)(3) Spring.

ART222, Color-Painting + Color Theory II: Intermediate-level painting and color theory. Prerequisites: ART122, art + design major or minor. (U)(3) Fall.

## ART303, Contrast-Photography + Digital

 Manipulation: An exploration of photography in both fine art and design contexts. Students learn studio photography, digital manipulation using graphic software, and conceptual photographic approaches. Historical processes and antecedents to contemporary photography are also studied. Prerequisite: ART210 or permission of instructor. (U)(3) Fall.
## ART304, Depiction-Illustration +

 Printmaking: An exploration of sequential art and design practices in genres including graphic novels, comic strips, and children's books. Students learn book illustration methods, study relief printmaking, and create storyboards for animation. Students use Adobe Illustratorand Manga Studio in this course. Prerequisite: ART210 or permission of instructor. (U)(3) Occasionally.

## ART305, Time and Motion-Animation +

Video: This course explores art and design forms that have a temporal component, including animation (Flash, claymation, and stopmotion), digital imaging, and video. Students use DragonFrame in this course. Prerequisite: ART210 or permission of instructor. (U)(3) Fall.

## ART306, Interactive-Digital Art + Web

 Design: This course is an exploration of art and design that provokes interaction with audiences, including web design, toy design, relational aesthetics, digital art, and video game design. Students use Dreamweaver and GameSalad in this course. Prerequisite: ART210 or permission of instructor. (U)(3) Occasionally.ART30'7, Line and Value-Drawing + 2D Design III: Advanced-level drawing and twodimensional design. Prerequisites: ART207, art + design major or minor. (U)(3) Fall.

ART308, Structure III: Advanced level of graphic design and identity branding. Prerequisites: ART208, art + design major or minor. (U)(3) Fall.

ART311, Function-Product Design + Fashion: This course explores art and design in the context of function, including product development and package design. Students gain skills in sewing construction, pattern-making, and silk-screen printing. Students also learn to use product photography, animation, and websites to market their products. Students use Sketchup and Blender in this course. Prerequisite: ART210 or permission of instructor. (U)(3) Spring.

## ART312, Design-History and Theory:

This course provides an introduction to the history of modern and postmodern design. It is expressly designed to explore the relationship between the design disciplines (graphic design, furniture design, architecture, textile design, interior design, and fashion), as well as the dialogue between design history and design theory. Prerequisite: ART105, or junior or senior standing, or permission of instructor. (U)(3) Occasionally.

ART314, Museum as Theatre: This course considers aesthetic and theoretical issues that cross the boundaries between performance art and museum exhibition spaces. This course is discussion and activity-based and incorporates historical study, direct experience, critical analysis, and research at the Indianapolis Museum of Art. Prerequisite: ART105, or junior
or senior standing, or permission of instructor. This course meets off campus. Students will pay entrance fees to local museums. (U)(3) Occasionally.

## ART315, Postmodernism in the Arts:

Introduction to postmodernist theory as it applies to studio art, theater, dance, and music. Postmodern forms of art such as installation, video art, performance art, and happenings will be discussed. Prerequisite: ART105, or junior or senior standing, or permission of instructor. (U) (3) Occasionally.

ART322, Color-Painting + Color Theory III: An introduction to color theory and exploration of art and design practices with a special emphasis on painting. Students learn a broad range of approaches to color in painting, mixed media, and digital environments. Prerequisites: ART222, art + design major or minor. (U)(3) Fall.

ART360, Space-Sculpture + 3D Design: The focus of this course is the creation of threedimensional works utilizing traditional and nontraditional materials, including found object construction, mold-making, and 3D printing. Discussions, lectures, and critiques will explore and emphasize concept, materials, space, form, site, presentation, craft, and context. Students utilize Blender. Prerequisite: ART210 or permission of instructor. (U)(3) Fall.

ART382, Special Topics in Art and Visual Culture: Work in the special seminar will be centered on a specific aspect of studio art, art history, or visual culture. Prerequisite: Permission of instructor. (U)(3)

ART401, Independent Study-Art + Design: Offers the qualified student the opportunity to pursue a topic of individual interest. Prerequisites: Junior or senior standing and approval of written project proposal. (U)(1) Fall and spring.

## ART402, Independent Study-Art + Design:

 Offers the qualified student the opportunity to pursue a topic of individual interest. Prerequisites: Junior or senior standing and approval of written project proposal. (U)(2) Fall and spring.
## ART403, Independent Study-Art + Design:

Offers the qualified student the opportunity to pursue a topic of individual interest. Prerequisites: Junior or senior standing and approval of written project proposal. (U)(3) Fall and spring.

ART411C, Method-Exhibition + Thesis: In this course students create a comprehensive
body of work and complete a corresponding research project that places their work into one or more contexts based on media, style, or theme. Students learn to make both formal and informal presentations about their work, prepare a career-focused electronic portfolio, artist's statement, bio and resume, and gain networking and interview experience. Prerequisites: Senior standing, art + design majors; art + design minors only with approval. (U)(3) Spring.

ART451, Internship-Art + Design: On the job experience or apprenticeship related to the student's interests or degree objectives. Prerequisites: Art + design majors only with junior or senior standing and approval of the program director. (U)(1) Fall and spring.

ART452, Internship-Art + Design: On the job experience or apprenticeship related to the student's interests or degree objectives. Prerequisites: Art + design majors only with junior or senior standing and approval of the program director. (U)(2) Fall and spring.

ART453, Internship-Art + Design: On the job experience or apprenticeship related to the student's interests or degree objectives. Prerequisites: Art + design majors only with junior or senior standing and approval of the program director. (U)(3) Fall and spring.

## Arts Administration

Administration

Susan Zurbuchen, MA, Department Chair
Associate Professor
Susan Zurbuchen, MA
Assistant Professor
Brenda Johnston, MA

## Program Website

www.butler.edu/arts-administration
Arts administration is a course of study that prepares undergraduate students for a future in the management of nonprofit arts and community organizations. The program provides a strong undergraduate liberal arts education, a basic understanding of the business world, and a comprehensive education in the disciplines of the arts. Required experiential learning opportunities and internships provide essential workplace training and education. Careers include jobs in management, special events, volunteer coordination, fundraising, public relations, educational programming, and facilities management.

## Arts Administration at Butler

- Multidisciplinary approach integrating dance, music, theatre, and visual arts with current issues in arts management
- Educational relationships with local cultural organizations, professional artists, educators, and administrators
- Hands-on learning that integrates classroom instruction with workplace practice
- Strong emphasis on community engagement
- In-depth experience in the student's chosen art form
- National internship placements
- Study-abroad opportunities
- Comprehensive liberal arts education
- Distinguished faculty of experienced arts administrators
- Cross-campus business instruction led by experts in their respective fields (public relations, economics, management, etc.)
- One of the earliest and most comprehensive undergraduate arts administration programs in the nation


## Arts Administration Student Learning Outcomes

- Recognize the purposes and values of the nonprofit arts sector as well as the essential operations of a nonprofit organization Demonstrate this knowledge in practical applications
- Demonstrate critical-thinking skills when analyzing issues facing arts organizations
- Communicate how classroom experiences, community-based learning, and creative expression have shaped your personal career aspirations and value for lifelong learning in the arts
- Communicate coherently, effectively, and creatively in both written and oral formats
- Demonstrate proficiency in the use of current computer technologies utilized in nonprofit organizations
- Demonstrate the ability to understand and apply the principles of arts advocacy and philanthropy


## Degree Programs

- Bachelor of Science in Arts Administration (BS)
- Bachelor of Science in Arts

Administration-Music (BS)

- Bachelor of Science in Arts

Administration-Theatre (BS)

- Bachelor of Science in Dance Arts Administration (BS) (See dance major requirements.)


## Requirements for the Major

The three components of each arts administration degree are the University Core Curriculum, the required arts administration courses, and the required arts courses for each specific degree. All degrees in arts administration require completion of 128 credit hours.

## Arts Administration Courses

AA201, Survey of Arts Administration: An introduction to the field of arts administration, this course will explore the wide variety of arts and cultural organizations and the various aspects of the profession within the for-profit and nonprofit fields. (U)(2) Spring.

AA281, Special Topics: Special topics courses will focus on specific aspects of the arts. Topics will vary; courses are open to all students. (U)(1) Occasionally.

AA282, Special Topics: Special topics courses will focus on specific aspects of the arts. Topics will vary; courses are open to all students. (U)(2) Occasionally.

AA283, Special Topics: Special topics courses will focus on specific aspects of the arts. Topics will vary; courses are open to all students. (U)(3) Occasionally.

## AA301, Principles and Practices of Arts

 Administration: An introduction to the principles and practices of arts management, including incorporation, board development, strategic planning, and grant writing.Prerequisite: Sophomore standing. (U)(3) Fall and spring.

AA315, Arts in Society: This class will investigate the various genres of the visual and performing arts in relation to contemporary society. Through reading, discussion, writing, and creative learning activities, students will learn to appreciate and accept a wide framework of artistic endeavors and begin to develop an understanding of the concept of aesthetics. (U) (3) Annually, term varies.

AA325, Arts Advocacy and Lobbying: This seminar course is designed to make students aware of the current trends, challenges, and practices in arts advocacy and lobbying, and to enable them to gain insights into the advocacy responsibilities of the professional arts administrator. Prerequisite: Junior standing or permission of the instructor. (U)(3)

AA335, Special Events: This course provides students with a basic understanding of the role of special events in nonprofit arts and community
organizations. The course will cover event planning, coordination, and implementation utilizing written materials, guest speakers, and project work. Requirements will include group and individual participation in special events in the community. Prerequisite: Sophomore standing or permission of the instructor. (U)(3) Occasionally.

## AA3'1S, Experiential Learning: An

 opportunity for qualified students to undertake supervised field experience with an arts or related nonprofit organization. Prerequisites: Arts administration major and sophomore standing and permission of the instructor. (U)(1) Fall and spring.AA3'2S, Experiential Learning: An opportunity for qualified students to undertake supervised field experience with an arts or related nonprofit organization. Prerequisites: Arts administration major and sophomore standing and permission of the instructor. (U)(2) Fall and spring.

## AA3 ${ }^{\text {r7 }}$ 3S, Experiential Learning: An

 opportunity for qualified students to undertake supervised field experience with an arts or related nonprofit organization. Prerequisites: Arts administration major and sophomore standing and permission of the instructor. (U)(3) Fall and spring.
## AA381, Special Seminar in Arts

Administration: Special seminars will focus on more detailed components of arts administration. Seminars may include guest speakers, research papers, presentations, and/ or a portfolio. Prerequisite: Arts administration major or permission of instructor. (U)(1) Occasionally.

## AA382, Special Seminar in Arts

Administration: Special seminars will focus on more detailed components of arts administration. Seminars may include guest speakers, research papers, presentations, and/ or a portfolio. Prerequisite: Arts administration major or permission of instructor. (U/G)(2) Occasionally.

## AA383, Special Seminar in Arts

Administration: Special seminars will focus on more detailed components of arts administration. Seminars may include guest speakers, research papers, presentations, and/ or a portfolio. Prerequisite: Arts administration major or permission of instructor. (U/G)(3) Occasionally.

AA390, Leadership and Artistic Vision:
This course will introduce students to trends
in the field of arts management and help them gain insights into the diverse roles and responsibilities of the professional artistic director. Students will also explore their own leadership skills and participate in activities to identify and expand their own creative abilities and vision. Prerequisites: Junior standing and AA301. (U)(3) Occasionally.

AA400, Internship Preparation: Preparation and selection of internship, including résumé, cover letter, computer skills and literacy for the workplace, and approval of internship site. Prerequisite: Permission of the department chair. (U)(0) Fall and spring.

AA401, Arts Administration Seminar: Work in the seminar class will focus on trends in the nonprofit arts world; emphasis on marketing, promotions, and fundraising. Course includes guest speakers. Prerequisites: AA301, junior standing, and permission of the instructor. (U/G) (3) Fall and spring.

## AA425, Arts, Education, and Community

Engagement: This course is designed to provide students with an understanding of the history of arts education and outreach, community engagement, and current trends. Students will examine and evaluate existing programs as well as design new ones. Course includes guest speakers and field trips. Prerequisite: AA301 or permission of the instructor. (U)(3) Fall.

## AA450W, Arts Administration Senior

Seminar: Capstone course focusing on timely issues in the field of arts administration. Significant writing assignments as related to arts administration. Prerequisites: Arts administration major and senior standing or arts administration major and permission of the instructor. (U)(3) Fall.

## AA475, Internship in Arts Administration:

 On-the-job experience in an arts agency directly related to the student's degree objectives. Prerequisites: AA301, AA401, junior standing, and permission of the department chair. (U)(6) Fall, spring, and summer.AA481, Independent Study: An opportunity for the qualified student to pursue some investigative work upon his or her own initiative. Petition required with approval by the dean. (U)
(1) Fall and spring.

AA482, Independent Study: An opportunity for the qualified student to pursue some investigative work upon his or her own initiative. Petition required with approval by the dean. (U) (2) Fall and spring.

AA483, Independent Study: An opportunity for the qualified student to pursue some investigative work upon his or her own initiative. Petition required with approval by the dean. (U)
(3) Fall and spring.

AA499, Honors Thesis. (U)(3) Fall and spring.

## Department of Dance

Administration<br>Larry Attaway, BM, Department Chair Professors

Marek Cholewa; Michelle Jarvis, MA; Stephan Laurent, MFA; Cynthia Pratt, MFA

## Associate Professors

Larry Attaway, BM; Susan McGuire; Derek Reid, BA
Assistant Professor
Patrick Hinson, BA
Department Website
www.butler.edu/dance

## Dance at Butler

- Continuing a 50-year tradition of excellence in ballet, training serious and talented dance students, preparing them for future careers in the dance arts
- A nationally and internationally renowned undergraduate department that is fully accredited by the National Association of Schools of Dance
- Strong technical training based on the central focus of classical ballet
- Exposure to a wide range of techniques
- Extensive performance opportunities with the Butler Ballet, the department's preprofessional company
- Broad exposure to academic subjects in dance and other arts
- Opportunities to perform in major productions each year in Clowes Memorial Hall, a 2,200-seat venue, and also in the more intimate setting of the 450 -seat Howard L. Schrott Center for the Arts
- Butler Ballet performs full-length classical ballets, commissioned and licensed masterworks, and contemporary repertoire from a variety of stylistic approaches
- Butler Chamber Dance performs experimental, often non-proscenium, multi-disciplinary, highly contemporary choreographic work
- Opportunities for students to present their creativity through student choreographic showcases and senior productions
- Highly qualified professors who are artistscholars combining broad educational backgrounds with professional performing
careers, in-depth study, choreography, and teaching in the United States and abroad
- International summer study opportunities


## Dance Student Learning Outcomes

The coursework of each of the three degree plans is designed with the following student learning outcomes:

- Demonstrate an understanding of the intellectual underpinning of the various dance techniques in terms of structure, vocabulary, syntax, and phrasing
- Interpret, compare, and critique the art of choreography and performance through theoretical and practical study in terms of innovation, craft, and sophistication
- Demonstrate an understanding of the physical and intellectual underpinning of the various dance techniques as manifested in execution and pedagogy
- Articulate and apply an understanding of the impact of dance in history, society, and the allied arts, thus becoming advocates for the art form
- Incorporate the impact of other arts on dance through studies in music, theatre, and the fine arts
- Value an ethic of professionalism as manifested through respect for appropriate etiquette and interaction with faculty and fellow students


## Degree Programs

- Bachelor of Arts in Dance-Pedagogy (BA)
- Bachelor of Fine Arts in DancePerformance (BFA)
- Bachelor of Science in Dance-Arts Administration (BS)
- Minor in Dance


## Requirements

Applicants are admitted to the program on the basis of academic acceptance by the University and an audition in ballet.

All majors in dance ( $\mathrm{BFA}, \mathrm{BA}$, and BS ) require completion of 128 credit hours, composed of a variety of studio courses, performance, and dance academics in addition to required courses in related areas such as music and theatre, and the Core Curriculum of the University.

The dance minor requires 24 hours in dance, 17 of which are prescribed while the other seven can be taken from an approved list of dance electives. Only students with sophomore status and above and who have been previously admitted as dance majors are eligible to apply for the minor.

## Core Courses Offered by Dance

PCA220-DA, American Dance in the Black Tradition-Searching for Cultural Diffusion in Movement: This course will examine the relationship between dance and artistic development in 20th-century America, focusing on the artistic expression of the African American culture. Through examination of the interplay between dominant and nondominant cultures, students can create and develop a model of compassion and appreciation where diverse artistic talents are recognized and valued for their unique contributions. (U)(3) Spring.

PCA221-DA, Latin Dances, African Roots: An introduction to and overview of the national dances of Cuba, Brazil, Argentina, and Peru. We will study the influence of indigenous cultures, colonization, and the Atlantic slave trade on the development of dances such as samba, rumba, tango, capoeira, and popular dance and culture, as well as examining current practice in light of the political and social changes that have occurred in these countries since 1900 . We will approach the course subject using films, texts, and, of course, by dancing. We will gain first-hand knowledge of, and appreciation for, dance in these cultures and how it relates to an appreciation of dance in our culture. All students are welcome. (U)(3) Fall.

PWB103-DA, Beginning Ballet: (Non-majors) Basic ballet technique in the recognized classic form. (For students who have had no previous training. Not applicable to the dance major; open to all other students). Two meetings per week. Open to students who have not completed a PWB course. (U)(1) Fall and spring.

PWB104-DA, Beginning Jazz: Basic jazz styles and forms for non-majors. No prerequisite. Two meetings per week. Open to students who have not completed a PWB course. (U)(1) Fall and spring.

PWB105-DA, Intermediate/Advanced Jazz:
Intermediate/advanced jazz styles and forms for non-majors. Two meetings per week. Open to students who have not completed a PWB course. (U)(1) Spring.

PWB106-DA, Modern Dance (non-majors): Dance technique as a combination of movement improvisation and modern technique emphasizing qualities of movement in space and time. (Not applicable to dance majors; open to all other students.) Two meetings per week. Open to students who have not completed a PWB course. (U)(1) Fall and spring.

## Courses in Dance for Non-majors

Unless otherwise indicated, all odd-numbered courses are offered in the fall, and all evennumbered courses are offered in the spring.

DA101, Beginning Ballet 1: Basic ballet technique in the recognized classic form. (For students who have had no previous training. Not applicable to the dance major; open to all other students.) Two meetings per week. (U)(1) Fall.

DA102, Beginning Ballet 2 (non-majors): Continuation of DA101: Basic ballet technique in the recognized classic form for students who have had little previous training. Not applicable to the dance major; open to all other students. Two meetings per week. (U)(1) Spring.

DA103, Beginning Jazz: Basic jazz styles and forms for non-majors. No prerequisite. Two meetings per week. (U)(1) Fall.

DA104, Beginning Jazz: Basic jazz styles and forms for non-majors. No prerequisite. Two meetings per week. (U)(1) Spring.

DA105, Intermediate/Advanced Jazz (nonmajors): Intermediate/advanced jazz styles and forms for non-majors. Two meetings per week. (U)(1) Fall.

DA106, Intermediate/Advanced Jazz (nonmajors): Intermediate/advanced jazz styles and forms for non-majors. Two meetings per week. (U)(1) Spring.

DA107, Modern Dance (non-majors): Dance technique as a combination of movement improvisation and modern technique emphasizing qualities of movement in space and time. (Not applicable to dance majors; open to all other students.) Two meetings per week. (U) (1) Fall.

DA108, Modern Dance (non-majors): Dance technique as a combination of movement improvisation and modern technique emphasizing qualities of movement in space and time. (Not applicable to dance majors; open to all other students.) Two meetings per week. (U) (1) Spring.

DA301, Intermediate Ballet (non-majors): Continuation of DA202 for non-majors who wish to further their ballet training. Three meetings per week. (U)(2) Fall.

DA302, Intermediate Ballet (non-majors): Continuation of DA202 for non-majors who wish to further their ballet training. Three meetings per week. (U)(2) Spring.

DA401, Intermediate/Advanced Ballet (nonmajors): Continuation of DA302. Intermediate/ advanced level of ballet technique for nonmajors. Three meetings per week. (U)(2) Fall.

DA402, Intermediate/Advanced Ballet (nonmajors): Continuation of DA302. Intermediate/ advanced level of ballet technique for nonmajors. Three meetings per week. (U)(2) Spring.

## Courses in Dance for Majors

Unless otherwise indicated, all odd-numbered courses are offered in the fall, and all evennumbered courses are offered in the spring.

DA109, Professional Practices: Seminar course designed to inform, direct, and support new students, serve as an open forum for discussion, broaden awareness, gain knowledge, and develop skills while fostering artistic life. One meeting per week. Prerequisite: First-year dance major status. (U)(0)Fall.

DA110, Professional Practices: Seminar course designed to inform, direct, and support new students, serve as an open forum for discussion, broaden awareness, gain knowledge, and develop skills while fostering artistic life. One meeting per week. Prerequisite: First year status and DA109. (U)(0)Spring.

## Ballet Technique Courses for Majors

Courses DA211-218 are open to sophomores. Courses DA313-318 are open to juniors. Courses DA415-418 are open to seniors.

## DA111, Ballet Technique 1 First Year:

Recognized classic dance form of Western Europe and America. It serves in the scheme of dance training as mathematics does in the academic curriculum-a discipline toward exactness and precision of line. Includes barre and center exercises. Placement in appropriate levels is determined by previous training and not by the year in residence. Class meets five days a week for one and one-half hours. (U)(2) Fall.

DA112, Ballet Technique 1 First Year: Recognized classic dance form of Western Europe and America. It serves in the scheme of dance training as mathematics does in the academic curriculum-a discipline toward exactness and precision of line. Includes barre and center exercises. Placement in appropriate levels is determined by previous training and not by the year in residence. Class meets five days a week for one and one-half hours. (U)(2) Spring.

DA113, Ballet Technique 2 First Year:
Recognized classic dance form of Western Europe and America. It serves in the scheme
of dance training as mathematics does in the academic curriculum-a discipline toward exactness and precision of line. Includes barre and center exercises. Placement in appropriate levels is determined by previous training and not by the year in residence. Class meets five days a week for one and one-half hours. (U)(2) Fall.

DA114, Ballet Technique 2: Recognized classic dance form of Western Europe and America. It serves in the scheme of dance training as mathematics does in the academic curriculum-a discipline toward exactness and precision of line. Includes barre and center exercises. Placement in appropriate levels is determined by previous training and not by the year in residence. Class meets five days a week for one and one-half hours. (U)(2) Spring.

DA115, Ballet Technique 3: Recognized classic dance form of Western Europe and America. It serves in the scheme of dance training as mathematics does in the academic curriculum-a discipline toward exactness and precision of line. Includes barre and center exercises. Placement in appropriate levels is determined by previous training and not by the year in residence. Class meets five days a week for one and one-half hours. (U)(2) Fall.

DA116, Ballet Technique 3: Recognized classic dance form of Western Europe and America. It serves in the scheme of dance training as mathematics does in the academic curriculum-a discipline toward exactness and precision of line. Includes barre and center exercises. Placement in appropriate levels is determined by previous training and not by the year in residence. Class meets five days a week for one and one-half hours. (U)(2) Spring.

DA119, Ballet Technique-Men First Year: Recognized classic dance form of Western Europe and America geared specifically for the male dancer. It serves in the scheme of dance training as mathematics does in the academic curriculum-a discipline toward exactness and precession of line. Includes barre and center exercises. Class meets five days a week for one and one half-hour. (U)(2) Fall.

DA120, Ballet Technique-Men First Year: Recognized classic dance form of Western Europe and America geared specifically for the male dancer. It serves in the scheme of dance training as mathematics does in the academic curriculum-a discipline towards exactness and precision of line. Includes barre and center exercises. Class meets five days a week for one and one half-hour. (U)(2) Spring.

DA12'7, Men's Allegro Technique 1: Specific allegro technique for men: multiple turns, beats, and grand allegro steps. Two meetings per week. Prerequisite: Male dance major. (U)(1) Fall.

## DA128, Men's Allegro Technique 1:

Continuation of DA 127. Two meetings per week. Prerequisite: DA127. (U)(1) Spring.

DA211, Ballet Technique 1: Recognized classic dance form of Western Europe and America. It serves in the scheme of dance training as mathematics does in the academic curriculum-a discipline toward exactness and precision of line. Includes barre and center exercises. Placement in appropriate levels is determined by previous training and not by the year in residence. Class meets five days a week for one and one-half hours. (U)(2) Fall.

DA212, Ballet Technique 1: Recognized classic dance form of Western Europe and America. It serves in the scheme of dance training as mathematics does in the academic curriculum-a discipline toward exactness and precision of line. Includes barre and center exercises. Placement in appropriate levels is determined by previous training and not by the year in residence. Class meets five days a week for one and one-half hours. (U)(2) Spring.

DA213, Ballet Technique 2: Recognized classic dance form of Western Europe and America. It serves in the scheme of dance training as mathematics does in the academic curriculum-a discipline toward exactness and precision of line. Includes barre and center exercises. Placement in appropriate levels is determined by previous training and not by the year in residence. Class meets five days a week for one and one-half hours. (U)(2) Fall.

DA214, Ballet Technique 2: Recognized classic dance form of Western Europe and America. It serves in the scheme of dance training as mathematics does in the academic curriculum-a discipline toward exactness and precision of line. Includes barre and center exercises. Placement in appropriate levels is determined by previous training and not by the year in residence. Class meets five days a week for one and one-half hours. (U)(2) Spring.

DA215, Ballet Technique 3: Recognized classic dance form of Western Europe and America. It serves in the scheme of dance training as mathematics does in the academic curriculum-a discipline toward exactness and precision of line. Includes barre and center exercises. Placement in appropriate levels is determined by previous training and not by the year in residence. Class
meets five days a week for one and one-half hours. (U)(2) Fall.

DA216, Ballet Technique 3: Recognized classic dance form of Western Europe and America. It serves in the scheme of dance training as mathematics does in the academic curriculum-a discipline toward exactness and precision of line. Includes barre and center exercises. Placement in appropriate levels is determined by previous training and not by the year in residence. Class meets five days a week for one and one-half hours. (U)(2) Spring.

DA217, Ballet Technique 4: Advanced level of ballet technique. (See description under DA117, DA118.) Ladies will take the complete class on pointe during three of the five weekly meetings. (U)(3) Fall.

DA218, Ballet Technique 4: Advanced level of ballet technique. (See description under DA 117, DA118.) Ladies will take the complete class on pointe during three of the five weekly meetings. (U)(2) Spring.

DA219, Ballet Technique-Men Sophomore: Recognized classic dance form of Western Europe and America geared specifically for the male dancer. It serves in the scheme of dance training as mathematics does in the academic curriculum-a discipline towards exactness and precision of line. Includes barre and center exercises. Placement in classes is determined by previous training and not by the year in residence. Class meets five days a week for one and one half-hours. (U)(2) Fall.

DA220, Ballet Technique-Men Sophomore:
Recognized classic dance form of Western Europe and America geared specifically for the male dancer. It serves in the scheme of dance training as mathematics does in the academic curriculum-a discipline towards exactness and precision of line. Includes barre and center exercises. Placement in classes is determined by previous training and not by the year in residence. Class meets five days a week for one and one half-hours. (U)(2) Spring.

DA22'7, Men's Allegro Technique 2: Specific allegro technique for men: multiple turns, beats, and grand allegro steps. Two meetings per week. Prerequisite: DA128. (U)(1) Fall.

## DA228, Men's Allegro Technique 2:

Continuation of DA22 7 . Two meetings per week. Prerequisite: DA227. (U)(1) Spring.

DA313, Ballet Technique 2: Intermediate level of ballet technique (see description under DA115, DA116). By placement only. (U)(2) Spring.

DA314, Ballet Technique 2: Intermediate level of ballet technique (see description under DA115, DA116). By placement only. (U)(2) Spring.

DA315, Ballet Technique 3: See description under DA115, DA116. (U)(2) Fall.

DA316, Ballet Technique 3: See description under DA115, DA116. (U)(2) Spring.

DA31'7, Ballet Technique 4: Advanced level of ballet technique. (See description under DA115, DA116.) Ladies will take the complete class on pointe during three of the five weekly meetings. (U)(2) Fall.

DA318, Ballet Technique 4: Advanced level of ballet technique. (See description under DA115, DA116.) Ladies will take the complete class on pointe during three of the five weekly meetings. (U)(2) Spring.

## DA319, Ballet Technique-Men Junior:

 Advanced ballet technique geared specifically for the male dancer. Includes barre and center exercises. Placement in classes is determined by previous training and not by the year in residence. Class meets five days a week for one and one half-hours. (U)(2) Fall.DA320, Ballet Technique-Men Junior:
Advanced level of ballet technique geared specifically for the male dancer. Includes barre and center exercises. Placement in classes is determined by previous training and not by the year in residence. Class meets five days a week for one and one half-hours. (U)(2) Spring.

DA32'7, Men's Allegro Technique 3: Specific allegro technique for men: multiple turns, beats, and ground allegro steps. Two meetings per week. Prerequisite: DA228. (U)(1) Fall.

DA328, Men's Allegro Technique 3:
Continuation of DA327. Two meetings per week. Prerequisite: DA 327. (U)(1) Spring.

DA410, Ballet Technique: Same as DA415, DA416. One section of the course meets MWF, the other TR and TBA for one hour of credit. By placement only. (U)(1) Fall and spring.

DA415, Ballet Technique 3: Advanced level of ballet technique. (See description under DA115, DA116.) By placement only. Meets five times per week. (U)(2) Fall.

DA416, Ballet Technique 3: Advanced level of ballet technique. (See description under DA115, DA116.) By placement only. Meets five times per week. (U)(2) Spring.

DA417, Ballet Technique 4: Advanced level of ballet technique. (See description under DA117\%,

DA118.) Ladies will take the complete class on pointe during three of the five weekly meetings. (U)(2) Fall.

DA418, Ballet Technique 4: Advanced level of ballet technique. (See description under DA11'\%, DA118.) Ladies will take the complete class on pointe during three of the five weekly meetings. (U)(2) Spring.

## DA419, Ballet Technique-Men Senior:

Advanced ballet technique geared specifically for the male dancer. Includes barre and center exercises. Placement in classes is determined by previous training and not by the year in residence. Class meets five days a week for one and one half-hours. (U)(2) Fall.

DA420, Ballet Technique-Men Senior: Advanced ballet technique geared specifically for the male dancer. Includes barre and center exercises. Placement in classes is determined by previous training and not by the year in residence. Class meets five days a week for one and one half-hours. (U)(2) Spring.

DA427, Men's Allegro Technique 4: Specific allegro technique for men: multiple turns, beats, and grand allegro steps. Two meetings per week. Prerequisite: DA328. (U)(1) Fall.

## DA428, Men's Allegro Technique 4:

Continuation of DA42 7 . Two meetings per week. Prerequisite: DA427. (U)(1) Spring.

## Pointe, Pas de Deux, and Variations Courses

DA121, Pointe 1 First Year: The specialized study of ballet technique as applied to pointe work. For dance majors only. Two meetings per week. (U)(1) Fall.

DA122, Pointe 1 First Year: The specialized study of ballet technique as applied to pointe work. For dance majors only. Two meetings per week. (U)(1) Spring.

DA123, Pointe 2 First Year: Intermediate/ advanced level of pointe technique for dance majors. By placement only. Two meetings per week. (U)(1) Fall.

DA124, Pointe 2 First Year: Intermediate/ advanced level of pointe technique for dance majors. By placement only. Two meetings per week. (U)(1) Spring.

DA125, Pas de Deux 1: First-year partnering technique. Required of male dance majors, by invitation only for female dance majors. (U)(1) Fall.

DA126, Pas de Deux 1: First-year partnering technique. Required of male dance majors, by invitation only for female dance majors. (U)(1) Spring.

DA221, Pointe 2 Sophomores: Intermediate/ advanced level of pointe technique for dance majors. By placement only. Two meetings per week. (U)(1) Fall.

DA222, Pointe 2 Sophomores: Intermediate/ advanced level of pointe technique for dance majors. By placement only. Two meetings per week. (U)(1) Spring.

DA223, Pointe 3 Sophomores: Advanced level of pointe technique for dance majors. By placement only. Two meetings per week. (U)(1) Fall.

DA224, Pointe 3 Sophomores: Advanced level of pointe technique for dance majors. By placement only. Two meetings per week. (U)(1) Spring.

DA225, Pas de Deux 2: Second-year partnering technique. Required of male BFA dance majors, by invitation only for female dance majors. One meeting per week. (U)(1) Fall.

DA226, Pas de Deux 2: Second-year partnering technique. Required of male BFA dance majors, by invitation only for female dance majors. One meeting per week. (U)(1) Spring.

DA321, Pointe 3 Juniors: Advanced level of pointe technique for dance majors. By placement only. Two meetings per week. (U)(1) Fall.

DA322, Pointe 3 Juniors: Advanced level of pointe technique for dance majors. By placement only. Two meetings per week. (U)(1) Spring.

DA323, Pointe 4 Juniors: Advanced professional level pointe technique for dance majors. By placement only. Two meetings per week. (U)(1) Fall.

DA324, Pointe 4 Juniors: Advanced professional level pointe technique for dance majors. By placement only. Two meetings per week. (U)(1) Spring.

DA325, Pas de Deux 3: Intermediate/advanced technique of supported adagio and advanced repertoire required of male BFA dance majors. By invitation only for male BA and BS dance majors and female dance majors. One meeting per week. (U)(1) Fall.

DA326, Pas de Deux 3: Intermediate/advanced technique of supported adagio and advanced repertoire required of male BFA dance majors. By invitation only for male BA and BS dance majors
and female dance majors. One meeting per week. (U)(1) Spring.

DA408, Classical Variations: Learning and analyzing standard solo variations from the 19thand 20th-century ballet repertoires with special emphasis on pointe technique. One meeting per week. By consent of the instructor. (U)(1) Spring.

DA421, Pointe 3 Seniors: Advanced level of pointe technique for dance majors. By placement only. Two meetings per week. (U)(1) Fall.

DA422, Pointe 3 Seniors: Advanced level of pointe technique for dance majors. By placement only. Two meetings per week. (U)(1) Spring.

DA423, Pointe 4 Seniors: Advanced professional level pointe technique for dance majors. By placement only. Two meetings per week. (U)(1) Fall.

DA424, Pointe 4 Seniors: Advanced professional level pointe technique for dance majors. By placement only. Two meetings per week. (U)(1) Spring.

DA425, Pas de Deux 4: Advanced technique of supported adagio and advanced repertoire. By invitation only for male and female dance majors. One meeting per week. (U)(1) Fall.

DA426, Pas de Deux 4: Advanced technique of supported adagio and advanced repertoire. By invitation only for male and female dance majors. One meeting per week. (U)(1) Spring.

## Modern and Improvisation Courses

Unless otherwise indicated, all odd-numbered courses are offered in the fall and all evennumbered courses are offered in the spring.

DA131, Modern Technique 1: First-year modern technique for dance majors. Three hours per week. No prerequisite. (U)(1) Fall.

DA132, Modern Technique 1: First-year modern technique for dance majors. Three hours per week. Prerequisite: DA131. (U)(1) Spring.

DA231, Modern Technique 2: Second-year modern technique for dance majors. Three hours per week. Prerequisites: DA131, DA132. (U)(1) Fall.

DA232, Modern Technique 2: Second-year modern technique for dance majors. Three hours per week. Prerequisite: DA231. (U)(1) Spring.

DA233, Improvisation 1: Exploration of basic improvisational skills in order to relinquish the habitual movements of the trained dancer and to find more original ways of expressing ideas through dance. One meeting per week.

Prerequisite: Sophomore dance major status. (U) (1) Fall.

DA331, Modern Technique 3: Third-year technique for dance majors. Three meetings per week. Prerequisites: DA231, DA232. (U)(1) Fall.

DA332, Modern Technique 3: Third-year technique for dance majors. Three meetings per week. Prerequisite: DA331. (U)(1) Spring.

DA431, Modern Technique 4: Fourth-year modern technique for dance majors. Three meetings per week. Prerequisites: DA331, DA332. (U)(1) Fall.

DA432, Modern Technique 4: Fourth-year modern technique for dance majors. Three meetings per week. Prerequisite: DA431. (U)(1) Spring.

## Other Dance Techniques Courses

Unless otherwise indicated, all odd-numbered courses are offered in the fall and all evennumbered courses are offered in the spring.

DA141, Jazz 1: Contemporary jazz for dance majors with emphasis on Simonson technique. Two meetings per week. (U)(1) Fall.

DA142, Jazz 1: Contemporary jazz for dance majors with emphasis on Simonson technique. Two meetings per week. Prerequisite: DA141 (U) (1) Spring.

DA241, Jazz 2: Continuing study of jazz techniques at the sophomore level. Three meetings per week. Prerequisite: DA142. (U)(1) Fall.

DA242, Jazz 2: Second-year jazz technique for dance majors. Three meetings per week. Prerequisite: DA241. (U)(1) Spring.
DA247, Character Dance: The study of Slavic dance techniques of the Polish, Russian, Hungarian, and Spanish styles with emphasis on individual and group performances. Two meetings per week. Open to dance majors only. (U)(1) Fall.

DA248, World Dance Technique: The study of non-traditional dance techniques; culturally based dance idioms with emphasis on individual and ensemble performances. Two meetings per week. Prerequisite: DA247. (U)(1) Spring.

DA341, Jazz 3: Secondary training in Simonson jazz technique with emphasis on varied movement styles. Prerequisite: DA242. (U)(1) Fall.

DA342, Jazz 3: Secondary training in Simonson jazz technique with emphasis on varied
movement styles. Prerequisite: DA341. (U)(1) Spring.

DA344, Theatre Dance Forms: A survey of theatrical dance from the early 20th century with materials designed for teaching and performance using tap, jazz, and folk techniques in entertainment routines. Emphasis on individual and group performance. Three meetings per week. Prerequisite: Junior dance major or consent of department chair. (U)(2) Spring.

DA429, Contemporary Partnering: Advanced study through practical work in the principles related to contemporary partnering in the 21st century, including balance, counterbalance, resistance, strength building, and weight distribution. Prerequisites: Completion of DA325 or DA326; enrollment in DA425/426 preferred, mandatory for male dancers. (U)(1) Fall.

## Performance Courses

Unless otherwise indicated, all odd-numbered courses are offered in the fall and all evennumbered courses are offered in the spring.

DA151, Butler Ballet-First Year: All performance groups are selected by the choreographer in line with the particular needs of the work being produced. Participation in more than one group is possible. Prerequisite: Dance major. (U)(1) Fall.

DA152, Butler Ballet-First Year: Continuation of DA151. Prerequisite: DA151. (U)(1) Spring.

DA251, Butler Ballet-Sophomore: All performance groups are selected by the choreographer in line with the particular needs of the work being produced. Participation in more than one group is possible. Prerequisite: DA152. (U)(1) Fall.

DA252, Butler Ballet-Sophomore:
Continuation of DA251. Prerequisite: DA251. (U) (1) Spring.

DA255, Butler Chamber Dance: Ensemble created to perform new choreographic works by the dance faculty, collaborate with similar university programs or professional companies, and collaborate with the community of artists of the Jordan College of the Arts, among others. Each performance is an individual project with participation by audition only. Permission of the dance department is required. Prerequisite: DA151 and DA152, sophomore status. (U)(1) Fall and spring.

DA355, Butler Chamber Dance: Ensemble created to perform new choreographic works by the dance faculty, collaborate with similar
university programs or professional companies, and collaborate with the community of artists of the Jordan College of the Arts, among others. Each performance is an individual project with participation by audition only. Permission of the dance department is required. Prerequisite: DA151 and DA152, sophomore status. (U)(1) Fall and spring.

DA455, Butler Chamber Dance: Ensemble created to perform new choreographic works by the dance faculty, collaborate with similar university programs or professional companies, and collaborate with the community of artists of the Jordan College of the Arts, among others. Each performance is an individual project with participation by audition only. Permission of the dance department is required. Prerequisite: DA151 and DA152, sophomore status. (U)(1) Fall and spring.

DA311, Performance Lab: Laboratory course for dance majors to serve as performers for student choreographers in Choreography 3, DA453. No prerequisite. (U)(1) Fall and spring.

DA351, Butler Ballet-Junior: All performance groups are selected by the choreographer in line with the particular needs of the work being produced. Participation in more than one group is possible. Prerequisite: DA252 or consent of department chair. (U)(2) Fall.

DA352, Butler Ballet-Junior: Continuation of DA351. Prerequisite: DA351 or consent of department chair. (U)(2) Spring.

DA451, Butler Ballet-Senior: All performance groups are selected by the choreographer in line with the particular needs of the work being produced. Participation in more than one group is possible. Prerequisite: DA352 or consent of department chair. (U)(2) Fall.

DA452, Butler Ballet-Senior: Continuation of DA451. Prerequisite: DA451 or consent of department chair. (U)(2) Spring.

## Arts Event Attendance Courses

Unless otherwise indicated, all odd-numbered courses are offered in the fall, and all evennumbered courses are offered in the spring.

DA190, Arts Event Attendance: New dance majors and new secondary dance majors will attend 10 performances in their first academic year. Events will be distributed among art, dance, music, theatre, and arts-related lectures and will include on- and off-campus presentations. Pass/ fail credit. (U)(0) Fall and spring.

DA290, Arts Event Attendance: Sophomore dance majors and secondary dance majors will attend eight performances in their second academic year. Events will be distributed among art, dance, music, theatre, and arts-related lectures and will include on- and off-campus presentations. Pass/fail credit. Prerequisite: DA190. (U)(0) Fall and spring.

DA390, Arts Event Attendance: Junior dance majors and secondary majors will attend six performances in their third academic year. Events will be distributed among art, dance, music, theatre, and arts-related lectures and will include on- and off-campus presentations. Pass/ fail credit. Prerequisite: DA290. (U)(0) Fall and spring.

DA490, Arts Event Attendance: Senior dance majors and secondary majors will attend six performances in their final academic year. Events will be distributed among art, dance, music, theatre, and arts-related lectures and will include on- and off-campus presentations. Pass/ fail credit. Prerequisite: DA390. (U)(0) Fall and spring.

## Dance Academic Courses

Unless otherwise indicated, all odd-numbered courses are offered in the fall and all evennumbered courses are offered in the spring.

DA161, Body Placement 1: A course for dance majors explaining the proper postural alignment of the body utilizing one or more of the following methods: Bartenieff Fundamentals of Movement, Alexander Technique, and Pilates Technique. (U) (1) Fall.

DA162, Body Placement 2: A course for dance majors explaining the proper postural alignment of the body utilizing one or more of the following methods: Bartenieff Fundamentals of Movement, Alexander Technique, and Pilates Technique. Prerequisite: DA161. (U)(1) Spring.

DA166, Masterworks of Dance: Introduction to major ballet and modern dance works, presented on video, briefly analyzed and placed in context. The course also examines ways that information literacy is a necessary component to academic research. No prerequisite. (U)(2) Fall and spring.

DA249, Acting for Dancers: The study of basic acting techniques to enhance the performance skills of the dancer. Emphasis placed on character development, confident use of voice, active storytelling, and critical assessment of theatrical acting practices. Prerequisites: DA109, DA152. (U)(2) Fall and spring.

## DA261, Laban Movement Analysis:

Elementary concepts in the major 20th-century theory of movement: exploration of the aspects of shape, space, and efforts (movement qualities). Prerequisite: Sophomore dance major or consent of department chair. (U)(2) Fall and spring.

DA263, Music for Dance-Theory: Elements of music theory for dancers, covering basic concepts such as meters, rhythms, key signature, and basic chords. Two meetings per week. Prerequisite: Sophomore dance major. (U)(1) Fall.

DA264, Music for Dance: The relationship of music to dance as applied to ballet class and to choreography. Two meetings per week. Prerequisite: DA263. (U)(1) Spring.

DA361, Choreography 1: A study of the basic building blocks in dance composition skills: movement themes and motifs, development and variation, overall structure of a choreographic piece. Prerequisites: DA233, DA261. (U)(2) Fall.

DA362, Choreography 2: Investigation of the relationship between choreography and music. Prerequisites: DA361, DA264. (U)(2) Spring.

DA365, Dance History 1: The evolution of dance from its earliest appearance to modern times; the relationship of dancing to religion, music, and drama. Three meetings per week (writingintensive). Prerequisite: Junior dance major. (U) (3) Fall.

DA366, Dance History 2: The evolution of dance from its earliest appearance to modern times; the relationship of dancing to religion, music, and drama. Three meetings per week (writingintensive). Prerequisite: Junior dance major. (U) (3) Spring.

DA453, Choreography 3: The third formal exposure of dance majors to the craft of composition. Advanced level of choreography for small and large groups. Two meetings per week. Prerequisite: DA362. (U)(1) Fall.

DA454, Senior Production Project: Production, rehearsal, and public presentation of the choreographic project which began in DA453. Prerequisite: DA453. (U)(2) Spring.

DA465, Career Planning: Taking the Next Step: Guidance for graduating seniors in the research and development of materials necessary in seeking and obtaining employment. Prerequisites: DA261, DA361, and DA366. (U) (1) Fall.

DA466, Theory and Philosophy of Dance:
Analysis of dance as an art form, an educational
device, and a vehicle for individual and group expression. Emphasis on concepts of aesthetic judgment and criticism. Prerequisites: DA261, DA361, and DA366. (U)(2) Spring.

## DA467, Design/Construction Dance

Costumes: Basic principles involved in the preparation of design and construction of costumes for dance. Lecture and laboratory. (U) (3) Fall.

DA468, Applied Dance Costuming: The execution and construction of designed costumes for dance. Laboratory. Prerequisite: Consent of instructor. (U)(3) Spring.

## Dance Pedagogy and Special Studies Courses

Unless otherwise indicated, all odd-numbered courses are offered in the fall, and all evennumbered courses are offered in the spring.

DA4 71 , Teaching Analysis of Classical Technique: A practical and theoretical study of basic ballet techniques, preparing the student teacher for instructing beginning ballet. Two meetings per week. Prerequisites: Junior BA dance major or senior BFA, BS dance major. (U) (2) Fall.

DA472, Teaching Analysis of Intermediate and Advanced Classical Techniques: Teaching intermediate and advanced ballet techniques to skilled performers and teachers. Prerequisite: DA471. (U)(2) Spring.

## DA4'74, Teaching Analysis Modern

Techniques: A practical and theoretical study of basic modern technique, including how to devise material, structure a class, and work with an accompanist. Prerequisites: DA4 771, DA331. (U) (2) Spring.

DA476, Teaching Analysis Jazz Technique: Pedagogy of jazz techniques (theory and practice) utilizing the Simonson technique. Prerequisites: DA241, DA242, DA471. (U)(2) Spring.

## DA4'7ry, Dance Teaching Practicum:

Observation and teaching in selected school situations as a correlated school activity. Prerequisites: DA472, DA474, or DA476 and consent of department chair. (U)(2) Fall and spring.

DA481, Independent Study: An opportunity for the qualified student to pursue some investigative work upon his or her own initiative. Approval of department chair required. (U)(1) Occasionally.

DA482, Independent Study: An opportunity for the qualified student to pursue some investigative work upon his or her own initiative. Approval of department chair required. (U)(2) Occasionally.

DA483, Independent Study: An opportunity for the qualified student to pursue some investigative work upon his or her own initiative. Approval of department chair required. (U)(3) Occasionally.

DA491, Special Seminar: Work in the special seminar shall be centered on a specific aspect of dance. A paper may be required. By consent of instructor. (U)(1) Occasionally.

DA492, Special Seminar: Work in the special seminar shall be centered on a specific aspect of dance. A paper may be required. By consent of instructor. (U)(2) Spring.

DA493, Special Seminar: Work in the special seminar shall be centered on a specific aspect of dance. A paper may be required. By consent of instructor. (U)(3) Occasionally.

DA499, Honors Thesis: See section dealing with graduation honors. (U)(3) Occasionally.

## School of Music

## Administration

Lisa Brooks, DMA, Chair; Douglas E. Spaniol, DMA, Assistant Chair

## Professors

Timothy R. Brimmer, DA; James Robert Briscoe, PhD; Lisa Brooks, DMA; Richard Auldon Clark, MM; Michael Colburn, MM; Stanley E. DeRusha, MM; Penny Dimmick, DA; Jeffrey Gillespie, PhD; James Mulholland, MM; David Murray, MM; Michael Schelle, PhD; Laurence Shapiro, MM; Douglas E. Spaniol, DMA; Eric Stark, DMA

## Associate Professors

Daniel Bolin, EdD; Kathleen Boyd, DMA; Frank Felice, PhD; William Grubb, DMA; Melvin Jones, PhD; Mary Katherine Kelton, DMA; Gail Lewis, DMA; Matthew Pivec, DMA
Assistant Professors
Andrew Farina, PhD; Nicholas Johnson, PhD; John Perkins, DMA; Thomas Studebaker, MM
Artist-in-Residence in Percussion
Jon Crabiel, MA
Instructor
Mary Anne Scott, BM
School of Music Website
www.butler.edu/music

## Mission

The mission of the School of Music is to provide the highest quality education in music within
the University's liberal arts focus to both music majors, who are preparing for a professional career in music, and non-majors, who are enriching their human spirit. The faculty is committed to the musical development of each student in a challenging, nurturing environment through excellence in teaching, performance, scholarship, and creativity, while serving the global community.

The School of Music is a fully accredited member of the National Association of Schools of Music.

## Music Student Learning Outcomes

- Demonstrate an understanding of the common elements and organizational patterns of music and their interaction
- Develop a broad knowledge of music literature and the historical, political, and social context within which it was created
- Develop knowledge sufficient to provide musical leadership on matters of musical interpretation
- Perform technical skills requisite for artistic self-expression in at least one major performance area at a level appropriate for the particular music concentration
- Display the ability to integrate musical knowledge and technical skills with sensitivity to a variety of musical styles
- Display growth in artistry, technical skills, knowledge of repertory, and collaborative competence in a variety of ways that may include but are not limited to ensemble participation, interdepartmental collaborations, and recital performances
- Appreciate the importance of personal responsibility for developing their art
- Support the importance of advocating for the value of music in society
- Appreciate artistic expression found in other cultures and disciplines


## Music Preparation

The entrance requirements in all fields of music are similar to those adopted by the National Association of Schools of Music. An audition is required for majors. No audition is required for minors. Applicants are admitted to the program on the basis of academic acceptance by the University and an audition.

## Undergraduate Degree Programs

- Bachelor of Arts in Music (BA)
- Bachelor of Music in Composition (BM)
- Bachelor of Music in Jazz Studies (BM)
- Bachelor of Music in Music Educationchoral/general and instrumental/general (four-year program) (BM)
- Bachelor of Music in Music Educationarea (five-year program) (BM)
- Bachelor of Music in Performance (instrumental, piano, and voice major) (BM)
- Bachelor of Music in Performance and Music Education (five-year program) (BM)
- Bachelor of Musical Arts (pending approval) (BMA)
- Bachelor of Science in Arts Administration-Music (BS)


## Areas of Emphasis

The following emphases may be added to any music degree, although they are designed primarily for the BA degree. At least 50 percent of the credits in any emphasis must be unique to that program and may not overlap with another emphasis, major, or minor (except as free electives).

- Composition
- Jazz Studies
- Music History
- Music Performance
- Music Theory
- Piano Pedagogy


## Music Minor

A minor in music is available to students who are not enrolled in a music major. It consists of 24 semester hours, of which 14-16 are specified. The remaining hours are unspecified and may be taken in applied music, ensemble, music education, music history, diction, or music theory.

## Jazz Studies Minor

A minor in jazz studies is available to students who are not enrolled in a music major. It consists of 26 semester hours.

## Graduation Requirements Common to All Undergraduate Music Degree Curricula

- The last two semesters of applied study must be earned in residence at the University.
- In most areas, students are given a choice of applied instructor dependent upon teacher availability and approval of the Chair of the School of Music.
- Each student who makes use of a University-owned band or orchestral instrument is responsible for any damage or loss. There is also a fine for unauthorized use of University-owned instruments.
- Applied upper-divisional examination: required of all music majors whose degrees
require applied major study beyond the sophomore level. Students must audition for upper-level applied study during board examinations following the fourth semester of lower-level applied study. Failure to pass the upper-divisional exam will require repetition of lower-level applied study until such time as the exam is passed; applied credits taken during this period will count as electives but will not fulfill the required applied credits. A student who does not pass the upper-divisional exam may reapply by the end of the next semester of applied study. If a student does not pass on the second attempt, the student may not complete a music degree that requires the applied upper-divisional exam. A student must have obtained upper-level status in applied music in order to present a degreerequired recital. Details of the contents of this exam are available online.
- Students in a degree program that does not require an upper-divisional examination may continue to take lessons at the major level ( 200 level) without passing an upperdivisional examination, with the approval of the applied instructor.
- If a Butler student, regardless of major, is taking applied lessons, he or she must register for the lessons for credit and pay the appropriate applied music fee. Students may not pay a music faculty member directly for private instruction.
- Music education students are required to pass an upper-divisional examination in music education at the end of the sophomore year. Specific requirements are available online.
- Music composition students are required to pass an upper-divisional examination in composition. This is normally done at the completion of the fourth semester of composition study. Specific requirements are available online.
- Students must pass a recital hearing before presenting an instrumental or vocal degreerequired recital. Details are available online.


## Graduate Degree Programs

- Master of Music in Composition (MM)
- Master of Music in Conducting (choral or instrumental) (MM)
- Master of Music in Music Education (MM)
- Master of Music in Music History (MM)
- Master of Music in Performance (instrumental, piano, or voice) (MM)
- Master of Music in Piano Pedagogy (MM)
- Master of Music Degrees with a Double Major (MM)

Students may earn a Master of Music degree with a double major by combining two of the above areas. One area will be declared the primary major; the other will be the secondary major. Applicants will need to complete the relevant audition/interview for both majors. Details are available online.

The specific admission and degree requirements for each graduate degree program are available online.

See the Graduate Studies section of the Bulletin for more information on the School of Music graduate program.

## Core Courses Offered by Music

PCA241-MU, Music in Action: The arts are a fundamental expression of the human condition, and as such, a key element in developing an understanding of cultures. This course provides both an historical overview of music and its development within Western civilization as well as an exploration of what gives music its meaning and emotional charge. Students will examine and discuss music from a variety of historical periods; attend live performances; participate in written exercises and class activities relating music to the socio-cultural environment in which it was created; investigate the lives and ideas of leading composers and artists; and engage in creative projects. (U)(3) Fall and spring.

TI221-MU, Rock Music and Society: This course will use text surrounding American popular music to explore pivotal social issues of the past 100 years. Students will learn the basic histories of several musical genres such as delta blues, hip-hop, and rock n' roll, and then use this knowledge to explore how these musical styles related to specific social and political challenges of the day. Class discussions will be centered on texts regarding these issues, and will include topics such as sexism, racism, globalization, war, drugs, and class divides. Students will be given reading assignments from a collection of articles and primary sources, as well as listening lists relating to a specific time period. No prior training in music is necessary, and no music notation will be used during the course. Rather, this course uses popular music as a text to discuss the challenges that have faced American society in the 20th and 21st centuries. (U)(3) Summer.

## Applied Music Courses

Instruction is offered in the following for either undergraduate or graduate credit for music majors: bassoon, bass clarinet, cello, clarinet,
double bass, euphonium, flute, guitar, harp, harpsichord, horn, oboe, organ, percussion, piano, piccolo, saxophone, trombone, tuba, trumpet, viola, violin, and voice.

Students who are not majoring in music may study applied music as resources allow. To do so, students must complete an application requesting permission and must also be enrolled in an approved School of Music ensemble. Details are available online.

AM11, Keyboard Skills 1: Basic piano techniques, sight-reading, transposition, improvisation, theory, ear training, and repertoire analysis. For dance majors only. (U) (1) Fall.

AM12, Keyboard Skills 2: Continuation of AM011. For dance majors only. Prerequisite: AM011 or consent of the instructor. (U)(1) Spring

AM13, Keyboard Skills 3: Continuation of AM012 with emphasis on harmonization, analysis of repertoire, piano ensemble, and contemporary techniques. For dance majors only. Prerequisite: AM012 or consent of the instructor. (U)(1) Fall.

AM14, Keyboard Skills 4: Continuation of AM013. For dance majors only. Prerequisite: AM013 or consent of the instructor. (U)(1) Spring.

AM21, Keyboard Skills 1: Basic piano techniques, sight-reading, transposition, improvisation, theory, ear training, and repertoire analysis. This course does not count toward piano requirements on degree programs. (U)(1) Fall.

AM22, Keyboard Skills 2: Continuation of AM021. This course does not count toward piano requirements on degree programs. Prerequisite: AM021 or consent of the instructor. (U)(1) Spring.

AM23, Keyboard Skills 3: Continuation of AMO22 and AM021 with emphasis on harmonization, analysis, score reading, accompanying, transposition, piano ensemble, and contemporary techniques. This course counts toward piano requirements on degree programs. Prerequisite: AM021 or AM022 or consent of the instructor. (U)(1) Fall.

AM24, Keyboard Skills 4: Continuation of AM023. This course counts toward piano requirements on degree programs. Prerequisite: AM023 or consent of the instructor. (U)(1) Spring.

AM2'7, Jazz Keyboard Skills 1: This course is designed as an introduction to the techniques and history of jazz piano. (U)(1) Occasionally.

AM28, Jazz Keyboard Skills 2: A continuation of AM027, this course is designed for further study of the techniques and history of jazz piano. Prerequisite: AM027 or permission of the instructor. (U)(1) Occasionally.

## AM31, Piano Major: Keyboard Skills 1:

Keyboard skills for piano majors. Studies at the keyboard focusing on transposition, chord progressions, melody harmonization, sightreading, improvisation, and score reading. (U)(1) Occasionally.

## AM32, Piano Major: Keyboard Skills 2:

 Continuation of AM031. Studies at the keyboard focusing on transposition, chord progressions, melody harmonization, sight-reading, improvisation, and score reading. Prerequisite: AM031 or permission of the instructor. (U)(1) Occasionally.AM101, Bassoon Secondary. (U)(1) Fall and spring.

AM102, Clarinet Secondary. (U)(1) Fall and spring.

AM103, Euphonium Secondary. (U)(1) Fall and spring.

AM104, Flute Secondary. (U)(1) Fall and spring.
AM105, Guitar Secondary. (U)(1) Fall and spring.

AM106, Harp Secondary. (U)(1) Fall and spring.
AM107, Piccolo Secondary. (U)(1) Fall and spring.

AM108, Horn Secondary. (U)(1) Fall and spring. AM109, Oboe Secondary. (U)(1) Fall and spring.

AM110, Organ Secondary. (U)(1) Fall and spring.

AM111, Percussion Secondary. (U)(1) Fall and spring.

AM112, Piano Secondary. (U)(1) Fall and spring.

AM113, Saxophone Secondary. (U)(1) Fall and spring.

AM114, String Bass Secondary. (U)(1) Fall and spring.

AM115, Trombone Secondary. (U)(1) Fall and spring.

AM116, Trumpet Secondary. (U)(1) Fall and spring.

AM117, Tuba Secondary. (U)(1) Fall and spring.
AM118, Viola Secondary. (U)(1) Fall and spring.
AM119, Violin Secondary. (U)(1) Fall and spring.

AM120, Violoncello Secondary. (U)(1) Fall and spring.

AM121, Voice Secondary. (U)(1) Fall and spring. AM123, Jazz Piano Secondary. (U)(1) Fall and spring.

AM124, Harpsichord Secondary. (U)(1) Fall and spring.

AM125, Guitar Class 1: This course is designed for beginning guitar students with a passing knowledge of guitar playing, but no formal guitar instruction. This course will stress basic fundamentals such as hand and arm movement, chord playing, melody playing, counting, sightreading music, and the study of a wide range of music. (U)(1) Fall.

AM126, Guitar Class 2: A continuation of AM125, with emphasis on more advanced techniques. (U)(1) Spring.

AM127, Voice Class 1: Basic principles of voice development and use. This class is intended for non-majors or those music majors for whom voice is not the primary instrument. Two meetings per week. (U)(1) Fall.

AM128, Voice Class 2: Basic principles of voice development and use. This class is intended for non-majors or those music majors for whom voice is not the primary instrument. Two meetings per week. (U)(1) Spring.

AM129, Bass Clarinet Secondary. (U)(1) Spring.

AM130, World Drumming Class: This course offers experiences in learning world percussion techniques and its history. Areas of percussion study include Latin-American percussion, African percussion, Brazilian percussion, Caribbean percussion, cultural history, and folklore. No previous percussion experience required; instruments will be provided. Two meetings per week. (U)(1) Fall and spring.

AM150, Bassoon Principal: Private instruction for students admitted to the BS Arts Administration degree. (U)(1) Fall and spring.

AM151, Bassoon Reed Making 1: An
introduction to the complete process of making German-style bassoon reeds. This is a "hands-
on" course. Also includes an overview of available literature, various techniques of reed making, and styles of bassoon reeds. Prerequisite: concurrent enrollment in applied bassoon. (U)(1) Fall and spring.

AM152, Clarinet Principal: Private instruction for students admitted to the BS Arts Administration degree. (U)(1) Fall and spring.

AM153, Euphonium Principal: Private instruction for students admitted to the BS Arts Administration degree. (U)(1) Fall and spring.

AM154, Flute Principal: Private instruction for students admitted to the BS Arts Administration degree. (U)(1) Fall and spring.

AM155, Guitar Principal: Private instruction for students admitted to the BS Arts Administration degree. (U)(1) Fall and spring.

AM156, Harp Principal: Private instruction for students admitted to the BS Arts Administration degree. (U)(1) Fall and spring.

AM157, Piccolo Principal: Private instruction for students admitted to the BS Arts Administration degree. (U)(1) Fall and spring.

AM158, Horn Principal: Private instruction for students admitted to the BS Arts Administration degree. (U)(1) Fall and spring.

AM159, Bass Clarinet Principal: Private instruction for students admitted to the BS arts administration degree. (U)(1) Fall and spring.

AM161, Percussion Principal: Private instruction for students admitted to the BS Arts Administration degree. (U)(1) Fall and spring.

AM162, Piano Principal: Private instruction for students admitted to the BS Arts Administration degree. (U)(1) Fall and spring.

AM163, Saxophone Principal: Private instruction for students admitted to the BS Arts administration degree. (U)(1) Fall and spring.

AM164, String Bass Principal: Private instruction for students admitted to the BS Arts Administration degree. (U)(1) Fall and spring.

AM165, Trombone Principal: Private instruction for students admitted to the BS Arts Administration degree. (U)(1) Fall and spring.

AM166, Trumpet Principal: Private instruction for students admitted to the BS Arts Administration degree. (U)(1) Fall and spring.

AM167, Tuba Principal: Private instruction for students admitted to the BS Arts Administration degree. (U)(1) Fall and spring.

AM168, Viola Principal: Private instruction for students admitted to the BS Arts Administration degree. (U)(1) Fall and spring.

AM169, Violin Principal: Private instruction for students admitted to the BS Arts Administration degree. (U)(1) Fall and spring.

AM1'70, Violoncello Principal: Private instruction for students admitted to the BS Arts Administration degree. (U)(1) Fall and spring.

AM1'71, Voice Principal: Private instruction for students admitted to the BS Arts Administration degree. (U)(1) Fall and spring.

AM179, Oboe Principal: Private instruction for students admitted to the BS Arts Administration degree. (U)(1) Fall and spring.

AM193, Secondary Applied Jazz Studies: Private instruction related to the jazz idiom. Meets one half-hour per week. Program of study will be determined by the needs and interests of the student. Topics may include (but are not limited to): repertoire, melodic/harmonic/ rhythmic vocabulary, improvisation, style, and articulation. (U)(1) Fall and spring.

AM201, Bassoon Major. (U)(2) Fall and spring.
AM202, Clarinet Major. (U)(2) Fall and spring.
AM203, Euphonium Major. (U)(2) Fall and spring.

AM204, Flute Major. (U)(2) Fall and spring.
AM205, Guitar Major. (U)(2) Fall and spring.
AM206, Harp Major. (U)(2) Fall and spring.
AM20'7, Piccolo Major. (U)(2) Fall and spring.
AM208, Horn Major. (U)(2) Fall and spring.
AM209, Oboe Major. (U)(2) Fall and spring.
AM211, Percussion Major. (U)(2) Fall and spring.

AM212, Piano Major. (U)(2) Fall and spring.
AM213, Saxophone Major. (U)(2) Fall and spring.

AM214, String Bass Major. (U)(2) Fall and spring.

AM215, Trombone Major. (U)(2) Fall and spring.

AM216, Trumpet Major. (U)(2) Fall and spring.
AM217, Tuba Major. (U)(2) Fall and spring.
AM218, Viola Major. (U)(2) Fall and spring.

AM219, Violin Major. (U)(2) Fall and spring.
AM220, Violoncello Major. (U)(2) Fall and spring.

AM221, Voice Major. (U)(2) Fall and spring.
AM222, Voice Studio Class: For music and arts administration-music majors for whom voice is the principal instrument. Studio class is designed to be an adjunct to the private lesson wherein common issues such as repertoire, public performance, and career development are explored. Concurrent registration in major, principal, or secondary voice is required. (P/F) (U)(0) Fall and spring.

AM226, Piano Studio Class: Weekly workshop where piano students meet as a group to share works in progress. Topics such as repertoire, performance issues, style, and interpretation are explored. Texts may be required at the discretion of the instructor. Concurrent registration in AM212, AM412, or AM612 is required. Graded P/F. (P/F)(U/G)(0) Fall and spring.

AM229, Bass Clarinet Major. (U)(2) Fall and spring.

## AM251, Bassoon Reed Making 2: A

continuation of the study and practice of German-style bassoon reed making, focusing on finishing and testing reeds. This is a "handson" course. Also includes study of available literature, various techniques of reed making, and styles of bassoon reeds. Prerequisites: concurrent enrollment in applied bassoon, AM151, or consent of instructor. (U)(1) Fall and spring.

AM280, Composition: Introduction to the larger musical forms from the 16th century to the present; beginning exercises and study of the problems in the use of contemporary techniques and structures. For composition majors only. Requires concurrent registration in MT222. Prerequisite: MT119 or permission of instructor. (U)(2) Fall and spring.

AM293, Applied Jazz Studies: Private instruction related to the jazz idiom. Meets one hour per week. Program of study will be determined by the needs and interests of the student. Topics may include (but are not limited to): repertoire, melodic/harmonic/ rhythmic vocabulary, improvisation, style, and articulation. (U)(2) Fall and spring.

AM298, Instrumental Studio Class: The studio class is an important component of private applied study wherein common issues such as repertoire, public performance, and career development are explored. Offered at the
discretion of the individual applied instructor. Concurrent registration in major, principal, or secondary applied music is required. (P/F)(U)(0)

## AM299, Upper Divisional Examination:

Required of all music majors whose degrees require applied major study beyond the sophomore level. Failure to pass the exam will require repetition of sophomore-level study until the exam is passed. Examination is graded P/F by a faculty committee. (P/F)(U)(0) Fall and spring.

AM300, Recital: Preparation and presentation of the required junior recital, which should be presented during the student's junior year. The recital is graded $\mathrm{P} / \mathrm{F}$ by a faculty committee. Prerequisite: AM299. (P/F)(U)(0)Fall and spring.

AM301, Bassoon Secondary. (U)(1) Fall and spring.

AM302, Clarinet Secondary. (U)(1) Fall and spring.

AM303, Euphonium Secondary. (U)(1) Fall and spring.

AM304, Flute Secondary. (U)(1) Fall and spring.

AM305, Guitar Secondary. (U)(1) Fall and spring.

AM306, Harp Secondary. (U)(1) Fall and spring.
AM307, Piccolo Secondary. (U)(1) Fall and spring.

AM308, Horn Secondary. (U)(1) Fall and spring. AM309, Oboe Secondary. (U)(1) Fall and spring.

AM310, Organ Secondary. (U)(1) Fall and spring.

AM311, Percussion Secondary. (U)(1) Fall and spring.

AM312, Piano Secondary. (U)(1) Fall and spring.

AM313, Saxophone Secondary. (U)(1) Fall and spring.

AM314, String Bass Secondary. (U)(1) Fall and spring.

AM315, Trombone Secondary. (U)(1) Fall and spring.

AM316, Trumpet Secondary. (U)(1) Fall and spring.

AM317, Tuba Secondary. (U)(1) Fall and spring.
AM318, Viola Secondary. (U)(1) Fall and spring.

AM319, Violin Secondary. (U)(1) Fall and spring.

AM320, Violoncello Secondary. (U)(1) Fall and spring.

AM321, Voice Secondary. (U)(1) Fall and spring.

AM323, Jazz Piano Secondary. (U)(1) Fall and spring.

AlM324, Harpsichord Secondary. (U)(1) Fall and spring.

AM329, Bass Clarinet Secondary. (U)(1) Fall and spring.

AM350, Bassoon Principal: Private instruction for students admitted to the BS Arts Administration degree. (U)(1) Fall and spring.

AM351, Bassoon Reed Making 3: Advanced study of German-style bassoon reed making focused on making reeds for upper-level bassoonists. This is a "hands-on" course. Includes study of available literature, advanced techniques of reed making, and styles of bassoon reeds. Prerequisites: Concurrent enrollment in 300-level or higher applied bassoon, AM251, or consent of instructor. (U)(1) Fall and spring.

AM352, Clarinet Principal: Private instruction for students admitted to the BS Arts Administration degree. (U)(1) Fall and spring.

AM353, Euphonium Principal: Private instruction for students admitted to the BS Arts Administration degree. (U)(1) Fall and spring.

AM354, Flute Principal: Private instruction for students admitted to the BS Arts Administration degree. (U)(1) Fall and spring.

AM355, Guitar Principal: Private instruction for students admitted to the BS Arts Administration degree. (U)(1) Fall and spring.

AM356, Harp Principal: Private instruction for students admitted to the BS Arts Administration degree. (U)(1) Fall and spring.

AM357, Piccolo Principal: Private instruction for students admitted to the BS Arts Administration degree. (U)(1) Fall and spring.

AM358, Horn Principal: Private instruction for students admitted to the BS Arts Administration degree. (U)(1) Fall and spring.

AM359, Bass Clarinet Principal: Private instruction for students admitted to the BS arts administration degree. (U)(1) Fall and spring.

AM361, Percussion Principal: Private instruction for students admitted to the BS Arts Administration degree. (U)(1) Fall and spring.

AM362, Piano Principal: Private instruction for students admitted to the BS Arts Administration degree. (U)(1) Fall and spring.

AM363, Saxophone Principal: Private instruction for students admitted to the BS Arts administration degree. (U)(1) Fall and spring.

AM364, String Bass Principal: Private instruction for students admitted to the BS Arts Administration degree. (U)(1) Fall and spring.

AM365, Trombone Principal: Private instruction for students admitted to the BS Arts Administration degree. (U)(1) Fall and spring.

AM366, Trumpet Principal: Private instruction for students admitted to the BS Arts Administration degree. (U)(1) Fall and spring.

AM367, Tuba Principal: Private instruction for students admitted to the BS Arts Administration degree. (U)(1) Fall and spring.

AM368, Viola Principal: Private instruction for students admitted to the BS Arts Administration degree. (U)(1) Fall and spring.

AM369, Violin Principal: Private instruction for students admitted to the BS Arts Administration degree. (U)(1) Fall and spring.

AM370, Violoncello Principal: Private instruction for students admitted to the BS Arts Administration degree. (U)(1) Fall and spring.

AM371, Voice Principal: Private instruction for students admitted to the BS Arts Administration degree. (U)(1) Fall and spring.

AM379, Oboe Principal: Private instruction for students admitted to the BS Arts Administration degree. (U)(1) Fall and spring.

## AM393, Secondary Applied Jazz Studies:

 Private instruction related to the jazz idiom. Meets one half-hour per week. Program of study will be determined by the needs and interests of the student. Topics may include (but are not limited to): repertoire, melodic/harmonic/ rhythmic vocabulary, improvisation, style, and articulation. (U)(1) Fall and spring.AM400, Recital: Preparation and presentation of the required graduation recital, which may be presented only during the last 32 hours in residence. The recital is graded $\mathrm{P} / \mathrm{F}$ by a faculty committee. Prerequisite: AM299. (P/F)(U)(0) Fall and spring.

AM401, Bassoon Major: Prerequisite: AM299. (U)(2) Fall and spring.

AM402, Clarinet Major: Prerequisite: AM299. (U)(2) Fall and spring.

AM403, Euphonium Major: Prerequisite: AM299. (U)(2) Fall and spring.

AM404, Flute Major: Prerequisite: AM299. (U)
(2) Fall and spring.

AM405, Guitar Major: Prerequisite: AM299. (U)
(2) Fall and spring.

AM406, Harp Major: Prerequisite: AM299. (U)
(2) Fall and spring.

AM407, Piccolo Major: Prerequisite: AM299.
(U)(2) Fall and spring.

AM408, Horn Major: Prerequisite: AM299. (U)
(2) Fall and spring.

AM409, Oboe Major: Prerequisite: AM299. (U)
(2) Fall and spring.

AM411, Percussion Major: Prerequisite:
AM299. (U)(2) Fall and spring.
AM412, Piano Major: Prerequisite: AM299. (U)
(2) Fall and spring.

AM413, Saxophone Major: Prerequisite:
AM299. (U)(2) Fall and spring.
AM414, String Bass Major: Prerequisite:
AM299. (U)(2) Fall and spring.
AM415, Trombone Major: Prerequisite: AM299. (U)(2) Fall and spring.

AM416, Trumpet Major: Prerequisite: AM299. (U)(2) Fall and spring.

AM41'7, Tuba Major: Prerequisite: AM299. (U)
(2) Fall and spring.

AM418, Viola Major: Prerequisite: AM299. (U)
(2) Fall and spring.

AM419, Violin Major: Prerequisite: AM299. (U)
(2) Fall and spring.

AM420, Violoncello Major: Prerequisite: AM299. (U)(2) Fall and spring.

AM421, Voice Major: Prerequisite: AM299. (U)
(2) Fall and spring.

AM422, Voice Studio Class: For music and arts administration-music majors for whom voice is the principal instrument. Studio class is designed to be an adjunct to the private lesson wherein common issues such as repertoire, public performance, and career development are explored. Concurrent registration in major,
principal, or secondary voice is required. (P/F) (U)(0) Fall and spring.

AM426, Piano Studio Class: Weekly workshop where piano students meet as a group to share works in progress. Topics such as repertoire, performance issues, style, and interpretation are explored. Texts may be required at the discretion of the instructor. Concurrent registration in AM212, 412, or 612 is required. Graded P/F. (P/F) (U)(0) Fall and spring.

AM429, Bass Clarinet Major: Prerequisite: AM299. (U)(2) Fall and spring.

AM430, Piano Teaching Practicum: Piano teaching, under supervision, in a variety of settings and levels. Prerequisite: Permission of the instructor. (U/G)(1) Fall and spring.

AM440, Jazz Repertoire Proficiency Exam: To be taken during the fall semester of the senior year and required of all students in the BM-jazz studies, emphasis in jazz studies, and minor in jazz studies programs. This exam is designed to ensure that each student possesses a working knowledge of relevant jazz repertoire. The exam is graded $P / F$ by a faculty committee. $(P / F)(U)(0)$ Fall and spring.

AM450, Advanced Conducting: Advanced conducting techniques, with emphasis on style, analysis, and programming. Prerequisites: MT311, a choice of MT321 or MT322, and permission of department chair. (U)(2) Fall and spring.

AM480, Composition: Exercises in the larger musical forms from the 16th century to the present; problems in the use of contemporary techniques and structures. For composition majors only. Requires concurrent registration in MT422. Prerequisite: Six hours of AM280 or permission of the instructor. (U)(2) Fall and spring.

AM481, Electronic Composition: Composition of music employing electronic means; this may include recording, sampling, sequencing, MIDI topics, and other types of electroacoustic techniques. Prerequisites: MT440 and MT441. (U)(3) Fall and spring.

AM493, Applied Jazz Studies: Private instruction related to the jazz idiom. Meets one hour per week. Program of study will be determined by the needs and interests of the student. Topics may include (but are not limited to): repertoire, melodic/harmonic/ rhythmic vocabulary, improvisation, style, and articulation. (U)(2) Fall and spring.

AM494, Jazz Recital: Preparation and presentation of the required jazz recital, which should be presented during the student's final semester. The recital should demonstrate comprehensive understanding of material learned from the jazz studies curriculum. The recital is graded $\mathrm{P} / \mathrm{F}$ by a faculty committee. $(P / F)(U)(0)$ Fall and spring.

AM497, Advanced Performance Study: Course requirements: minimum of two hours of practice per day beyond what is required in 400-level applied study. Typically intended for students who are preparing a senior recital or graduate school or professional auditions. Prerequisites: AM299, concurrent enrollment in 400-level applied music, permission of instructor. (U)(2) Fall and spring.

AM498, Instrumental Studio Class: The studio class is an important component of private applied study wherein common issues such as repertoire, public performance, and career development are explored. Offered at the discretion of the individual applied instructor. Concurrent registration in major, principal, or secondary applied music is required. ( $\mathrm{P} / \mathrm{F}(\mathrm{U})(0)$

AM501, Bassoon Secondary. (G)(1) Fall and spring.

AM502, Clarinet Secondary. (G)(1) Fall and spring.

AM503, Euphonium Secondary. (G)(1) Fall and spring.

AM504, Flute Secondary. (G)(1) Fall and spring.

AM505, Guitar Secondary. (G)(1) Fall and spring.

AM506, Harp Secondary. (G)(1) Fall and spring.
AM507, Piccolo Secondary. (G)(1) Fall and spring.

AM508, Horn Secondary. (G)(1) Fall and spring.
AM509, Oboe Secondary. (G)(1) Fall and spring.
AM510, Organ Secondary. (G)(1) Fall and spring.

AM511, Percussion Secondary. (G)(1) Fall and spring.

AM512, Piano Secondary. (G)(1) Fall and spring.

AM513, Saxophone Secondary. (G)(1) Fall and spring.

AM514, String Bass Secondary. (G)(1) Fall and spring.

AM515, Trombone Secondary. (G)(1) Fall and spring.

AM516, Trumpet Secondary. (G)(1) Fall and spring.

AM517, Tuba Secondary. (G)(1) Fall and spring.
AM518, Viola Secondary. (G)(1) Fall and spring.
AM519, Violin Secondary. (G)(1) Fall and spring.

AM520, Violoncello Secondary. (G)(1) Fall and spring.

AM521, Voice Secondary. (G)(1) Fall and spring.
AM523, Jazz Piano Secondary. (G)(1) Fall and spring.

AM524, Harpsichord Secondary. (G)(1) Fall and spring.

AM529, Bass Clarinet Secondary. (G)(1) Fall and spring.

AM551, Bassoon Reed Making 4: Advanced study of German-style bassoon reed making focused on making reeds for graduate-level bassoonists. This is a "hands-on" course. Includes study of available literature, advanced techniques of reed making, and styles of bassoon reeds. Prerequisites: concurrent enrollment in graduate-level applied bassoon, AM351, or consent of instructor. (G)(1) Fall and spring.

## AM593, Secondary Applied Jazz Studies:

 Private instruction related to the jazz idiom. Meets one half-hour per week. Program of study will be determined by the needs and interests of the student. Topics may include (but are not limited to): repertoire, melodic/harmonic/ rhythmic vocabulary, improvisation, style, and articulation. (G)(1) Fall and spring.AM600, Advanced Conducting: Advanced conducting techniques, with emphasis on style, analysis, and programming. (G)(2) Fall and spring.

AM601, Bassoon Major. (G)(2) Fall and spring. AM602, Clarinet Major. (G)(2) Fall and spring.
AM603, Euphonium Major. (G)(2) Fall and spring.

AM604, Flute Major. (G)(2) Fall and spring.
AM605, Guitar Major. (G)(2) Fall and spring.
AM606, Harp Major. (G)(2) Fall and spring.
AM607, Piccolo Major. (G)(2) Fall and spring.
AM608, Horn Major. (G)(2) Fall and spring.

AM609, Oboe Major. (G)(2) Fall and spring.
AM611, Percussion Major. (G)(2) Fall and spring.

AM612, Piano Major. (G)(2) Fall and spring.
AM613, Saxophone Major. (G)(2) Fall and spring.

AM614, String Bass Major. (G)(2) Fall and spring.

AM615, Trombone Major. (G)(2) Fall and spring.

AM616, Trumpet Major. (G)(2) Fall and spring.
AM617, Tuba Major. (G)(2) Fall and spring.
AM618, Viola Major. (G)(2) Fall and spring.
AM619, Violin Major. (G)(2) Fall and spring.
AM620, Violoncello Major. (G)(2) Fall and spring.

AM621, Voice Major. (G)(2) Fall and spring.
AM622, Voice Studio Class: For music and arts administration-music majors for whom voice is the principal instrument. Studio class is designed to be an adjunct to the private lesson wherein common issues such as repertoire, public performance, and career development are explored. Concurrent registration in major, principal, or secondary voice is required. (P/F) (G)(0)Fall and spring.

AM625, Piano Pedagogy Major. (G)(2) Fall and spring.

AM626, Piano Studio Class: Weekly workshop where piano students meet as a group to share works in progress. Topics such as repertoire, performance issues, style, and interpretation are explored. Texts may be required at the discretion of the instructor. Concurrent registration in AM212, AM412, or AM612 is required. Graded P/F. (P/F)(G)(0) Fall and spring.

AM629, Bass Clarinet Major. (G)(2) Fall and spring.

## AM634, Advanced Keyboard Harmony:

Studies at the keyboard in the realization of figured bass, melody harmonization, transposition, clefs, and advanced score reading. Prerequisite: Graduate status and permission of the instructor. (G)(1) Fall and spring.

AM680, Advanced Composition: Composition in the larger musical forms, employing complex textural and formal procedures. Requires concurrent registration in MT622. Prerequisite: Six credits of AM480 or permission of the instructor. (G)(2) Fall and spring.

AM681, Advanced Electronic Composition:
Advanced techniques in the composition of electronic music, emphasis on larger forms, computer music, production, and other advanced techniques. Prerequisites: MT440 and MT441 or consent of the instructor. (G)(2) Fall and spring.

AM693, Applied Jazz Studies: Private instruction related to the jazz idiom. Meets one hour per week. Program of study will be determined by the needs and interests of the student. Topics may include (but are not limited to): repertoire, melodic/harmonic/ rhythmic vocabulary, improvisation, style, and articulation. (G)(2) Fall and spring.

AM698, Instrumental Studio Class: The studio class is an important component of private applied study wherein common issues such as repertoire, public performance, and career development are explored. Offered at the discretion of the individual applied instructor. Concurrent registration in major, principal, or secondary applied music is required. $(P / F)(G)(0)$

AMr709, Recital: Preparation and presentation of the required graduate recital. Applied major must be completed concurrently or earlier. The recital is graded $\mathrm{P} / \mathrm{F}$ by a faculty committee. (P/F)(G)(0)Fall and spring.

AM「10, Conducting Recital: Recital prepared and conducted by the registrant. A document demonstrating historical research and analysis of the compositions performed is required for each registration. Recital to be graded $P / F$ by a faculty committee. Prerequisite: Permission of the instructor. (P/F)(G)(0) Fall and spring.

AIM'799, Final Comprehensive Exam: Required of all graduate students in performance or conducting at the end of the final semester of study. The exam is oral and will cover the major components of the student's coursework and the final recital program. Examination to be graded P/F by a faculty committee. (P/F)(G)(0)Fall and spring.

## Music Ensemble Courses

Ensembles are open to all students of the University. Contact the individual directors as listed in the semester class schedule for audition requirements. Participation in concerts and other scheduled events is required of students registered for all types of vocal and instrumental ensembles. Registration levels are as follows:

100 numbers-first-year and sophomores 300 numbers-juniors and seniors 500 numbers-graduates

ES101, Chamber Music. (U)(1) Fall and spring.
ES102, Chamber Music-Guitar: (U)(1) Fall and spring.

## ES103, Chamber Music-Arthur Jordan Saxophone Quartet: (U)(1) Fall and spring.

ES104-I, Jordan Jazz: A 20-member ensemble and student organization which actively promotes vocal jazz awareness, education, and entertainment through performance in the greater Indianapolis area, workshops and clinics in the Midwest, and international tours. Membership in Jordan Jazz is open to all Butler students through annual spring auditions. (U)(1) Fall and spring.

ES105, Chamber Singers: A select chamber choir specializing in a cappella repertoire or works suitable for small vocal ensemble with instrumental accompaniment. Open to all Butler students through annual auditions. (U)(1) Fall and spring.

## ES106, Chamber Music-Percussion

Ensemble: A select percussion group that performs a range of styles including classical, contemporary, jazz, rock, ragtime, calypso, Latin American, African, and Brazilian music. Includes performance in steel drum ensemble, mallet ensembles, xylophone ragtime band, and world percussion groups. Performs both on and off campus. Open to students outside of music department by audition. (U)(1) Fall and spring.

ES108, New Music Ensemble: A performing group devoted to the growing literature of works for groups of mixed instruments and for voice. Registration requires the permission of the instructor. (U)(1) Fall and spring.

ES110, Butler Opera Theatre: An integrated forum for the performance of music theatre in its varied forms: opera, musical theatre, operetta, and review. One full-length, staged production will be offered each year, alternating between each of the genres, with scenes programs on alternating semesters. Membership by audition, first-year or sophomore status. (U)(1) Fall and spring.

ES112, Butler Women's Chorus: Dedicated to excellence in the learning and performance of quality choral repertoire for treble voices. Open to any Butler student of appropriate voice type through audition. The chorus performs regularly in on-campus events and in local and regional presentations. (U)(1) Fall and spring.

ES116, University Symphonic Band: Open to all students by audition, the Symphonic

Band studies and performs the finest in band repertoire from the Renaissance to the present. (U)(1) Fall and spring.

ES117, University Choir: A choir of mixed voices, open to all university students who are interested in choral singing. (U)(1) Fall and spring.

ES118, University Chorale: A select group of mixed voices limited in membership and selected for quality of voice, musicianship, and interest.
Membership by audition. (U)(1) Fall and spring.
ES119, University Marching Band: Rehearsals of music and drill in connection with athletic events. Open to all university students. (U)(1) Fall.

ES120, University Wind Ensemble: The premiere wind and percussion organization on campus, the Wind Ensemble is a flexibleinstrumentation group dedicated to the study and performance of the finest wind repertoire of the last 500 years. Open to all students by audition, the group performs both on and off campus. (U)(1) Fall and spring.

ES121, University Basketball Band. (U)(1) Spring.

ES122, University Symphony: An organization with standard symphonic instrumentation performing works from traditional and contemporary literature. (U)(1) Fall and spring.

ES124, Jazz Ensemble: A large jazz band of flexible instrumentation specializing in the performance of jazz, popular, and commercial music. Performances include concerts, shows, dances, ballets, and musicals. Repertoire varies from big band to small-combo work. (U)(1) Fall and spring.

ES12'7, Jazz Combo: A group that explores the repertoire for the small jazz ensemble or "combo," emphasizing the portion of the jazz repertoire known as the jazz standards, with exploration of the music of Joe Henderson, Wayne Shorter, Cecil Taylor, Slide Hampton, Benny Golson, Horace Silver, and Curtis Fuller. Prerequisite: Audition required. (U)(1) Fall and spring.

ES301, Chamber Music. (U)(1) Fall and spring.
ES302, Chamber Music-Guitar. (U)(1) Fall and spring.

ES303, Chamber Music-Arthur Jordan Saxophone Quartet. (U)(1) Fall and spring.

ES304-I, Jordan Jazz: A 20-member ensemble and student organization which actively
promotes vocal jazz awareness, education, and entertainment through performance in the greater Indianapolis area, workshops and clinics in the Midwest, and international tours. Membership in Jordan Jazz is open to all Butler students through annual spring auditions. (U)(1) Fall and spring.

ES305, Chamber Singers: A select chamber choir specializing in a cappella repertoire or works suitable for small vocal ensemble with instrumental accompaniment. Open to all Butler students through annual auditions. (U)(1) Fall and spring.

## ES306, Chamber Music-Percussion

Ensemble: A select percussion group that performs a range of styles including classical, contemporary, jazz, rock, ragtime, calypso, Latin American, African, and Brazilian music. Includes performance in steel drum ensemble, mallet ensembles, xylophone ragtime band, and world percussion groups. Performs both on and off campus. Open to students outside of music department by audition. (U)(1) Fall and spring.

ES308, New Music Ensemble: A performing group devoted to the growing literature of works for groups of mixed instruments and for voice. Registration requires the permission of the instructor. (U)(1) Fall and spring.

ES310, Butler Opera Theatre: An integrated forum for the performance of music theater in its varied forms: opera, musical theatre, operetta, and review. One full-length, staged production will be offered each year, alternating between each of the genres, with scenes programs on alternating semesters. Prerequisite: Membership by audition, junior or senior status. (U)(1) Fall and spring.

ES312, Butler Women's Chorus: Dedicated to excellence in the learning and performance of quality choral repertoire for treble voices. Open to any Butler student of appropriate voice type through audition. The chorus performs regularly in on-campus events and in local and regional presentations. (U)(1) Fall and spring.

ES313, Accompanying: Practical training in accompanying through regularly scheduled class work and assigned studio participation. Prerequisite: Completion of piano class requirement or permission of the instructor. (U) (1) Fall and spring.

ES316, University Symphonic Band: Open to all students by audition, the Symphonic Band studies and performs the finest in band repertoire from the Renaissance to the present. (U)(1) Fall and spring.

ES317, University Choir: A choir of mixed voices, open to all university students who are interested in choral singing. (U)(1) Fall and spring.

ES318, University Chorale: A select group of mixed voices limited in membership and selected for quality of voice, musicianship, and interest. Membership by audition. (U)(1) Fall and spring.

ES319, University Marching Band: Rehearsals of music and drill in connection with athletic events. Open to all university students. (U)(1) Fall.

ES320, University Wind Ensemble: The premiere wind and percussion organization on campus, the Wind Ensemble is a flexibleinstrumentation group dedicated to the study and performance of the finest wind repertoire of the last 500 years. Open to all students by audition, the group performs both on and off campus. (U)(1) Fall and spring.

ES321, University Basketball Band. (U)(1) Spring.

ES322, University Symphony: An organization with standard symphonic instrumentation performing works from traditional and contemporary literature. (U)(1) Fall and spring.

ES324, Jazz Ensemble: A large jazz band of flexible instrumentation specializing in the performance of jazz, popular, and commercial music. Performances include concerts, shows, dances, ballets, and musicals. Repertoire varies from big band to small-combo work. (U)(1) Fall and spring.

ES327, Jazz Combo: A group that explores the repertoire for the small jazz ensemble or "combo," emphasizing the portion of the jazz repertoire known as the jazz standards, with exploration of the music of Joe Henderson, Wayne Shorter, Cecil Taylor, Slide Hampton, Benny Golson, Horace Silver, and Curtis Fuller. Prerequisite: Audition required. (U)(1) Fall and spring.

ES423, Two-Piano Ensemble: Ensemble experience in a specialized field of performance. Registration is open only to juniors, seniors, and graduate students with the approval of the student's piano teacher. (U)(1) Fall and spring.

ES501, Chamber Music. (G)(1) Fall and spring.
ES502, Chamber Music-Guitar: (G)(1) Fall and spring.

ES503, Chamber Music-Arthur Jordan Saxophone Quartet: (G)(1) Fall and spring.

ES504, Jordan Jazz: A 20-member ensemble and student organization which actively promotes vocal jazz awareness, education, and entertainment through performance in the greater Indianapolis area, workshops and clinics in the Midwest, and international tours. Membership in Jordan Jazz is open to all Butler students through annual spring auditions. (G)(1) Fall and spring.

ES505, Chamber Singers: A select chamber choir specializing in a cappella repertoire or works suitable for small vocal ensemble with instrumental accompaniment. Open to all Butler students through annual auditions. (G)(1) Fall and spring.

## ES506, Chamber Music: Percussion

Ensemble: A select percussion group that performs a range of styles including classical, contemporary, jazz, rock, ragtime, calypso, Latin American, African, and Brazilian music. Includes performance in steel drum ensemble, mallet ensembles, xylophone ragtime band, and world percussion groups. Performs both on and off campus. Open to students outside of music department by audition. (G)(1) Fall and spring.

ES508, New Music Ensemble: A performing group devoted to the growing literature of works for groups of mixed instruments and for voice. Registration requires the permission of the instructor. (G)(1) Fall and spring.

ES510, Butler Opera Theatre: An integrated forum for the performance of music theater in its varied forms: opera, musical theatre, operetta, and review. One full-length, staged production will be offered each year, alternating between each of the genres, with scenes programs on alternating semesters. Prerequisite: Membership by audition, graduate status. (G)(1) Fall and spring.

ES512, Butler Women's Chorus: Dedicated to excellence in the learning and performance of quality choral repertoire for treble voices. Open to any Butler student of appropriate voice type through audition. The chorus performs regularly in on-campus events and in local and regional presentation. (G)(1) Fall and spring.

ES513, Accompanying: Practical training in accompanying through regularly scheduled class work and assigned studio participation. Prerequisite: Completion of piano class requirement or permission of the instructor. (G) (1) Fall and spring.

ES516, University Symphonic Band: Open to all students by audition, the Symphonic Band studies and performs the finest in band
repertoire from the Renaissance to the present. (G)(1) Fall and spring.

ES517, University Choir: A choir of mixed voices, open to all university students who are interested in choral singing. (G)(1) Fall and spring.

ES518, University Chorale: A select group of mixed voices limited in membership and selected for quality of voice, musicianship, and interest. Membership by audition. (G)(1) Fall and spring.

ES519, University Marching Band: Rehearsals of music and drill in connection with athletic events. Open to all university students. (G)(1) Fall.

ES520, University Wind Ensemble: The premiere wind and percussion organization on campus, the Wind Ensemble is a flexibleinstrumentation group dedicated to the study and performance of the finest wind repertoire of the last 500 years. Open to all students by audition, the group performs both on and off campus. (G)(1) Fall and spring.

ES521, University Basketball Band. (G)(1) Spring.

ES522, University Symphony: An organization with standard symphonic instrumentation performing works from traditional and contemporary literature. (G)(1) Fall and spring.

ES523, Two-Piano Ensemble: Ensemble experience in a specialized field of performance. Registration is open only to juniors, seniors, and graduate students with the approval of the student's piano teacher. (G)(1) Fall and spring.

ES524, Jazz Ensemble: A large jazz band of flexible instrumentation specializing in the performance of jazz, popular, and commercial music. Performances include concerts, shows, dances, ballets, and musicals. Repertoire varies from big band to small-combo work. (G)(1) Fall and spring.

ES52'7, Jazz Combo: A group that explores the repertoire for the small jazz ensemble or "combo," emphasizing the portion of the jazz repertoire known as the jazz standards, with exploration of the music of Joe Henderson, Wayne Shorter, Cecil Taylor, Slide Hampton, Benny Golson, Horace Silver, and Curtis Fuller. Prerequisite: Audition required. (G)(1) Fall and spring.

ES530, Independent Study: Individualized study of the student's choice under the guidance of a music faculty member. Prerequisite: Graduate status and approval of written project proposal. (G)(1) Fall and spring.

ES531, Independent Study: Individualized study of the student's choice under the guidance of a music faculty member. Prerequisite:
Graduate status and approval of written project proposal. (G)(2) Fall and spring.

## Music Education Courses

All music education curricula require a semester of student teaching, with the guidance of the cooperating teacher and University supervisors. Students register through the College of Education for ED425 and ED426.

ME101, Foundations in Music Education 1: An introduction to the field of music education and the music education program at Butler University. Class content, activities, and assignments are designed to assist students in the beginning to define their professional goals and to assess their individual qualifications for entrance into the field. On-site experiences with $\mathrm{K}-12$ students is required. Additionally, students will experience basic musicianship through Dalcroze and Laban activities. (U)(2) Fall.

## ME102, Foundations in Music Education

2: A continuation of ME101 with additional work in instrumental and vocal techniques and conducting. Continuation of field experiences and work in Dalcroze and Laban pedagogies. (U) (2) Spring.

## ME160, Practicum in Music Education:

Supervised observation and participation in a teaching setting with $\mathrm{K}-12$ students under the supervision of an approved instructor. A minimum of 12 lab hours and a final portfolio is required. By permission only. This class is repeatable for credit one time. (U)(1) Fall and spring.

ME161, Practicum in Music Education: Supervised observation and participation in a teaching setting with $\mathrm{K}-12$ students under the supervision of an approved instructor. A minimum of 24 lab hours and a final portfolio is required. By permission only. This class is repeatable for credit one time. (U)(2) Fall and spring.

ME191, String Techniques 1: Teaching techniques and materials of the string group. The class includes a performance lab and will meet two days per week for 50 minutes. (U)(1) Fall.

ME192, String Techniques 2: Continuation of String Techniques 1 with additional instruments and techniques. The class includes a performance lab and will meet two days a week for 50 minutes. (U)(1) Spring.

ME193, Percussion Techniques: Teaching techniques and materials of percussion instruments. The class includes a performance lab and will meet two days per week for 50 minutes. (U)(1) Fall and spring.

ME291, Brass Techniques 1: Teaching techniques and materials of the brass instruments. The class includes a performance lab and will meet two days per week for 50 minutes. (U)(1) Fall.

ME292, Brass Techniques 2: Continuation of Brass Techniques 1 with additional brass instruments and techniques. The class includes a performance lab and will meet two days per week for 50 minutes. (U)(1) Spring.

## ME299, Music Education Upper Divisional

Examination: Required of all music education majors. At the conclusion of the sophomore year, the student must submit a developmental portfolio and successfully complete an interview/ audition with the music education faculty, including a piano/sight-singing proficiency exam. Examination is graded P/F. (P/F)(U)(0) Spring.

## ME325-C, General Music Methods-

 Elementary: Objectives and pedagogical approaches to music classes in elementary schools, grades K-5. Current issues and trends will be addressed in relation to state and national standards. A review of various teaching models through field experience in approved schools is required. Prerequisites: Successful completion of AM299 and ME299. (U)(3) Fall.
## ME326-I, General Music Methods-

Secondary: A study of the objectives and pedagogical approaches to non-performance music classes in secondary schools, grades 6-12. Current issues and trends will be addressed in relation to state and national standards. A review of various teaching models through field experience in approved schools is required. Concurrent enrollment in ME424 or ME426. Prerequisites: Successful completion of AM299 and ME299. (U)(2) Spring.

ME345-C, Exploring the Digital Arts-Music: An exploration into digital technologies as they impact music professions. Students complete music projects (modules) using the Web, audio and video media, and MIDI technologies. Graduate students complete more rigorous parallel modules and portfolios. (U)(2) Fall and spring.

## ME360, Practicum in Music Education:

Supervised observation and participation in a teaching setting with $\mathrm{K}-12$ students under
the supervision of an approved instructor. A minimum of 12 lab hours and a final portfolio is required. By permission only. This class is repeatable for credit one time. (U)(1) Fall and spring.

## ME361, Practicum in Music Education:

Supervised observation and participation in a teaching setting with $\mathrm{K}-12$ students under the supervision of an approved instructor. A minimum of 24 lab hours and a final portfolio is required. By permission only. This class is repeatable for credit one time. (U)(2) Fall and spring.

## ME363-I, Music Practicum in the Urban

School Setting: A study of urban K-12 school music settings followed by participation in a teaching setting under the supervision of an approved instructor. A minimum of 20 onsite hours and a final portfolio is required. An additional project is required for graduate students. By permission only. This class is designed to fulfill the ICR requirement of the University Core Curriculum. (U)(2) Fall and spring.

ME380, Special Seminar: A course that addresses a specific aspect of music education. (U)(1) Fall and spring.

ME381, Special Seminar: A course that addresses a specific aspect of music education. (U)(2) Fall and spring.

ME382, Special Seminar: A course that addresses a specific aspect of music education. (U)(3) Fall and spring.

ME391, Woodwind Techniques 1: Teaching techniques and materials of the clarinet and flute. The class includes a performance lab and will meet two days per week for 50 minutes. (U) (1) Fall.

ME392, Woodwind Techniques 2: Teaching techniques and materials of the oboe, bassoon, and saxophone(s). The class includes a performance lab and will meet two days per week for 50 minutes. (U)(1) Spring.

ME400, Independent Study: An opportunity for the qualified student to pursue some investigative work upon his or her own initiative. Prerequisite: Permission of the department chair and instructor. (U)(1) Fall and spring.

ME401, Independent Study: An opportunity for the qualified student to pursue some investigative work upon his or her own initiative. Prerequisite: Permission of the department chair and instructor. (U)(2) Fall and spring.

ME402, Independent Study: An opportunity for the qualified student to pursue some investigative work upon his or her own initiative. Prerequisite: Permission of the department chair and instructor. (U)(3) Fall and spring.

ME40'\%, Instrumental Pedagogy: In this course, students will develop an understanding of techniques of instrumental pedagogy, become familiar with available repertoire and teaching materials, and investigate issues related to private instruction. Requirements include written and experiential assignments, and a final paper for graduate credit. (U/G)(1) Occasionally.

## ME411, Marching Band Techniques:

Fundamentals and techniques needed to develop and maintain a marching band. An extra project will be required for graduate credit. (U/G)(2) Occasionally.

ME412, Vocal Pedagogy: Physiology of the human voice and its development from early childhood through adulthood. Attention to appropriate literature and exercises suitable to vocal development, vocal repair, and maintenance. Prerequisite: Junior, senior, or graduate standing, or consent of the instructor. (U/G)(2) Occasionally.

ME413, Teaching the Young Singer: Students will learn pedagogical techniques for working with young students: basic vocal anatomy, breath, resonance, an understanding of registration and an even scale, articulation, diction, and vocal exercises designed to correct certain vocal problems. The second component of the course will be exploring appropriate repertoire for younger voices. Prerequisite: Junior, senior, or graduate standing, or consent of the instructor. (U/G)(2) Occasionally.

ME415, Jazz Pedagogy Practicum: Hands-on teaching experiences in the Butler Youth Jazz Program or the Butler Summer Jazz Camp. Students will work in cooperation with the director of jazz studies and lead teachers to prepare lessons and reflect on their effectiveness. Students can expect a total of 16 hours of teaching time. Prerequisite: Permission of the instructor. (U)(2) Fall and spring.

ME417, Piano Pedagogy 1: An investigation of teaching materials at all levels of instruction. Information regarding studio organization and business practices. The class will include a discussion of learning styles and motivation theories. Prerequisite: Junior, senior, or graduate status, or permission of the instructor (U/G)(3) Occasionally.

ME418, Piano Pedagogy 2: A study of keyboard performance practices in the different style eras. Consideration of interpretation in a wide cross-section of piano literature. Includes a consideration of the relevant technique and its pedagogy. Prerequisite: Junior, senior, or graduate status, or permission of the instructor. (U/G)(3) Occasionally.

ME424, Comprehensive Instrumental Music Techniques: A study of the philosophies, techniques, and materials for developing a comprehensive instrumental music program in secondary schools, grades 5-12. Practical experience teaching a laboratory band and orchestra. Concurrent enrollment in ME326 and ME425. Prerequisites: Successful completion of AM299 and ME299. (U)(2) Spring.

ME425, Administration of the School Music Program: This course examines the organizational skills and legal issues necessary for administering a school music program at the elementary and secondary level. Concurrent registration with either ME424 or ME426. Prerequisites: Successful completion of AM299 and ME299. (U)(1) Spring.

## ME426, Comprehensive Choral Music

Techniques: A study of the philosophies, techniques, and materials for developing a comprehensive choral music program in secondary schools, grades 5-12. A review of various teaching models through field experience in approved schools is required. Concurrent enrollment in ME326 and ME425. Prerequisites: Successful completion of AM299 and ME299. (U)(2) Spring.

## ME432, Kodaly and Orff in the Classroom:

Materials and procedures utilizing the principles of the Kodaly and Orff approaches. An extra project will be required for graduate credit. Prerequisite: ME325. (U/G)(2) Occasionally.

ME443, Wind Instrument Repair: Minor repairs of wind instruments. What to do and what not to attempt in repairing. (U/G)(2) Occasionally.

ME452, Psychology of Music: An
interdisciplinary study of music learning and effect. Perception, learning theories, affective and physiological responses to music will be addressed. Graduate students complete more rigorous, additional assignments. (U/G)(3) Occasionally.

## ME460, Career Development and

Entrepreneurship for Musicians: This seminar focuses on the development of entrepreneurship and business skills in the field of music. An
extra project will be required for graduate credit. Prerequisite: Junior, senior, or graduate standing, or consent of the instructor. (U/G)(3) Occasionally.

## ME480, Music Student Teacher Seminar:

Senior seminar will address issues of classroom and rehearsal management, assessment and evaluation, administrative aspects of a school music program, music in general education, music teaching techniques, and pedagogy. Concurrent registration in student teaching (ED425 and ED426) is required. (U)(1) Fall and spring.

ME499, Honors Thesis. (U)(3) Fall and spring.
ME511, History and Philosophy of Music
Education: The nature of music learning throughout history, with emphasis on the aesthetic and educational philosophies that guide school music instruction. (G)(3) Occasionally.

## ME521, Piano Pedagogy Workshop

Presentation: Presentation of a three-hour public workshop for piano teachers dealing with current pedagogical issues. Prerequisite: Graduate status or permission of the instructor. (P/F)(G)(0) Fall and spring.

ME530, Independent Study: An opportunity for the qualified student to pursue some investigative work upon his or her own initiative. Prerequisite: Graduate status and permission of the department chair and instructor. (G)(1) Fall and spring.

ME531, Independent Study: An opportunity for the qualified student to pursue some investigative work upon his or her own initiative. Prerequisite: Graduate status and permission of the department chair and instructor. (G)(2) Fall and spring.

ME532, Independent Study: An opportunity for the qualified student to pursue some investigative work upon his or her own initiative. Prerequisite: Graduate status and permission of department chair and instructor. (G)(3) Fall and spring.

ME545, Exploring the Digital Arts: Music: An exploration into digital technologies as they impact music professions. Students complete music projects (modules) using the Web, audio and video media, and MIDI technologies. Graduate students complete more rigorous parallel modules and portfolios. (G)(2) Fall and spring.

## ME560, Practicum in Music Education:

Supervised observation and participation in a teaching setting with $\mathrm{K}-12$ students under the supervision of an approved instructor. A minimum of 12 lab hours and a final portfolio is required. By permission only. This class is repeatable for credit one time. (G)(1) Fall and spring.

## ME561, Practicum in Music Education:

Supervised observation and participation in a teaching setting with $\mathrm{K}-12$ students under the supervision of an approved instructor. A minimum of 24 lab hours and a final portfolio is required. By permission only. This class is repeatable for credit one time. (G)(2) Fall and spring.

ME563, Music Practicum in the Urban School
Setting: A study of urban K-12 school music settings followed by participation in a teaching setting under the supervision of an approved instructor. A minimum of 20 on-site hours and a final portfolio is required. An additional project is required for graduate students. By permission only. This class is designed to fulfill the ICR requirement of the University Core Curriculum. (G)(2) Fall and spring.

ME580, Special Seminar: Work in the special seminar shall be centered on any specific problem wherein advanced music education is a factor. Essentially a research course, with students and faculty working together to collect and interpret all available material. Prerequisite: Senior or graduate status. (G)(1) Fall and spring.
ME581, Special Seminar: Work in the special seminar shall be centered on any specific problem wherein advanced music education is a factor. Essentially a research course, with students and faculty working together to collect and interpret all available material. Prerequisite: Senior or graduate status. (G)(2) Fall and spring.

ME582, Special Seminar: Work in the special seminar shall be centered on any specific problem wherein advanced music education is a factor. Essentially a research course, with students and faculty working together to collect and interpret all available material. Prerequisite: Senior or graduate status. (G)(3) Fall and spring.

ME759, Thesis: A scholarly paper embodying the results of the student's research in some field of music education. (G)(3) Fall and spring.

ME'799, Final Comprehensive Exam: Required of all graduate students in music education or piano pedagogy at the end of the final semester of study. The exam is oral and will cover the major components of the student's coursework and
thesis, if applicable. Examination to be graded P/F by a faculty committee. (P/F)(G)(0) Fall and spring.

## Modern Language Diction Courses

ML206, English and Italian Diction for
Singers: Phonetic training for accurate pronunciation and artistic performance of English and Italian vocal literature according to the rules governing standard stage diction/puro italiano. Training includes application of the International Phonetic Alphabet. (U)(2) Spring.

## ML306, German Diction for Singers:

 Phonetic training for accurate pronunciation and artistic performance of German lieder and operatic arias according to the rules governing Buhnen-Aussprache (German stage diction). Prerequisite: ML206 or permission of the instructor. (U)(2) Occasionally.ML308, French Diction for Singers: Phonetic training for accurate pronunciation and artistic performance of French art songs and operatic arias according to the rules governing accepted French stage diction (la diction soutenue). Prerequisite: ML206 or permission of the instructor. (U)(2) Occasionally.

ML508, Graduate Lyric Diction Review: This course is designed for graduate music students majoring in vocal performance or choral conducting who have not had sufficient previous study in foreign languages/foreign language diction to pass the Graduate Foreign Language Diction proficiency exam. (G)(2) Occasionally.

## Music History Courses

MH111, Historical Survey of Music: An introduction to Western music, including popular and jazz music and its comparison to non-Western folk and art music. Serious avantgarde music of the West also will be included. Prerequisite: Dance major status. (U)(3) Fall and spring.

MH305, Music History and Literature 1:
A study of the evolution of music from its primitive origins through the Middle Ages and Renaissance. (U)(2) Spring.

MH306W, Music History and Literature 2: A study of the evolution of music from the Baroque era through the Classical period. (U)(3) Fall.

MH307, Music History and Literature 3: A study of the language of music and its social meanings from the 19th century to the present. (U)(3) Spring.

MH308, World Music: Basic concepts of ethnomusicology and a survey of world musics, including class performance. Music culture areas studied will be selected from these: Indonesia, India, Ireland, West Africa, Latin America, Egypt and the Middle East, China, and the Jewish Diaspora. Prerequisite: MT102 (U)(2) Fall.

## MH320, Honors Thesis Preparation:

This course introduces students to the professional methodologies of musicology and ethnomusicology. Students will have the opportunity to refine their writing skills and to develop the research strategies necessary to ask and answer vital questions about music. This course fulfills the departmental honors course requirement for music students enrolled in the University Honors Program. (U)(1) Occasionally.

MH380, Special Seminar: A research course in music history with students and faculty working together to collect and interpret material. (U)(1) Fall and spring.

MH381, Special Seminar: A research course in music history with students and faculty working together to collect and interpret material. (U)(2) Fall and spring.

MH382, Special Seminar: A research course in music history with students and faculty working together to collect and interpret material. (U)(3) Fall and spring.

MH400, Independent Study: An opportunity for the qualified student to pursue some investigative work upon his or her own initiative. Prerequisite: Permission of the department chair and instructor. (U)(1) Fall and spring.

MH401, Independent Study: An opportunity for the qualified student to pursue some investigative work upon his or her own initiative. Prerequisite: Permission of the department chair and instructor. (U)(2) Fall and spring.

MH402, Independent Study: An opportunity for the qualified student to pursue some investigative work upon his or her own initiative. Prerequisite: Permission of the department chair and instructor. (U)(3) Fall and spring.

MH405, American Music: Music in the United States from the 17'th century to the present. Course limited to music majors. Prerequisite: Junior, senior, or graduate standing, or permission of the instructor. (U/G)(3) Occasionally.

MH 408-I, History and Literature of Jazz:
Historical development of jazz styles, from their folk origins through contemporary experimental styles. (U/G)(3) Occasionally.

MH410, Final Music History Paper: The culminating project for the emphasis in music history. (P/F)(U)(0) Fall and spring.

MH412, The Art Song: The rise of the art song. A study of the works of the leading composers in the idiom. (U/G)(3) Occasionally.

MH415, Piano Literature: A survey of the solo literature of the piano and its predecessors, beginning with early clavier music and continuing through Baroque, Classical, Romantic, and early 20th-century literature. Prerequisite: Junior, senior, or graduate status, or permission of instructor. (U/G)(3) Occasionally.

## MH430, History and Literature of the Wind

Band: Survey of the history and literature of the wind band from the Renaissance to the present. Lecture, readings, and listening assignments. Graduate students will be required to submit one additional research paper and a program notes project. (U/G)(3) Occasionally.

MH440, Survey of American Musical
Theatre: A history and survey of the significant repertoire and style development in American musical theatre. Students will carefully examine books, lyrics, and music of masterworks, as well as attend and critique live performances. Prerequisite: Junior, senior, or graduate standing, or consent of instructor. (U/G)(3) Occasionally.

## MH441, Special Studies in Opera Literature:

Examination of selected operatic literature drawn from local and regional professionalquality productions. Two or three operas will be studied in depth and experienced in live performance. Class presentations and term papers will focus on filling any historical/stylistic gaps. Prerequisite: Junior, senior, or graduate standing, or consent of instructor. (U/G)(3) Occasionally.

MH442, Special Studies in Vocal LiteratureCantata and Oratorio: Course designed to introduce students to the standard cantata and oratorio solo repertoire drawn from masterworks from the 17th through the 20th centuries.
Prerequisite: Junior, senior, or graduate standing, or consent of instructor. (U/G)(3) Occasionally.

MH451, Survey of the Symphony: The evolution of the symphony from the Mannheim group to modern times. Prerequisite: Junior, senior, or graduate standing, or permission of the instructor. (U/G)(3) Occasionally.

MH452, Survey of Chamber Music: Chamber music from Haydn to the present with particular consideration of the piano trio and the string quartet. Prerequisite: Junior, senior, or graduate
standing, or permission of the instructor. (U/G) (3) Occasionally.

MH453, History of Film Music: Survey of film music from the early 20th-century silents to the Golden Age (1933-1949), the Silver Age (19501980), and contemporary films. Also included are studies of music for animation (features, cartoons), 1930s-1940s movie house serials, experimental films and documentaries, art films, and 20th-century European cinema (German, Italian, French, Japanese, Scandinavian). (U/G) (3) Summer.

MH454, History of Rock and Roll: This course investigates the roots of rock music (minstrel shows, jazz, blues, etc.), provides an in-depth look at rock's golden age (the 1950s), and introduces a number of rock's subgenres, including the British invasion, motown/soul, heavy metal, and punk/ new wave. Active listening and sociological/ historical perspectives are covered. (U/G)(3) Occasionally.

MH499, Honors Thesis. (U)(3) Fall and spring.
MH500, Music before 1400: A survey of Greek music, plainsong, secular monody, and polyphonic music beginning with organum and ending with the works of Machaut and Landini. Prerequisite: Graduate status. (G)(3) Occasionally.

MH501, Music of the Rennaisance: Music and musicians from the Burgundian School in the 15 th century to the vocal and instrumental music of the late 16th century. Prerequisite: Graduate status. (G)(3) Occasionally.

MH502, Music of the Baroque Era: Music and musicians through the vocal and instrumental forms from the end of the 16 th century to the middle of the 18th century. Prerequisite: Graduate status. (G)(3) Occasionally.

MH503, Music of the Classic Period: Music and musicians from the Rococo through Haydn and Mozart and their contemporaries to the early music of Beethoven. Prerequisite: Graduate status. (G)(3) Occasionally.

## MH504, Music of the Romantic Period: The

 Romantic period from its genesis in the Classical period through the development of nationalism up to the 20th century. Prerequisite: Graduate status. (G)(3) Occasionally.MH505, Modernist Music, 1894-1951:
Representative styles of music of the first part of the 20th century from the standpoint of form, tonal organization, thematic material, and instrumental devices. Prerequisite: Graduate status. (G)(3) Occasionally.

MH506, Post-Modern Music, 1945-Present: Contemporary music with emphasis on avant-garde ideas, objectives, and techniques. Particular attention will be devoted to the works of certain composers such as Cage, Stockhausen, and Partch. Prerequisite: Graduate status. (G)(3) Occasionally.

## MH508, Graduate Music History Review:

This survey intends to ensure a master's-level proficiency in central ideas and representative compositions from Classical antiquity through contemporary concert and popular music, including jazz. (G)(3) Occasionally.

MH510, Seminar in Choral Literature: This course will focus on major works for chorus and orchestra, typically one style period per semester, striving to broaden the student's knowledge of major choral works and increase the student's ability to communicate in a scholarly fashion about music. Weekly student presentations, a term paper, and final oral presentation are required. Prerequisite: Graduate status or permission of the instructor. (G)(3) Spring.

MH520, Research in Music: An introduction to the special problems involved in musical research and a survey of methods and materials available. Throughout the semester students will be expected to complete specific research assignments. Prerequisite: Graduate status. (G) (3) Fall.

MH530, Independent Study: Individualized study of the student's choice under the guidance of a music faculty member. Prerequisite: Graduate status and approval of written project proposed. (G)(1) Fall and spring.

MH531, Independent Study: Individualized study of the student's choice under the guidance of a music faculty member. Prerequisite: Graduate status and approval of written project proposed. (G)(2) Fall and spring.

MH532, Independent Study: Individualized study of the student's choice under the guidance of a music faculty member. Prerequisite: Graduate status and approval of written project proposed. (G)(3) Fall and spring.

MH580, Special Seminar: Work in the special seminar shall be centered on any specific problem wherein advanced music history and literature are factors. Essentially a research course, with students and faculty working together to collect and interpret all available material. Prerequisite: Senior or graduate status. (G)(1) Fall and spring.

MH581, Special Seminar: Work in the special seminar shall be centered on any specific problem wherein advanced music history and literature are factors. Essentially a research course, with students and faculty working together to collect and interpret all available material. Prerequisite: Senior or graduate status. (G)(2) Fall and spring.

MH582, Special Seminar: Work in the special seminar shall be centered on any specific problem wherein advanced music history and literature are factors. Essentially a research course, with students and faculty working together to collect and interpret all available material. Prerequisite: Senior or graduate status. (G)(3) Fall and spring.

MH'729, Thesis: A scholarly paper in some field of music history and literature. Prerequisite: Graduate status. (G)(3) Fall and spring.

MH799, Final Comprehensive Exam: Required of all graduate students in music history at the end of the final semester of study. The exam is oral and will cover the major components of the student's coursework and thesis. Examination to be graded $P / F$ by a faculty committee. (P/F)(G) (0) Fall and spring.

## Music Theory Courses

MT100, Elements of Music: A basic course in theory involving notation, scales, intervals, chords, and ear training, including the use of the keyboard. Will not count toward the music major. (U)(3) Spring.

MT101, Theory 1: An introduction to the principles of music analysis, including functional harmony, part writing, and form. Prerequisite: Completion or current enrollment in MT100, or permission of the instructor. (U)(3) Fall.

MT102, Theory 2: An introduction to the principles of music analysis, including functional harmony, part writing, and form. Prerequisite: Completion or currently enrolled in MT101, or permission of the instructor. (U)(3) Spring.

MT111, Aural Skills 1: Singing, writing, and auditory recognition of melodic and harmonic materials, melodies, and rhythms. Prerequisite: Concurrent enrollment in or successful completion of MT101. (U)(1) Fall.

MT112, Aural Skills 2: Continuation of MT111. Prerequisites: Completion or currently enrolled in MT111, plus concurrent enrollment in or successful completion of MT102. (U)(1) Spring.

MT119, Introduction to Composition: A basic introduction to composition through the study
and "imitation" of selected composers and styles. Technique, craftsmanship, and attention to artistic and practical detail are emphasized through weekly assignments and a final, large chamber composition. For composition majors only. Requires concurrent registration in MT222. Prerequisite: Permission of instructor. (U)(3) Fall.

MT201, Theory 3: Advanced theory including counterpoint, chromatic harmony, and 20thcentury analysis. Prerequisites: Completion or currently enrolled in MT102, and MT111. (U) (3) Fall.

MT202, Theory 4: Advanced theory including counterpoint, chromatic harmony, and 20thcentury analysis. Prerequisites: Completion or currently enrolled in MT201, and MT112. (U)(3) Spring.

MT211, Aural Skills 3: Singing, writing, and auditory recognition of more complex melodic, harmonic, and rhythmic material. Prerequisites: Completion or currently enrolled in MT112 plus concurrent enrollment in or successful completion of MT201. (U)(1) Fall.

MT212, Aural Skills 4: Continuation of MT211. Prerequisites: Completion or currently enrolled in MT 211 plus concurrent enrollment in or successful completion of MT202. (U)(1) Spring.

MT222, Composition Seminar: A course where student composers can present their works for peer critique, faculty can present major contemporary musical works for analysis, and visiting guest composers can present their works. Requires concurrent registration in MT119, AM280, AM480, or AM680. (U)(1) Fall and spring.

MT244, Jazz Improvisation: A practical course in the development of improvisational skills, as well as the concepts necessary in the jazz tradition. Prerequisite: MT102. (U)(2) Occasionally.

## MT299, Upper Divisional Examination-

 Composition: Required of all bachelor of music and bachelor of arts music majors whose degrees require music composition study beyond the sophomore level. Failure to pass the exam will require a change of major to a non-compositionrelated music or non-music degree. Examination is graded $P / F$ by a faculty committee. (P/F)(U) (0) Spring.MT307, Choral Arranging: Arranging folk songs for the various combinations of voices available in the school and professional fields; choral
effects; accompaniment writing. Prerequisite: MT202. (U)(2) Spring.

MT308, Orchestration: Ranges, transposition, color, and technical nature of the orchestral instruments; basic principles of orchestral writing; texture and balance of standard orchestral combinations. Prerequisite: MT202. (U)(3) Spring.

MT311, Basic Conducting: The fundamentals of conducting, including the basic beat patterns and the accepted methods of indicating meter, tempo, volume, and style. Prerequisite: MT202. (U)(2) Fall.

MT313, Form and Analysis: A concise review of forms and procedures viewed as dynamic processes. Approaches to analytical problems, techniques, and methods of presenting the results of an analysis. Prerequisite: MT202. (U) (3) Spring.

MT317, Counterpoint: Contrapuntal techniques from late Renaissance through 20th century. Selected representative composers will be included with emphasis on works of J. S. Bach. Prerequisite: MT202. (U)(3) Occasionally.

MT319, Introduction to Composition: An introduction to the techniques of composition with emphasis on writing smaller forms in both traditional and contemporary styles. For noncomposition majors only. Prerequisite: MT202 or permission of the instructor. (U)(3) Fall.

MT321, Instrumental Conducting: The fundamentals of instrumental conducting with emphasis on style and interpretation. Prerequisite: MT311. (U)(2) Spring.

MT322, Choral Conducting: The fundamentals of vocal conducting including choral techniques, voice testing, diction, rehearsal techniques, and program building; emphasis on style and interpretation of choral music. Prerequisite: MT311. (U)(2) Spring.

## MT333, Jazz Theory and Ear Training:

This course will focus on understanding jazz improvisation and composition through the study of harmony, chord and scale function, form, rhythm, meter, and articulation. Transcribed solos and compositions by jazz masters will be studied. Development of aural skills will also be emphasized. Prerequisite: MT102. (U)(2) Occasionally.

MT339, Jazz Arranging: Practical study of the techniques of arranging for small and large ensembles in jazz style including instruments, notation, form, voicing, and part and score
preparation. Prerequisite: MT333. (U)(2)
Occasionally.
MT380, Special Seminar: A research course in music theory with students and faculty working together to collect and interpret available material. (U)(1) Fall and spring.

MT381, Special Seminar: A research course in music theory with students and faculty working together to collect and interpret available material. (U)(2) Fall and spring.

MT382, Special Seminar: A research course in music theory with students and faculty working together to collect and interpret available material. (U)(3) Fall and spring.

MT400, Independent Study: An opportunity for the qualified student to pursue some investigative work on his or her own initiative. Prerequisite: Permission of the department chair and instructor. (U)(1) Fall and spring

MT401, Independent Study: An opportunity for the qualified student to pursue some investigative work on his or her own initiative. Prerequisite: Permission of the department chair and instructor. (U)(2) Fall and spring.

MT402, Independent Study: An opportunity for the qualified student to pursue some investigative work on his or her own initiative. Prerequisite: Permission of the department chair and instructor. (U)(3) Fall and spring.

MT408, Composition Recital: Preparation and presentation of the required graduation recital, which may be presented only during the last 32 hours in residence. This recital is to be approved four weeks prior to performance; performance of student's original composition(s) to be graded P/F by a faculty committee. (P/F)(U)(0) Fall and spring.

MT409, Final Composition Project: The culminating project for the emphasis in composition. (P/F)(U)(0) Fall and spring.

MT410, Final Music Theory Paper: The culminating project for the emphasis in music theory. (P/F)(U)(0) Fall and spring.

MT421, Professional Topics in Music
Composition: An introduction to professional skills necessary for composers including knowledge of copyright, publishing, publicity, collection of royalties, and grant writing skills. An extra project will be required for graduate credit. (U/G)(1) Occasionally.

MT422, Composition Seminar: A course where student composers can present their works
for peer critique, faculty can present major contemporary musical works for analysis, and visiting guest composers can present their works. Requires concurrent registration in MT119, AM280, AM480, or AM680. (U)(1) Fall and spring.

## MT440, Introduction to Electronic Music:

Introduction to the topic of electronic music; its history, its underlying principles and science, and an introduction to composing music in a recording studio. Basic editing, musique concrete, and synthesis are emphasized. Prerequisites: MT202 or consent of the instructor. (U/G)(2) Fall and spring.

MT441, Advanced Electronic Music: Continuation of MT440-advanced topics focus on compositional techniques, advanced computer sequencing, interactive media composition, and some theatrical sound design. Prerequisite: MT440. (U/G)(2) Spring.

MT499, Honors Thesis. (U)(3) Fall and spring.

## MT503, Graduate Choral Conducting

Seminar: For students in the first year of the MM degree in choral conducting. The course considers techniques and resources for the advanced choral conductor, with an emphasis on developing an advanced gestural vocabulary that is effective, efficient, and clear. Additional emphasis is placed upon comprehensive score reading/study, rehearsal techniques, error detection, and vocal/choral pedagogy. Throughout the year, students will study representative works from the major style periods. Prerequisite: Two or more semesters of undergraduate conducting experience (choral or instrumental), or permission of the instructor. (G)(2) Fall and spring.

MT508, Graduate Music Theory Review: This course provides practice with basic analytic principles in application to music from the Baroque era to the present. Emphasis is given to review of harmonic and formal conventions of the common-practice era, with some attention to post-tonal repertoire and other areas of review as may be needed. Prerequisite: MT202 or equivalent. (G)(3) Fall.

## MT509, Analysis of Music Since 1900:

Discussion of fundamental trends in musical structure and new tonality, such as those of Debussy, Schoenberg, Bartok, Copland, avantgarde, and minimalism. Prerequisite: MT202 or equivalent. (G)(3) Occasionally.

MT510, Analysis of Tonal Music: Introduction to and practice with analytic techniques appropriate for tonal music. Includes attention
to Schenkerian analysis, rhythmic theories, and generative theories of Fred Lerdahl and others. Prerequisite: MT202 or equivalent. (G)(3) Occasionally.

MT513, Analysis in Relation to Performance: A study of musical structure as a basis for understanding the content and presentation of standard literature. Prerequisite: MT202 or equivalent. (G)(3) Spring.

MT530, Independent Study: Individualized study of the student's choice under the guidance of a music faculty member. Prerequisites: Graduate status and approval of written project proposed. (G)(1) Fall and spring.

MT531, Independent Study: Individualized study of the student's choice under the guidance of a music faculty member. Prerequisites: Graduate status and approval of written project proposed. (G)(2) Fall and spring.

MT532, Independent Study: Individualized study of the student's choice under the guidance of a music faculty member. Prerequisites: Graduate status and approval of written project proposed. (G)(3) Fall and spring.

## MT550, Pedagogy of Music Theory:

Philosophies of theory instruction, a discussion of the nature of the theory curriculum, of musicianship goals, methods, and texts. Includes practice teaching, observation, and curriculum design. (G)(3) Spring.

MT580, Special Seminar: Work in the special seminar shall be centered on any specific problem wherein advanced music theory is a factor. This is essentially a research course, with students and faculty working together to collect and interpret available material. Prerequisite: Senior or graduate status. (G)(1) Fall and spring.

MT581, Special Seminar: Work in the special seminar shall be centered on any specific problem wherein advanced music theory is a factor. This is essentially a research course, with students and faculty working together to collect and interpret available material. Prerequisite: Senior or graduate status. (G)(2) Fall and spring.

MT582, Special Seminar: Work in the special seminar shall be centered on any specific problem wherein advanced music theory is a factor. This is essentially a research course, with students and faculty working together to collect and interpret available material. Prerequisite: Senior or graduate status. (G)(3) Fall and spring.

## MT603, Advanced Graduate Choral

Conducting Seminar: For students in the second year of the MM degree in choral
conducting. The course meets concurrently with MT503, solidifying students' understanding of the topics considered, and broadening their knowledge of repertoire and styles. Typically, this course is taken concurrently with AM600 (Advanced Conducting). Prerequisite: Two semesters of MT503, or permission of the instructor. (G)(2) Fall and spring.
MT622, Composition Seminar: A course where student composers can present their works for peer critique, faculty can present major contemporary musical works for analysis, and visiting guest composers can present their works. Requires concurrent registration in MT119, AM280, AM480, or AM680. (G)(1) Fall and spring.

MT708, Composition Recital: Preparation and presentation of the required graduate recital. Performance of student's original composition(s) to be graded $P / F$ by a faculty committee. (P/F)(G) (0)Fall and spring.

MTr709, Thesis-Composition: An original composition in one of the larger forms. Graded P/F. (P/F)(G)(0) Fall and spring.
MT729, Thesis-Theory: A scholarly paper in some field of music theory. (G)(3) Fall and spring.

MT799, Final Comprehensive Exam: Required of all graduate students in composition or music theory at the end of the final semester of study. The exam is oral and will cover the major components of the student's coursework and the thesis. Examination to be graded $P / F$ by a faculty committee. (P/F)(G)(0) Fall and spring.

## Department of Theatre

## Administration

Diane Timmerman, MFA, Department Chair Professors
William Fisher, MFA equivalent; Owen Schaub, PhD; Diane Timmerman, MFA

## Associate Professors

Elaina Artemiev, PhD; Robert Koharchik, MFA; Wendy Meaden, MFA

Department Website
www.butler.edu/theatre

## Why Study Theatre?

- The Department of Theatre is fully accredited by the National Association of Schools of Theatre.
- Butler theatre students develop their own voices through rigorous study and collaborative practice. We prepare students to push the boundaries of theatre and integrate their theatre training into purposeful lives.
- With the practical conditions for theatre artists constantly evolving, the Butler University Department of Theatre offers students the experience, skills, and initiative to navigate a rapidly changing environment and pursue their aspirations with determination and purpose. Butler Theatre's distinctive, collaborative work extends beyond the curriculum, offering a depth and breadth of research, practice, and experience.
- The curriculum is designed to educate the whole person and to prepare future theatre artists to enter and transform the field or apply knowledge, communication, and problem-solving skill regardless of their eventual profession. Within the frame of Butler University's liberal education, our practice-based, international tradition surpasses a conventional academic approach, bringing students into dialogue with extraordinary artists and institutions worldwide.
- Complementing a faculty of international professionals, the department maintains relationships with significant guest artists, the Indiana Repertory Theatre, the Phoenix Theatre, and Heartland Actors' Repertory Theatre. We continue a unique partnership with the Moscow Art Theatre School, as well as study programs at destinations around the world.
- The Christel DeHaan Visiting International Theatre Artist Program is a unique and exciting program that connects Butler students with prominent theatre artists from around the world.
- Our goal is to contribute to a community of citizen artists who are broadly and rigorously prepared to work effectively and innovatively across artistic approaches, venues, and technologies, and by extension to engage in the continuing conversation about what it means to be human.


## Theatre Student Learning Outcomes

- Demonstrate proficiency in theatre processes including play analysis, performance, technologies, design, and directing
- Demonstrate the ability to apply theatre processes in production
- Demonstrate an understanding of theatre in relationship to historical and contemporary contexts, as well as its historical and contemporaneous relationship to other art forms
- Demonstrate an understanding of the collaborative nature of theatre
- Demonstrate the ability to assess quality in works of theatre


## Degree Programs

- Bachelor of Arts in Theatre (BA)
- Bachelor of Science in Arts

Administration-Theatre (BS)

- Minor in Theatre


## Requirements for the Major

Applicants are admitted to the program on the basis of academic acceptance by the University and an audition or portfolio presentation and interview. The BA in theatre requires completion of 124 credit hours. In addition to the University Core Curriculum, the student takes courses in the analysis, history, technique, and production of theatre. The BS in arts administrationtheatre requires completion of 128 credit hours including business, administration, and theatre courses.

## Requirements for the Minor

The minor in theatre requires 24 credit hours in theatre, 11 of which are stipulated, with the remaining hours selected from a list of theatre courses. No audition is required.

Alpha Psi Omega, Omicron Cast is the Butler chapter of the National Theatre Honorary Dramatic Society.

Auditions for mainstage productions are limited to majors. Any Butler student may audition for student-directed productions.

## Core Courses Offered by Theatre

PCA225-TH, Introduction to Theatrical
Costuming. This course explores the principles and practices by which costumes are created for theatrical performance. Often dubbed "page to stage," coursework includes text analysis, research, design aesthetics, and production basics. Students will participate in the page-to-stage costume design process, and attend a University theatre meeting and performances. (U)(3) Occasionally.

PCA250-TH, Masks: This course introduces students to a variety of theatrical masking traditions, and explores mask work through participation in the design, creation, and studio exploration of masks for performance. Study will incorporate readings, research, classroom discussion, design and performance analysis, and the creation of three wearable masks. No prior experience in performance or design is required. (U)(3) Occasionally.

## PCA255-TH, Theatre-Actor's Perspective:

Students will learn about the actor's process through a series of acting exercises culminating in performance. Visiting artists will contextualize the students' acting work as it relates to other aspects and forms of theatre. Acting experience is not necessary, but a willingness to participate during each class session is! (U)(3) Occasionally.

## Theatre Courses

TH100, Professional Theatre Practices: Development of professional rehearsal, performance, and production techniques and discipline. Enrollment in this course is required of first-year students and sophomores in the theatre program. This is a pass/fail course and must be successfully completed four times to meet graduation requirements in the theatre major. Open to theatre majors only. $(\mathrm{P} / \mathrm{F})(\mathrm{U})(1)$ Fall and spring.

TH110, Introduction to Acting: Scene study including basic techniques of performance with experience in preparation and presentation. (U) (3) Fall and spring.

TH111, Acting 1: Theories and principles of acting as an art including flexible physical and vocal techniques. Enrollment by audition only. Audit only with consent of instructor. Open to theatre majors only. (U)(3) Fall.

TH112, Acting 2: Fundamentals of performance preparation. Includes the preparation and class presentation of a series of scenes selected from major theatrical works. Prerequisite: TH111. Audit only with consent of instructor. (U)(3) Spring.

TH113, Idea of Theatre 1: Introductory foundation course exploring the theory and practice of performance with a particular focus on the Indianapolis community. Required of all first-year theatre majors. Open to theatre majors and minors only. (U)(3) Fall.

TH123, Stage Makeup: This course introduces the student to the fundamentals of makeup application for stage. Weekly projects include research, analysis, documentation of design plan, application, and evaluation. Emphasis is on defining the face as part of a character through understanding of research, materials, and techniques. Open to theatre majors only. (U) (3) Fall.

## TH200, Production Fundamentals:

Introduction to the study and practice of theatrical production. Exploration of the interrelationship of theatrical production design
and technology to performance. Laboratory experience included. Open to theatre majors only. (U)(2) Fall and spring.

TH201, Stage Movement 1: Foundation course addressing the actor's body as primary instrument and movement as discreet element in training performance. Included studies: physical alignment, articulation, coordination, and kinesthetic ability, preparation, relaxation, availability and concentration techniques for actors. Limited to theatre majors or permission of instructor. One semester, required. (U)(2) Fall and spring.

TH202, Voice for the Actor 1: Vocal production techniques for theatrical performance with an emphasis on the speaking voice. Limited to theatre majors. (U)(2) Fall.

TH203, Voice for the Actor 2: Vocal production techniques for theatrical performance with an emphasis on the speaking voice. Prerequisite: TH202. (U)(2) Spring.

TH208, Text Analysis: Foundational course focusing on approaches to reading plays analytically for the purpose of stage presentation. This course will introduce and teach specific techniques for text analysis as an initial step in the process of theatre production. Limited to theatre majors or permission of instructor. One semester, required. (U)(3) Spring.

TH210, Movement Theatre Studio: This course focuses on the study of physical practices and techniques for the stage actor, including the continuation of studies from TH201 Stage Movement 1: physical articulation, locomotion, coordination, and character and text integration for actors. The course will include skill-based etudes, movement improvisation, and movement composition. Open to theatre majors only or permission of instructor. Prerequisite: TH201 (U)(2) Spring.

TH213, Acting 3: TH 213, Development of analysis, preparation, and performance skills in acting with an emphasis on character study and ensemble acting for modern and contemporary theatre. Prerequisites: TH111, TH112. (U)(3) Fall.

TH220, Stage Management: This course introduces students to the skills and techniques employed by the professional stage manager. It is required for all students who wish to stage manage or assist on Butler Theatre productions. Theatre majors only, or by permission of the instructor. (U)(2) Fall and spring.

TH231, Stagecraft: Planning, construction, and painting of scenery for the theatre. Instruction
in drafting, hand and power tools, and light industrial fabrication techniques. Laboratory component included. Prerequisite: TH200 or permission of instructor. Open to theatre majors and non-majors. (U)(3) Occasionally.

TH232, Stage Lighting 1: Study and application of the principles of lighting for the stage: properties of light, control of light, and effect of light upon the play. Prerequisites: TH200, TH208. (U)(3) Fall

TH233, Costume Technologies 1: For majors and anyone interested in costume construction. Prerequisite for internship in costume. Course includes fabric preparation, reading a pattern, cutting a project, basic construction skills, standard finishing techniques. Both lab and wardrobe crew hours included. Prerequisite: TH200 or permission of instructor. (U)(3) Fall and spring.

## TH300, Professional Theatre Practice:

Development of professional rehearsal, performance and production techniques, and discipline. Enrollment in this course is required of juniors or seniors in the theatre program. This is a pass/fail course and must be successfully completed four times to meet graduation requirements in the theatre major. Open to theatre majors only. (U)(1) Fall and spring.

TH302, Voice for the Actor 3: Advanced vocal production technique, with an emphasis on a variety of topics including the International Phonetic Alphabet, speech, and dialects. (U/G) (3) Fall.

TH314C, Acting 4: TH 314C Analysis of verse structure of Shakespeare and his contemporaries with application in language usage through performance. Prerequisites: TH111, TH112, TH213. Limited to theatre majors or permission of instructor. (U)(3) Spring.

TH322, History of Theatre 1: Development of early European theatre and drama from antiquity to Moliere. (U)(3) Fall.

TH323, History of Theatre 2: Development of American theatre and drama from the colonial period to 1917 and the rise of the art theatre. (U) (3) Spring.

TH324, Survey of Historical Costume: An historical survey of dress and how it relates to theatrical costuming. This course counts toward theatre major elective requirement. (U)(3) Spring

TH325, Costume Design: This course introduces the qualities, tools, and process of design. We study the visual elements of design,
their place in theatrical productions, and our responses to them. Students will do script and character analysis and research, make design choices, render, and present their work. Open to theatre majors only. Prerequisites: TH200 and TH208. (U)(3) Fall and spring.

TH326, Advanced Makeup Projects: Creating and executing makeups involving advanced and complex techniques. Prerequisite: TH123. (U) (3) Spring.

TH330, Theatre Graphics: Drafting and rendering techniques for scenic and lighting design. Development of theatrical designs through ground plans, front elevations, working and line drawings. Consideration of both manual and CAD techniques. Prerequisites: TH200, TH231, TH232. (U)(2) Occasionally.

TH331, Scenography: This course is a projectbased course designed to guide the student through the process of designing for the stage. We will cover script analysis, research, and the different ways the scenographer communicates their vision. Prerequisites: TH200 and TH208. (U)(3) Fall and spring.

TH380, Special Seminar: Work in the seminar shall be centered on any specific problem wherein theatre or drama is a factor. Open to theatre majors only. (U)(1) Fall and spring.

TH381, Special Seminar: Work in the seminar shall be centered on any specific problem wherein theatre or drama is a factor. Open to theatre majors only. (U)(2) Fall and spring.

TH382, Special Seminar: Work in the seminar shall be centered on any specific problem wherein theatre or drama is a factor. Open to theatre majors only. (U)(3) Fall and spring.

TH385, Dramatic Literature 1: The course will investigate significant dramatic works from the major periods of Western playwriting activity. Prerequisite: Junior or senior status. Open to theatre majors only. (U)(3) Fall.

TH400, Independent Study: An opportunity for the qualified student to pursue some investigative work on his or her own initiative. Permission of department chair and instructor. Open to theatre majors only. (U)(1) Fall and spring.

TH401, Independent Study: An opportunity for the qualified student to pursue some investigative work on his or her own initiative. Permission of department chair and instructor. Open to theatre majors only. (U)(2) Fall and spring.

TH402, Independent Study: An opportunity for the qualified student to pursue some investigative work on his or her own initiative. Permission of department chair and instructor. Open to theatre majors only. (U)(3) Fall and spring.

TH405, Senior Capstone in Theatre: The purpose of this course is to prepare theatre majors for future careers in a variety of theatre and theatre-related fields and to provide a capstone experience for theatre majors that utilizes and contextualizes their undergraduate education. Prerequisites: Senior standing as a theatre major. (U)(3) Fall.

TH410, Acting Seminar 1: Advanced study in one acting technique. Prerequisite: Junior or senior status. Open to theatre majors only. (U)(3) Fall and spring.

TH411, Stage Directing 1: Techniques necessary for the direction of plays on primarily the proscenium stage: composition, picturization, pantomimic dramatization, rhythm, and movement. Directorial techniques required for arena theatre, three-quarter, and thrust stage also will be considered. Prerequisites: Junior status and TH111, TH112, TH231, TH232, and TH333. (U)(3) Fall.

TH412, Stage Directing 2: The selection and interpretation of plays for production; casting, the rehearsal period, and conduct of the rehearsal; and the director's responsibility and relationship to the cast, the crew, and the audience. Prerequisite: TH411. (U)(3) Spring.

TH414, Seminar in Theatre Management: An introductory study of managerial functions and practices in theatre arts. Prerequisite: Junior or senior. (U)(3) Fall.

TH416, Acting Seminar 2: In-class preparation and presentation of major plays with emphasis on character study, development, and execution. Ensemble acting is stressed. Prerequisites: TH314 and junior or senior standing. (U)(3) Fall and spring.

TH422, History of Theatre 3: Development of European theatre and drama from the English Restoration to World War 1. (U)(3) Occasionally.

TH423, History of Theatre 4: Development of American theatre and drama from the immediate post World War I era to the new millennium. (U) (3) Occasionally.

TH424, History of Theatre 5: Development of European theatre and drama in the 20th century. (U)(3) Occasionally.

## TH426W, Playwriting and Screenwriting:

Writing for theatre and film. Primary goals will be to learn scriptwriting fundamentals and to explore one's own style and voice as a writer. Students of all writing experience are welcome. (U)(3) Fall.

TH482, Special Seminar: Work in the seminar shall be centered on any specific problem wherein theatre or drama is a factor. Open to theatre majors only. (U)(3) Fall and spring.

TH495, Internship in Theatre: Professional internship with Equity theatres under the supervision of departmental faculty and the staff of the designated theatre. Open to theatre majors only. (U)(0) Fall and spring.

TH496, Internship in Theatre: Professional internship with Equity theatres under the supervision of departmental faculty and the staff of the designated theatre. Normally requires 10 hours per week. Open to theatre majors only. (U) (3) Fall and spring.

TH498, Internship in Theatre: Professional internship with Equity theatres under the supervision of departmental faculty and the staff of the designated theatre. Normally requires 20 hours per week. Open to theatre majors only. (U) (6) Fall and spring.

TH499, Honors Thesis: Prerequisite: Approval of instructor. Open to theatre majors only. (U)(3) Fall and spring.


## COLLEGE of COMMUNICATION

## Administration

Gary Edgerton, PhD, Dean; Suzanne Reading, PhD, Associate Dean

## Professors

Kwadwo Anokwa, PhD; Rose G. Campbell, PhD; Kenneth Creech, PhD; Allan Diefendorf, PhD; Suzanne Reading, PhD, CCC-SLP; Ann M. Savage, PhD; Nancy Whitmore, PhD

## Associate Professors

Margaretha Geertsema Sligh, PhD; Allison
Harthcock, PhD; Kristen Hoerl, PhD; Carolyn Richie, PhD; Kristin Swenson, PhD; Christine Taylor, MA

## Assistant Professors

Ian Z. Anderson, MFA; Lindsay Ems, PhD; Jessica Moore, PhD; Erin Ortiz, PhD; Mark Rademacher, PhD; Sofia Souto, PhD; Kevin Wang, PhD ; Laura Young, PhD
Senior Clinical Faculty
Mary Gospel, PhD, CCC-SLP
Clinical Faculty
Ann Bilodeau, MS, CCC-SLP
Professional Practice Faculty
Loni McKown, MS; Carrie Rector, MS

## Instructors

Cutler Armstrong, MS; Scott Bridge, MS; Janis Crawford, MA; Robert E. Norris, MA; Armando Pellerano, MS

College Website
www.butler.edu/ccom
The College of Communication (CCOM) was founded in 2010 and is currently Butler's fastest growing college. CCOM features a strong liberal arts foundation, outstanding facilities, and impressive internship opportunities. The College's faculty and staff are committed to helping students realize their full potential as communicators, journalists, media artists, and, most of all, engaged citizens. All of CCOM's nine majors blend rigorous curricula with abundant experiential learning opportunities. The College's coursework is thus theoretical and applied, providing the conceptual grounding for lifelong learning and career success.

## Mission

The Butler University College of Communication prepares students for success in our digital age and global society. Our curricular structure reflects the centrality of communication as a basic human right in society. Students learn to analyze, synthesize, speak, write and create meaningful, socially responsible messages across dynamic communication contexts and media
platforms. Our innovative, experiential approach to discipline-based education ensures that graduates can excel in their chosen professions or post-graduate study. The strong grounding in liberal arts ensures that our graduates are well prepared for civic engagement and to provide leadership in their careers and communities.

## College Requirements for Graduation

To fulfill graduation requirements, students must complete 126 credit hours; complete a minimum of 40 hours at the 300 course level or above; complete the College of Communication core requirements (see below for details); complete required courses in the selected major; complete required courses for a major, minor, or 12-hour concentration outside of the primary major; and maintain a minimum cumulative GPA of 2.0.

## College of Communication Core Requirements

COM101, Rhetoric and the American Demo:
This course provides a foundation in the study of rhetoric including the construction, performance, and analysis of rhetorical acts. Students will learn the rhetorical canon (invention, arrangement, style, memory, and delivery) and how the canon applies to democratic tradition. (U)(3) Fall, spring, and summer.

SW266-COM, Media Literacy: This course is an exploration of the cultural implications of media. Through systematic analysis of the grammar of mediated messages, students develop sensitivity to and a critical understanding of the interplay between popular culture and media, i.e., how mediated messages influence our lifestyles, attitudes, and values, and reflect who we are. (U) (3) Fall, spring, and summer.

One course designated Communication and Culture from the list below:

- CSD338, Language and Culture
- JR417, International Communication
- JR418, Global Views: Gender and Media
- CCM354, Gender and Communication
- CCM365W, Media and Cultural Criticism
- CCM376, Film, Culture, and Criticism
- CCM481, Technologies of the Body
- CCM468, Women and Rock
- CCM470, Sports, Media, and Culture
- CCM330, Representations of Race and Difference
- CCM420, Queering Film
- CCM482, Voices of Dissent and Social Change
- ORG359, Intercultural Communication


## Foreign Language

## Requirement

Students in the College of Communication must demonstrate competence in a foreign language by earning at least six hours of credit in one foreign language at the 200 level or above. Foreign language courses are offered at the 100 level for students in need of preparation for more advanced study. Although 100-level courses do not satisfy the foreign language requirement, they do count as credit hours toward the degree. All first-year students must take a placement examination. Further information is available in the Department of Modern Languages, Literatures \& Cultures in the College of Liberal Arts and Sciences. American Sign Language also fulfills the language requirement. Students should contact the Communication Sciences and Disorders Program for more information.

## Degree Programs

- Major in Communication Sciences and Disorders (BA)
- Major in Critical Communication and Media Studies (BA)
- Major in Digital Media Production (BA)
- Major in Human Communication and Organizational Leadership (BA)
- Major in Journalism (BA)
- Major in Recording Industry Studies (BA)
- Major in Sports Media (BA)
- Major in Strategic Communication: Public Relations and Advertising (BA)
- Minor in Critical Communication and Media Studies
- Minor in Digital Media Production
- Minor in Human Communication and Organizational Leadership
- Minor in Journalism
- Minor in Recording Industry Studies
- Minor in Strategic Communication


## Communication Sciences and Disorders

## Administration

Mary Gospel, PhD, CCC-SLP, Department Chair
Department Website
www.butler.edu/communication-disorders

## Why Study Communication Sciences and Disorders?

Mission Statement: The ability to communicate is one of our greatest human gifts. It is a fundamental human right and plays a central role in the dignity and value of human life. The remarkable ability to communicate allows us to realize our human potential and connect with other people. Problems with communication have a great impact on all aspects of life. The Communication Sciences and Disorders (CSD) Program at Butler is dedicated to educating students so that they may assist those who experience communication disorders.

## Why Study Communication Sciences and Disorders at Butler?

Our students receive a strong foundation in basic courses that prepares them for success in graduate school. Our students have had outstanding success in gaining admission into prestigious and competitive graduate programs throughout the United States. Our undergraduate students have many opportunities for experiential learning. Students provide treatment for speech and language disorders through the Butler University Speech-Language Clinic, the Butler Early Language and Literacy program, and through the Butler Aphasia Community. Students also provide speech, language, and hearing screening services to area schools.

In addition, students engage in research and teaching activities with faculty mentors.

Finally, the CSD degree at Butler leads to highdemand careers in speech-language pathology, audiology, and speech science.

## Communication Sciences and Disorders Student Learning Outcomes

- Demonstrate foundational knowledge of the biological, physical, and social sciences, mathematics, and cultural diversity
- Demonstrate knowledge of normal structures, processes, and development needed for the human communication system
- Demonstrate foundational knowledge about ethical issues and research methods in communication sciences and disorders
- Observe and study various communication disorders and basic treatment strategies
- Demonstrate knowledge required for acceptance into a communication sciences and disorders graduate program


## Degree Program

- Major in Communication Sciences and Disorders (BA)


## Requirements for the Major

The major comprises 36 credit hours, of which 27 hours are in required CSD courses. (All required courses are 3 credit hours.)

- CSD231, Introduction to Communication Sciences and Disorders
- CSD240, Phonetics
- CSD332, Language Development
- CSD333, Anatomy and Physiology of Speech and Hearing
- CSD334, Speech Science
- CSD335, Phonological Development and Disorders
- CSD336, Fundamentals of Audiology
- CSD356W, Communication Research Methods
- CSD485C, Capstone: Ethics and Professional Development

Electives: 9 credit hours

- CSD238S, American Sign Language III*
- CSD239S, American Sign Language IV*
- CSD337, Clinical Procedures
- CSD338, Language and Culture
- CSD339, Linguistics
- CSD360S, Communication Science Practicum
- CSD363S, Community Screening Practicum
- CSD397, CSD398, CSD399, Directed Research in Communication Disorders
- CSD401, CSD402, CSD403, Independent Study
- CSD404, CSD405, Internship
- CSD433, Aural Rehab
- CSD436, Neurogenic Communication Disorders
- CSD437, Language Disorders in Children
- CSD460S, Butler Aphasia Community
- CSD475, Teaching Practicum in CSD
- CSD480, CSD481, Topics in CSD (fluency disorders, voice disorders, medical SLP, advanced study in aphasia)
* Elective credit only if not taken to fulfill LAS language requirement


## Communication Sciences and Disorders Courses

CSD138, American Sign Language 1: An introduction to the language of signs and finger spelling. Receptive and expressive skills emphasized. The course will present stories, poems, and readings that exist in deaf culture. (U)(3) Fall.

CSD139, American Sign Language 2: A continuation of CSD138. An introduction to the language of signs and finger spelling. Receptive and expressive skills emphasized. The course will present stories, poems, and readings that exist in deaf culture. Prerequisite: CSD138. (U) (3) Spring.

## CSD231, Introduction to Communication

Science and Disorders: Introduction to the field of communication sciences and disorders, which includes phonetics, speech science, speechpathology, and audiology. Common speech and language disorders, their causes, treatment, and general clinical procedures will be covered. (U) (3) Fall and summer.

## CSD238S, American Sign Language 3:

Emphasis on competency in signing, both receptive and expressive. Use of videos to gain insight into deaf culture. Prerequisite: CSD138, CSD139, or equivalent. (U)(3) Fall.

CSD239S, American Sign Language 4:
A continuation of CSD238. Emphasis on competency in signing, both receptive and expressive. Use of videos to gain insight into deaf culture. Prerequisite: CSD238. (U)(3) Spring.

## CSD240, Introduction to Phonetics: An

 introduction to the study of the sounds of spoken language, this course will focus on articulatory, acoustic, linguistic, and clinical phonetics. Accurate transcription of the English language using International Phonetic Alphabet will be emphasized. This course will serve as an important foundation for future coursework in both normal and disordered speech processes. In keeping with the Liberal Arts and Sciences tradition, this course will take the scientific approach to various aspects of human communication. (U)(3) Spring.CSD332, Language Development: Major theoretical approaches to language acquisition, the perspectives and nature of language, normal and abnormal language behavior, and basic management will be considered. Prerequisite: CSD240. (U)(3) Spring.

CSD333, Anatomy and Physiology of Speech and Hearing: Introduction to the anatomical and physiological bases of the speech and hearing mechanisms. (U)(3) Fall.

CSD334, Speech Science: The physical characteristics of speech sounds and psychophysical processes involved in speech and hearing. (U)(3) Spring.

CSD335, Phonological Development and
Disorders: Phonological development and
speech characteristics are the focus. Testing and management of disorders will be discussed. Prerequisite: CSD240. (U)(3) Fall.

## CSD336, Fundamentals of Audiology:

Introduction to the field of audiology including the study of the physiology and pathology of the human ear. Rehabilitation management will be discussed. Prerequisites: CSD333, CSD334. (U) (3) Spring.

CSD337, Clinical Procedures: Introduction to therapy with emphasis upon behavioral observation, description of behavior, good planning, cause-effect relationships, and clinical interaction. Prerequisites: CSD332, CSD335. (U) (3) Fall and spring.

CSD339, Linguistics: Linguistics is the systematic study of language from its sounds (phonetics and phonology), words (morphology), and sentences (syntax), to its meaning (semantics). In addition to examining language itself, this course will cover aspects of language use such as language change, and the role of language in society. (U)(3) Spring.

## CSD356W, Communication Research

 Methods: Introduces students to the application of social science and quantitative methodology for communication research. Work includes problem analysis, research design, data collection, data analysis, and scientific writing. Prerequisites: CSD majors only, junior or senior standing, or permission of the instructor. (U)(3) Fall.
## CSD360S, Communication Science:

Laboratory practice in the diagnosis and treatment of speech and language disorders. Prerequisites: Cumulative GPA 3.0, minimum grade of B in CSD337, completed 25 hours of observation, or permission of the instructor. (U) (3) Fall and spring.

CSD363S, Communication Screening
Practicum-SL: This course focuses on speech, language, and hearing assessment of preschool and school-age children. Students will learn to administer speech and language screening tests, pure-tone audiometric testing, and impedance audiometry. Students will develop professional behaviors, including collaboration and scheduling with teachers and administrators, collecting accurate data, and interacting appropriately with young children. In addition, students will be able to apply classroom knowledge in evaluating typical and disordered communication skills. This course will include an introduction to speech and hearing screening instruments, community work, weekly journal entries, and a follow-up evaluation, which will
provide feedback about developing clinical skills. This course is a combination of lecture/ discussion and practicum. The students will average about three hours of classroom discussion and four hours of practicum. Prerequisite: Minimum cumulative GPA of 3.0, minimum grade of $B$ in CSD335, and minimum grade of B in CSD336, or permission of the instructor in consultation with the department chair. (U)(3) Fall and spring.

## CSD397, Directed Research in Com.

Disorders: This course provides an opportunity to gain hands-on research experience. Students earn course credit as they engage in directed research with communication faculty. Activities may include data collection, data analysis, and/or presentation of results. Prerequisite: Permission of instructor. May be repeated to six hours total. (U)(1) Fall and spring.

## CSD398, Directed Research in Com.

Disorders: This course provides an opportunity to gain hands-on research experience. Students earn course credit as they engage in directed research with communication faculty. Activities may include data collection, data analysis, and/or presentation of results. Prerequisite: Permission of instructor. May be repeated to six hours total. (U)(2) Fall and spring.

## CSD399, Directed Research in Com.

Disorders: This course provides an opportunity to gain hands-on research experience. Students earn course credit as they engage in directed research with communication faculty. Activities may include data collection, data analysis, and/or presentation of results. Prerequisite: Permission of instructor. May be repeated to six hours total. (U)(3) Fall and spring.

CSD401, Independent Study: An opportunity for the qualified student to pursue a topic of special interest. Prerequisite: Permission of department head. (U)(1) Fall and spring.

CSD402, Independent Study: An opportunity for the qualified student to pursue a topic of special interest. Prerequisite: Permission of department head. (U)(2) Fall and spring.

CSD403, Independent Study: An opportunity for the qualified student to pursue a topic of special interest. Prerequisite: Permission of department head. (U)(3) Fall and spring.

## CSD405, Communication Internship:

Offers the qualified student the opportunity for supervised work experience in a setting related to communication studies. Prerequisite: Permission of department head. (U)(6) Fall and spring.

CSD433, Aural Rehabilitation: The study of theoretical bases for rehabilitative audiology and principles of clinical application for pediatric and adult populations. Prerequisite: CSD336 (U) (3) Fall.

CSD436, Neurogenic Communication Disorders: An investigation of the neurological processes involved in communication disorders. Includes aphasia and cerebral palsy. Prerequisite: Junior or senior standing or permission of instructor. (U)(3) Spring.

CSD43'7, Language Disorders in Children: Description and diagnosis of various language disorders in children and procedures for therapeutic management. Prerequisite: CSD332. (U)(3) Fall.

## CSD460S, Butler Aphasia Community:

Students gain classroom knowledge and clinical experience with adults who have aphasia. Prerequisites: CSD337 and CSD436. (U)(3) Fall and spring.

CSD475, Teaching Practicum in CSD: Qualified students work with faculty on the development and presentation of the course curriculum. Student responsibilities may include preparation and organization of course materials, management of small-group projects, assistance with class discussion, and tutoring. Prerequisites: Junior or senior standing, satisfactory completion of the course for which student will be assisting, and permission of the instructor. (U)(3) Fall and spring.

CSD481, Topics in Communication Science Disorders: An in-depth study of a particular topic in the field of communication chosen from the areas represented by the upper-division courses in the department. (U)(3) Fall and spring.

CSD485C, Capstone-Ethics and Professional Development: A capstone course for majors in Communication Sciences and Disorders (CSD). In this course students will read about and discuss professional issues and ethics. They will prepare a portfolio of their undergraduate work, which will be suitable for submission with graduate program applications. (U)(3) Fall.

CSD499, Honors Thesis. (U)(3) Fall and spring.

## Creative Media and Entertainment

Administration<br>Kenneth Creech, PhD, Fairbanks Chair in Communications and Program Director

## Department Website

www.butler.edu/creative-media-entertainment
The Creative Media and Entertainment program offers majors in digital media production and recording industry studies. Each major is designed to prepare graduates for a life in their profession offering real-world experience and industry-focused coursework.

## Degree Programs

- Major in Digital Media Production (BA)
- Major in Recording Industry Studies (BA)
- Minor in Digital Media Production
- Minor in Recording Industry Studies


## Digital Media Production

## Why Study Digital Media Production?

Digital media production is integral to the world of entertainment and communication. Studying digital media theory and technique provides the knowledge you need to move from preproduction through finished project. You will also understand how to deliver your work online or in traditional media. Digital media production allows you to use your creative talent and understanding of a digital workflow to build a career in the communication and entertainment fields.

## Why Study Digital Media Production at Butler?

Imagine designing, shooting, and editing your first project and distributing it online. Butler provides the small class size and quality faculty that make collaborative work possible from the first year of study. Students work on industrystandard hardware and software in class. There are many opportunities within the curriculum for experiential hands-on learning in production facilities on campus and out in the workplace through internships. Additionally, students benefit from Butler's proximity to Indianapolis and all media and corporate venues a city of this size offers.

## Digital Media Production Student Learning Outcomes

- Students explore ways of knowing in finding, synthesizing, and understanding information in their field.
- Students demonstrate an understanding of the link between aesthetics and communication and are expected to be able to communicate effectively in written, oral, and mediated forms.
- Students demonstrate the ability to work in collaboration with others and to develop leadership potential.
- Students demonstrate a mastery of the technologies required and learn to appreciate the role of media in a global society.
- Students learn an appreciation for the evolutionary nature of their changing discipline and the ethical responsibilities incumbent upon media professionals.


## Requirements for the Major

- CME106, Survey of Digital Media Production
- CME201, Audio Production
- CME202, Multi-Camera Studio Production
- CME212, Writing for Electronic Media
- CME215, Video Editing
- CME219, Design for the Web
- CME305, Electronic Field Production
- CME306, Multimedia Design and Production
- CME310, Directing the Narrative
- CME415, Advanced Editing
- CME432, Electronic Media Law and Regulation or CME452, Entertainment Media and the Law
- CME457, Media Project Design and Management

Total hours required for graduation: 126

## Requirements for the Minor

- CME106, Survey of Digital Media Production
- CME201, Audio Production
- CME202, Multi-Camera Studio Production
- CME219, Design for the Web

Directed Electives (9 credit hours)

- CME212, Writing for Electronic Media
- CME215, Video Editing
- CME305, Electronic Field Production
- CME306, Multimedia Design and Production
- CME415, Advanced Editing
- CME457, Media Project Design and Management

Total hours for the minor: 21

## Recording Industry Studies

Why Study the Recording Industry?
The recording industry is a major component in the world of entertainment and communication, and this is an exciting time to be a part of it. The industry is rapidly changing, and opportunities for you to shape the future of audio and sound
design abound. You will have the opportunity to combine your love of music, recording, and producing to prepare for a challenging and rewarding professional career.

## Why Study the Recording Industry at Butler?

Imagine yourself sitting behind a professional audio console as you prepare to record a group of musicians who are set up in the studio. Or, you may be choosing sound effects to be edited into a film that you and other classmates are producing as a semester-long project. You may also find yourself negotiating with the manager of a local string quartet on behalf of Butler's record label as you prepare for the release of the group's latest CD. You can do all of these things and more when you study the recording industry at Butler.

Small class size and quality faculty make collaborative work possible from the first year of study. Students start immediately working on industry-standard hardware and software in class. There are many opportunities within the curriculum for experiential hands-on learning both in our home studios and out in the workplace through internships. Students benefit from Butler's proximity to Indianapolis and all the entertainment venues a city of this size offers.

## Recording Industry Studies Student Learning Outcomes

- Students explore ways of knowing in finding, synthesizing, and understanding information in their field.
- Students demonstrate an understanding of the link between aesthetics and communication and are expected to be able to communicate effectively in written, oral, and mediated forms.
- Students demonstrate the ability to work in collaboration with others and to develop leadership potential.
- Students demonstrate a mastery of the technologies required and learn to appreciate the role of media in a global society.
- Students learn an appreciation for the evolutionary nature of their changing discipline and the ethical responsibilities incumbent upon media professionals.


## Requirements for the Major

- CME107, Music Skills for the Recording Industry
- CME109, Survey of the Recording Industry
- CME201, Audio Production
- CME220, Audio Lab
- CME222, History of the Recording Industry
- CME252, Theories and Techniques of Sound Recording
- CME320, Audio Independent Study
- CME352, Business Aspects of the Recording Industry
- CME354, Advanced Audio Production
- CME452, Entertainment Media and the Law
- CME454, Seminar in Recording Industry
- CME455, In-Training in Recording Industry

Related Required Courses

- MT100, Elements of Music
- MK280, Introduction to Marketing
- MT440, Introduction to Electronic Music

Total hours required for graduation: 126

## Requirements for the Minor

- CME109, Survey of the Recording Industry
- CME201, Audio Production
- CME222, History of the Recording Industry
- CME252, Theories and Techniques of Sound Recording
- CME352, Business Aspects of the Recording Industry

Directed Electives (6 credit hours)

- CME107, Music Skills for the Recording Industry
- CME220, Audio Lab
- CME320, Audio Independent Study
- CME353, Audio for Video and Television
- CME354, Advanced Audio Production
- CME454, Seminar in Recording Industry
- CME455, In-Training in Recording Industry

Total hours for the minor: 21

## Creative Media and Entertainment Courses

CME102, Media Aesthetics and Basic Studio Production Technique: This course touches on the principles of applied media aesthetics as well as studio production technique. Students will be introduced to concepts of composition, color theory, lighting, and sound and apply that knowledge in practical studio production situations. Additionally, students will engage in producing, directing, and editing show content. (U)(4) Fall and spring.

CME106, Survey of Digital Media: An introduction to the history, concepts, techniques, and trends in digital media. This course introduces the student to the world of multimedia creation and its foundational
principles. Students also learn to use some of the basic tools of digital media. Prerequisites: Digital media production majors, journalism majors, and DMP minors or permission of the instructor. (U) (3) Fall and spring.

CME10'7, Music Skills for Recording Industry
Studies: An introductory course in music theory for the recording industry studies major. Specific topics include commercial music styles, music notation, melody, rhythm, chords, and basic aural and keyboarding skills as they apply to the recording industry. Prerequisites: MT100 or successful completion of a music theory placement exam. (U)(3) Fall.

## CME109, Survey of the Recording Industry:

An introduction to the world of recording and music production. This course will include the history of the recording industry, its current state, and where it may be headed in the near future. (U)(3) Fall.

CME130, Production Lab: Students participate in labs supporting the development of programming for distribution by the department. (U)(1) Fall and spring.

CME201, Audio Production: This course will cover the basics of audio theory recording and basic audio production as they relate to a variety of possible work situations, with the realization that students in this class have a wide variety of interests and career goals. CME201 is the introductory audio course and will also serve as a building block for more advanced audio courses for those who continue. Prerequisite: CME majors and minors or permission of the department chair. (U)(3) Fall and spring.

CME208, Multimedia Graphics: Students are introduced to concepts and principles of graphic design. Students will explore graphic editing, optimizing, and preparing images for media-based delivery. Projects are designed to further refine visual thinking and build upon basic constructs through applied projects. CME majors and minors or permission of the department chair. (U)(3) Fall and spring.

CME211, The Auteur Director: The auteur theory suggests that the greatest cinema is a result of the personal vision of one person, the director. This course examines the career of a specific director. Students view selected films from the director's works and study particular auteur characteristics. (U)(3) Occasionally.

CME215, Fundamentals of Videography and Video Editing: This course introduces the student to videography and video editing. Shooting and editing concepts and practice
will be combined with discussion of aesthetics. Prerequisite: CME102, CME106, or permission of the department chair. (U)(3) Fall and spring.

CME219, Design for the World Wide Web: The course focuses on concepts and techniques of creating elements of a website, posting the site to the Web and maintenance of the site. Prerequisite: CME106. (U)(3) Fall.

CME220, Audio Lab-Independent Study: This lab is designated as an opportunity for students who have completed MDA201 to hone basic audio recording, mixing, and editing skills. Prerequisite: Non-majors must have permission of the instructor. (U)(1) Fall and spring.

CME222, History of the Recording Industry: This course examines the development of the technology, business practices, rise and decline of the major record labels, the emergence of digital recording, and significance of the musical styles, genres, and historical figures important in the development of the recording industry. (U) (3) Fall.

CME252, Theories and Techniques of Sound Recording: The second audio production course. Emphasis on developing critical listening skills, microphone techniques, outboard gear, digital and analog recording. Prerequisites: CME201 or permission of the instructor. (U)(3) Spring.

CME290, Seminar in Media Arts: A group or individual study of the problems, achievements, and opportunities in the fields of digital production, media and cultural studies, electronic journalism, or recording industry studies. Class will be conducted through research, discussion, and/or individual reports. U)(3) Annually, term varies.

CME300, Honors Special Project: Preparation for honors thesis proposal. Taken in conjunction with any 300- or 400-level MDA course. Students' independent inquiry that goes beyond current course curriculum and individualized interactions with instructors are encouraged. Fulfills program area honors course requirement. Prerequisites: Junior honors status. (P/F)(U)(0) Fall and spring.

CME302, Video Production 2: Advanced studio production techniques including graphics, lighting, and production of program material. Prerequisite: CME202. (U)(3) Spring.

CME305, Documentary Style Production Theory and Technique: The focus of this course is on theory, techniques, and aesthetics of singlecamera storytelling. Students will learn how to properly use the camera, microphones, and lights
on location to produce compelling nonfiction stories using audio and video and other electronic tools. The techniques and aesthetics involved in post-production will also be covered. Prerequisites: CME102, CME106, and CME215 or permission of the department chair. (U)(3) Fall.

## CME306, Multimedia Design and Production

I: This course will introduce the student to the concepts, techniques, and trends in multimedia creation. Students will learn some of the basic tools used in multimedia authoring to meet the producer's communication goals. Prerequisites: CME106 and sophomore standing. (U)(3) Fall.

CME311, Genres in Cinema: This course examines specific styles, movements, and periods in the history of cinema. One specific genre will be studied during the course of an entire semester. (U)(3) Occasionally.

CME315, Advanced Video Editing: This course continues to develop concepts, techniques, and principles introduced in CME215. Prerequisites: CME102, CME106, and CME215. (U)(3) Spring.

## CME319, Advanced Web Development:

Building upon the proficiencies learned in the previous web development class (CME219), students will learn how to code webpages to do client-side processes to ease the strain of serverside processing through the use of variables, functions, statements, and libraries, making sites much more responsive to the user. Prerequisite: CME219. (U)(3) Fall.

CME320, Audio Lab-Multi-Track
Independent Study: This lab is designated as an opportunity for students to work in the recording studio on multi-track projects such as complete songs or collections of songs by small to medium groups or ensembles. Prerequisites: CME201, CME220 (U)(1) Fall and spring.

CME330, Production Laboratory: Students participate in labs supporting the development of programming for distribution by the department. Can be taken concurrently with MDA331. (U)(1) Fall and spring.

CME352, Business Aspects of the Recording
Industry: This course will give students the opportunity to expand upon their knowledge of recording industry business trends and practices. Topics to be covered include copyright, music publishing, performing rights organizations, royalties, agents/managers, and contracts. Prerequisite: CME109 or permission of instructor. (U)(3) Spring.

## CME353, Audio for Video and Television:

Practical applications of all aspects of sound from pre- to post-production; location sound; boom audio and love miking techniques; music editing and sound design. Prerequisite: MDA201, MDA252, and MDA352. (U)(3) Spring.

CME354, Advanced Audio Production: This course will give students the opportunity to expand upon their knowledge of an experience with recording, editing, mixing, and mastering of projects, including the use of DAWs (Digital Audio Workstations). Prerequisites: CME252 or permission of instructor. (U)(3) Annually, term varies.

## CME360, Recording Industry Practicum:

Students will work in groups to write, perform, produce, record, and mix original content for Indianapolis-based nonprofit organizations. The material produced will be suitable for student portfolio use. Part of the class will also be devoted to résumés, interviewing, and finding employment after graduation. Prerequisites: CME320, CME352 (U)(3) Spring.

## CME390, Seminar in Creative Media and

Entertainment: A group or individual study of the problems, achievements, and opportunities in the fields of digital production, media and cultural studies, electronic journalism, or recording industry studies. Class will be conducted through research, discussion, and/ or individual reports. Prerequisites: Sophomore or junior standing. Non-majors must have permission of the program director. (U)(3) Annually, term varies.

CME400, Independent Study: An opportunity for the qualified student to pursue some investigative work on his or her own initiative. Permission of department chair and instructor. (U)(1) Fall and spring.

CME401, Independent Study: An opportunity for the qualified student to pursue some investigative work on his or her own initiative. Permission of department chair and instructor. (U)(2) Fall and spring.

CME402, Independent Study: An opportunity for the qualified student to pursue some investigative work on his or her own initiative. Permission of department chair and instructor. (U)(3) Fall and spring.

CME410, Directing the Narrative: Explores the translation of the written script to screens both large and small. Topics for discussion include: the evolving roll of the director in the creative process, the impact of emerging technologies on the craft, and the business of filmmaking.

Students will utilize skills acquired in CME102, CME106, CME215, CME305, and CME315 in the production of a substantial final project. Prerequisites: CME102, CME106, CME215, CME305, and CME315 or permission of the department chair. (U)(3) Spring.

CME419, Interactive Web Development: This course builds off previous courses to create interactive web applications. Subject matter will include technologies that allow asynchronous page updates using AJAX, XML, and other similar technologies. Prerequisites: CME319 and junior standing. (U)(3) Spring.

CME422, New Media Distribution: This course is an introduction to rich internet applications. Topics include development and deployment of web and mobile applications across many platforms. Prerequisites: CME306 and junior standing. (U)(3) Fall.

CME432, Law and Regulation of Electronic
Media: A study of the laws, regulations, and policies affecting the electronic media, including broadcasting, cable, and developing electronic media. Prerequisite: Senior standing. Nonmajors must have permission of the program director. (U)(3) Fall.

CME452, Entertainment Media and the
Law: A survey of the major legal and business issues encountered by professionals in the entertainment industry. Cases and problems will address intellectual property, music licensing, and other issues related to recording, film, broadcasting, and new media. Prerequisite: Senior standing. Non-majors must have permission of the program director. (U)(3) Spring.

CME455, In-Training: On-the-job experience in a facility directly related to the student's degree objective. Prerequisite: Senior status. Majors only with approval of the program director. (U) (3) Fall and spring.

## CME457, Digital Media Project Design and

 Management: This course builds the foundation for creating and authoring digital media for all delivery systems through successful planning and project management. This course guides the student through the development process, project design, and management that would be followed with any client when developing a communication plan involving the use of multimedia communication. This course is a "capstone" course, designed to put to practice all the concepts and skills of a student into a focused, professional-grade project. Prerequisites: CME106, CME201, CME202,CME215, CME219, CME305, CME306 and senior standing. For senior majors only. (U)(3) Spring.

## CME460, RIS Capstone-Advanced Audio

Production: In this portfolio-building capstone course, students will be granted the opportunity to apply advanced microphone theory and techniques as well as advanced signal processing and mixing techniques while working in small groups to produce, engineer, and mix songs by Butler record label artists. Prerequisites: CME352, CME360. (U)(3) Spring.

CME461, RIS Capstone-Record Label and Music Publishing Operations: In this capstone course, senior recording industry studies students gain experience and make industry contacts through the Butler record label and music publishing company. Topics include how sound recordings and compositions are exploited and how royalties are generated, collected, and distributed; finding and signing talent. Prerequisites: CME352, CME360. (U)(3) Spring.

CME475, Internship in Creative Media and Entertainment: On-the-job experience in a facility directly related to the student's degree objectives. Prerequisite: Junior or senior standing, 25-30 credits in major, and approval of the program director. Majors only. (U)(6) Fall and spring.

CME490, Seminar in Creative Media and Entertainment: A group or individual study of the problems, achievements, and opportunities in the fields of digital production, media and cultural studies, electronic journalism, or recording industry studies. Class will be conducted through research, discussion, and/ or individual reports. Prerequisites: Junior or senior standing. Non-majors must have permission of program director. (U)(3) Annually, term varies.

CME499, Honors Thesis. (U)(3) Fall and spring.

## Critical Communication and Media Studies

Administration
Kristin Swenson, PhD, Department Chair
Department Website
www.butler.edu/critical-communication-media

## Why Study Critical Communication and Media Studies at Butler?

The CCM program at Butler is a unique interdisciplinary program that combines perspectives from critical theory, media studies,
and rhetoric-fields of study that complement each other but are often separated in more traditional communication programs. As such, the program serves as a showcase for synergy.

This innovative program highlights the spirit of a liberal arts education in partnership with preparation for a variety of exciting careers related to media and communication, as well as graduate or law school. The program provides a bridge that enables students to infuse practice with theory, and activism with scholarship, to demonstrate a commitment to social justice and diversity. Faculty are an enthusiastic group of well-published teacher-scholars, who are active in research and scholarship and who frequently present their work at national and international conferences. CCM students will have the opportunity to work closely with these faculty members on teaching or research.

## Critical Communication and Media Studies Student Learning Outcomes

## Students will:

- Acquire skills in and demonstrate systematic and innovative inquiry into the production, reception, and circulation of public and mass-mediated communication
- Demonstrate an understanding of historical, theoretical, and critical perspectives as they apply to a variety of public and mass-mediated messages
- Interpret, evaluate, and critique the symbolic and shared processes of meaning making
- Analyze how identity and power affect communication globally and locally
- Develop an appreciation of the value of communication to promote community engagement and social justice
- Demonstrate the ability to advocate appropriately and effectively in professional and public contexts


## Degree Programs

- Major in Critical Communication and Media Studies (BA)
- Minor in Critical Communication and Media Studies
- Film Concentration


## Requirements for the Major

The following courses are required:

- SW266-COM, Media Literacy
- CCM310, Media and Cultural Theory or CCM315, Rhetorical Theory
- CCM398, Argumentation and Advocacy
- CCM465, Communication and Cultural Criticism or CCM352, Rhetorical Criticism
- CCM482, Voices of Dissent and Social Change
- JR417, International Communication, or JR418, Gender and Media: Global Views

Four courses from the following electives:

- CCM308, History of Film
- CCM330, Representations of Race and Difference
- CCM354, Gender and Communication
- CCM368, Media and Politics
- CCM376, Film, Culture, and Criticism
- CCM420, Queering Film
- CCM430, Rhetoric of Horror Film
- CCM462, Influence in Public Culture
- CCM463, Freedom of Speech and Democracy
- CCM468, Women and Rock
- CCM470, Sports, Media, and Culture
- CCM481, Technologies of the Body
- CCM482, Voices of Dissent and Social Change


## Requirements for the Minor

The minor consists of 18 hours. The following four courses are required:

- SW-COM266, Media Literacy
- CCM310, Media and Cultural Theory or CCM315, Rhetorical Theory
- CCM398, Argumentation and Advocacy
- CCM465, Media and Cultural Criticism or CCM352W, Rhetorical Criticism

Two courses from any 300- or 400-level courses listed as part of the major.

## Requirements for the Film Concentration

- CCM308 History of Film
- CCM330 Representations of Race and Difference
- CCM376 Film, Culture, and Criticism
- CCM420 Queering Film
- CCM430 Rhetoric of Horror Films Critical Communication and Media Studies Courses


## Critical Communication and Media Studies Courses

CCM290, Topics: An in-depth study of a particular topic in the field of media, rhetoric, and culture. May be repeated when topics change. (U)(3)

CCM308, History of Film: A survey of the cinema from its birth in 1895 to the present, examining the medium from artistic, cultural, and business perspectives. The course will look at noted personalities, at seminal films, and at
both American and foreign movies. Readings, lecture and discussion, exams, and viewing of numerous film clips. (U)(3)

CCM310, Media and Cultural Theory: This course surveys the development of mass communication and cultural theory and current trends in the field. Prerequisite: Sophomore or above or permission of instructor. (U)(3)

CCM315, Rhetorical Theory: This course examines key theories and theoretical debates within rhetorical studies. These areas may include: rhetoric's role in defining humanity, culture, and public sphere, power and communication, marginal groups and public discourse, gender/sex and rhetoric, the influence of critical theory, and emerging communication technologies and rhetorical theory. (U)(3)

CCM320, Documentary Films: This course will introduce students to the theory and development of the nonfiction film genre while also considering the social, cultural, and historical contexts. A specific sub-genre, director, topic, or style will be studied throughout the semester. Prerequisites: Junior standing or permission of instructor. (U)(3)

CCM330, Representations of Race and Difference: Course investigates representations of race and racism in media culture and public discourse. Race is a social fiction, yet remains a force in our history, culture, and lives. Course examines how we discuss racism and represent race on news, film, and television. Prerequisite: Sophomore or above or permission of instructor. (U)(3)

CCM352, Rhetorical Criticism: Introduction to critical and interpretive research methods in rhetorical analysis and criticism. (U)(3)

CCM354, Gender and Communication:
This class examines communication practices in shaping and being shaped by gender. The study of gender and communication in public discourse, families, interpersonal relationships, organizations, and media are examined. We explore how communication creates, (re) produces, sustains, and sometimes challenges the meaning of gender and communication practices. (U)(3)

CCM363, Freedom of Speech and Democracy: This course examines the relationship between freedom of speech, the law, and democratic citizenship. This includes an examination of the role of free speech and the dissent in American democracy, critical and rhetorical analysis of the First Amendment, Supreme Court cases, and discourses that complicate our understanding
of free speech. Prerequisite: Junior or senior standing or permission of instructor. (U)(3)

## CCM376, Film, Culture, and Criticism:

 Introduces the concepts of film criticism. The course considers the grammars of composition, continuity, and editing; the conventions and variations involving narrative; and the implications of film for understanding social relations based on gender, race, and class. Prerequisite: Sophomore or above or permission of instructor. (U)(3)CCM390, Special Topics: An in-depth study of a particular topic in the field of media, rhetoric, and culture. May be repeated when the topics change. (U)(3)

CCM398, Argumentation and Advocacy: This course acquaints students to principles and skills of effective argumentation pertinent to a variety of situations including politics, entertainment, and advertising. Students critically examine the uses of advocacy in contemporary public culture and develop arguments about a contemporary public issue. Prerequisite: Sophomore or above or permission of instructor. (U)(3)

CCM420, Queering Film: From a criticalcultural studies perspective, this course will critically examine gay, lesbian, bisexual, transgender, and queer (GLBTQ) images in film. Examines both historical and contemporary examples while recognizing cultural conditions and industry restrictions imposed on queer life and images. Prerequisites: Junior or senior standing or permission of instructor. (U)(3)

CCM430, Rhetoric of Horror Films: Explores how the application of fundamental rhetorical principles and concepts can elucidate complex understandings about the social and political dimensions of both recent and classical horror films. Students will apply a variety of approaches including allegory, psychoanalysis, and auteur studies to a variety of horror and suspense films. (U)(3)

## CCM365, Media and Cultural Criticism:

Students will analyze mediated and popular culture texts from a critical-cultural perspective (semiotics, Marx, ideology, feminism). Through writing and reading in critical theory and media studies, students will explore media representations of race, gender, sexuality, class, and other identity categories. Prerequisites: Junior or senior standing or permission of instructor. (U)(3)

CCM466, Audience, Community, and Fandom: Using qualitative research methods (data collection, field work, interviewing), students will explore the relationship of audiences and
fans with mediated texts. Prerequisite: Junior or senior standing or permission of instructor. (U)(3)

CCM468, Women and Rock: Within a feminist studies framework, this course explores women's past roles in the development of music within Western culture and more specifically rock'n'roll. While considering the intersections of gender with race, class, and sexual orientation, we will also critically examine the current state of women in rock. Prerequisite: Junior or senior standing. (U)(3)

CCM470, Sports, Media, and Culture: This class is a critical study of mediated sports and their relationship to society. The class will examine the major issues and controversies surrounding sports and their cultural impact. Prerequisite: Junior or senior standing. (U)(3)

CCM481, Technologies of the Body: As the body is always a site of power relations, it can be "read" to express a particular culture's desires and anxieties. We will examine the technologies that we employ to alter, change, and "perfect" the human body in order to meet the demands and desires of contemporary life. (U)(3)

CCM482, Voices of Dissent and Social Change:
This course explores the communication strategies that activists have used to challenge the political and social injustices of their time. Case studies include women's suffrage, civil rights, free speech, and anti-globalization movements. Prerequisite: Junior or senior standing or permission of instructor. (U)(3)

CCM486, Apprenticeship: Student work with faculty member on his or her teaching or research. In teaching apprenticeship, students work with professor in development and discussion of classroom experience. In research apprenticeship, students work with faculty mentor on his or her research. Prerequisites: Junior or senior standing, completion of at least two MRC courses, by application only. (U)(1)

CCM488, Apprenticeship: Students work with faculty member on his or her teaching or research. In teaching apprenticeship, students work with professor in development and discussion of classroom experience. In research apprenticeship, students work with faculty mentor on his or her research. Prerequisites: Junior or senior standing, completion of at least two MRC courses, by application only. (U)(3)

CCM490, Special Topics: An in-depth study of a particular topic in the field of media, rhetoric, and culture. May be repeated when topics change. (U)(3)

CCM491, Internship: Offers students the opportunity for a supervised educational work experience in a setting pertinent to media, rhetoric, and culture. Prerequisite: Majors only. (U)(1)

CCM492, Internship: Offers students the opportunity for a supervised educational work experience in a setting pertinent to media, rhetoric, and culture. Prerequisite: Majors only. (U)(2)

CCM493, Internship: Offers students the opportunity for a supervised educational work experience in a setting pertinent to media, rhetoric, and culture. Prerequisite: Majors only (U)(3)

CCM494, Independent Study: An opportunity for qualified students to pursue a topic of individual interest. Prerequisite: Junior or senior standing or permission program director. (U)(1)

CCM495, Independent Study: An opportunity for qualified students to pursue a topic of individual interest. Prerequisite: Junior or senior standing or permission of program director. (U) (2)

CCM496, Independent Study: An opportunity for qualified students to pursue a topic of individual interest. Prerequisite: Junior or senior standing or permission of program director. (U) (3)

CCM499, Independent Study: An opportunity for qualified students to pursue a topic of individual interest. Prerequisite: Junior or senior standing or permission of program director. (U) (3)

## Human Communication and Organizational Leadership

Administration

Jessica Moore, PhD, Department Chair

## Department Website

www.butler.edu/human-communication-and-organizational-leadership

## Why Study Human Communication and Organizational Leadership?

Every great leader is a great communicator. Whatever your trajectory in life-if you want to challenge yourself and change your world-you need the skills to intelligently, strategically, and intentionally express yourself. Additionally, successful organizations are often the result of people who understand the importance of building and maintaining relationships,
effectively communicating with organizational stakeholders, leveraging technology wisely and ethically, and leading with excellence.

## Why Study Human Communication and Organizational Leadership at Butler?

The Human Communication and Organizational Leadership Department at Butler blends innovative courses with opportunities for local, national, and international real-world professional experiences in order to position our students for personal and professional success. The department is supported by the expertise of faculty with academic training and professional expertise that propel the department's three areas of specialization within the major: Organizational Communication, Health and Human Communication, and Leadership Studies.

In addition to the opportunity for students to study abroad, the Indianapolis campus offers students access to a variety of internships and experiences that prepare them to begin a professional career immediately after graduation or facilitate their transition into graduate study in communication, business, medical, technology, or legal programs, among others. In addition, students may choose to take advantage of the many co-curricular activities offered in the College of Communication, including Lambda Pi Eta national communication honor society, Butler's nationally recognized Speakers Lab, the Butler Speech and Debate Team, or one of many other activities designed to enhance social, academic, and professional development.

The department encourages students to think synergistically by requiring innovative courses designed to build expertise in organizational communication, interpersonal and professional relationship management, social networks, research and analytics, communication technologies, social responsibility, and leadership. Whether students are considering local, national, or international positions and whether they are interested in nonprofit or Fortune 500 careers, the Human Communication and Organizational Leadership major offers a wide range of opportunities for students hoping to become the leaders of the future. One major; unlimited possibilities.

## Human Communication and Organizational Leadership Student Learning Outcomes

- Demonstrate the ability to communicate appropriately and effectively in a variety of
interpersonal, group, organizational, and public settings
- Apply research and analytics to academic and professional communication contexts
- Demonstrate how and explain why to engage in socially responsible communication and leadership
- Analyze and implement research-supported approaches to the study of organizational communication, health communication, interpersonal communication, and/or leadership
- Demonstrate the ability to create and implement appropriate and effective organizational communication in professional contexts


## Degree Programs

- Major in Human Communication and Organizational Leadership (BA)
- Minor in Human Communication and Organizational Leadership


## Requirements for the Major

Department Foundations ( 15 hours)

- ORG253, Interpersonal Communication
- ORG270, Organizational Communication
- ORG358, Communication \& Social Responsibility
- ORG315, Business and Professional Communication

Plus one research methods course:

- ORG356, Communication Research Methods
- STR327, Research Methods for Strategic Communication
- CCM352, Rhetorical Criticism

Applied Technology (3 hours)

- CME106, Survey of Digital Media
- CME219, Design for the Web
- STR351, Advanced Graphic Design
- STR426, Photo Graphic Communication

Experiential Requirements (6 hours)

- ORG362, Leadership \& Communication
- ORG440, Professional or Academic Internship

Students also select one of three areas of specialization (12 hours):

Organizational Communication

- ORG470, Advanced Organizational Communication
- Plus 9 upper-level credits* in ORG (see examples below)


## Health and Human Communication

- ORG 453: Relational Communication
- Plus 9 upper-level credits* in ORG (see examples below)


## Leadership Studies

- ORG470, Advanced Organizational Communication
- ORG453, Relational Communication
- Plus six leadership courses (\#) or upperlevel credits* approved by advisor
* Examples of upper-level courses for all tracks in the major:
- ORG351, Small Group Communication
- ORG355, Communication Consulting
- ORG357, Health Communication
- ORG454, Persuasion, Compliance, and Social Influence
- ORG471, Communication \& Globalization
- ORG481, Topics in Communication Studies
- COM305, Intercollegiate Speech
- COM307, Intercollegiate Debate
- EI201, Real Business Experience (\#)
- EI325, Social Entrepreneurship (\#)
- ED348, Perspectives in Leadership (\#)

In addition to major course requirements, students may need an additional course to meet the Butler Cultural Requirement as well as earn the minimum number of upper-level courses needed to graduate at Butler. All majors in the College of Communication are also required to declare a minor, concentration, or second major.

## Requirements for the Minor

Department foundations ( 12 hours)

- ORG253, Interpersonal Communication
- ORG270, Organizational Communication
- ORG358, Communication and Social Responsibility
- ORG315, Business and Professional Communication
- Plus any two upper-level courses in ORG (6 hours)


## Human Communication and Organizational Leadership Courses

ORG215, Speech for Business: Competent communicators are able to gather information through reading and listening and to convey ideas through oral and written means. This course is designed to give students an introduction to business communication and the standards for effective professional communication. (U)(2)

ORG253, Interpersonal Communication: This course is an introduction to the study of interpersonal communication and dyadic relationships. Students will receive exposure
to applied and theoretical research on identity formation, perception, emotion, listening, language, nonverbal behavior, love relationship development, conflict resolution, and computermediated communication (U)(3) Fall.

ORG2'70, Organizational Communication:
This course is designed to introduce students to organizational communication by taking a comprehensive approach to the study of management, organizations, work, and society through the lens of communication. Students explore a range of organizational communication theories and practices. No prerequisites. (U)(3) Occasionally.

ORG300, Tutoring and Mentoring: This course will focus on the concepts of tutoring and mentoring for skills development in oral presentation. Coaching techniques and Speakers Lab protocol will be studied. Successful completion of COM102 or approved performance course required. (U)(1)

## ORG315, Business and Professional

Communication: This course is designed to help students critically develop and refine business communication skills in order to become more innovative professionals and effective leaders. Students will gain experience with applied techniques in business communication, and learn to effectively integrate and manage new technologies in various professional contexts. (U)(3) Fall.

ORG350, Contemporary Communication Theory: An introduction to contemporary models of communication and to experimental and field research dealing with human communication. (U)(3) Spring.

## ORG351, Small Group Communication:

 Theory and practice in group discussion, leadership, decision making, and interpersonal communication in small groups. (U)(3) Spring.ORG355, Communication Consulting: Survey of communication consultancy, including assessment (audit) of communication needs for clients; techniques of learning, training, and teaching; assessment and reporting of training outcomes; and how to become a consultant. (U) (3) Fall.

## ORG356, Communication Research

Methods: This course prepares students to become knowledgeable consumers and novice producers of social scientific and humanistic communication research. By the end of this course, students should possess introductory skills in developing research questions/ hypotheses as well as gathering, organizing,
interpreting, and presenting qualitative and quantitative data using appropriate, effective, and ethical methods. (U)(3) Fall.

ORG357, Health Communication: This course encourages students to become familiar with fundamental interpersonal communication processes that are involved in managing physical and mental health. Students will have the opportunity to develop an awareness of how communication among friends, relatives, professional colleagues, and others influences well-being and, in turn, how health and illness shape communication and relational dynamics. Topics will include health identity, managing sensitive information, social support, the role of positive communication on health and wellbeing, conversations in close relationships about health issues, and patient-provider communication. (U)(3) Occasionally.

## ORG358, Communication and Social

 Responsibility: This course is designed for students to explore, critique, and study issues related to communication, community, and social responsibility. Students will increase their understanding and sensitivity to the role of communication in addressing contemporary social issues. (U)(3) Fall and spring.ORG359, Intercultural Communication: The purpose of this course is to lead students to acquire the concepts and skills needed to manage effectively communicative encounters in which intercultural factors make a difference. (U)(3) Occasionally.

ORG362, Leadership and Communication: This course introduces students to the theories and practices of leadership from a communication perspective. Students will learn concepts of interpersonal, organizational, public, and team leadership. Concepts of power, diversity, charisma, and ethics will be featured. Leadership styles of both historical and contemporary leaders will be examined. (U)(3) Spring.

ORG404, Internship: Supervised internship directly related to the student's degree and career objectives. Prerequisites: Junior or senior standing and approval of internship director. (U) (3) Fall, spring, and summer.

ORG405, Internship: Supervised internship directly related to the student's degree and career objectives. Prerequisites: Junior or senior standing and approval of the internship director. (U)(3) Fall, spring, and summer.

ORG453, Relational Communication: This course is designed to provide you with the
opportunity to develop an understanding of the theories, concepts, and findings associated with interpersonal and relational communication. This course will encourage you to examine the conceptual foundations for studying human relationships as well as the communication patterns associated with the development, maintenance, and deterioration of relationships. Prerequisite: ORG353 or instructor approval. (U) (3) Spring.

ORG454, Persuasion, Compliance, and Social Influence: This course is designed to provide students with the opportunity to develop an understanding of the theories, principles, and strategies associated with effective persuasion, compliance, and social influence. This course examines the psychological and communicative processes that lead to effective persuasion, compliance, and influence, as well as how students can utilize these tools to have a positive impact on the world. Prerequisite: ORG353 or instructor approval (U)(3) Occasionally.

ORG470, Advanced Organizational
Communication: This course investigates major topics within organizational communication theory, such as culture and identity, gendered work, work/family balance, organizational power and decision-making, or organizational change. An underlying theme of this course is to explore the communicative possibilities for meaningful work in various contexts, such as forprofit, nonprofit, and global organizations. (U) (3) Spring.

ORG471, Globalization, Communication, and Organizations: This course will explore the multiple dimensions of globalization as they affect and are shaped by today's organizations. The course will highlight the economic, political, cultural, and ecological implications of globalization and the influence of communication in those various dimensions. Prerequisite: ORG370 or instructor approval. (U) (3) Occasionally.

ORG481, Topics Communication Studies: An in-depth study of a particular topic in the field of communication chosen from the areas represented by the upper-division courses in the department. (U)(3)

ORG485, Senior Seminar in Communication
Studies: Capstone course in communication studies. Working in consultation with a faculty member, students will complete a major research project and present their senior portfolio. Prerequisite: Senior standing. (U)(3) Spring.

ORG499, Honors Thesis. (U)(3) Annually, term varies.

# Eugene S. Pulliam School of Journalism 

Administration

Nancy Whitmore, PhD, Director
School of Journalism Website
www.butler.edu/journalism

## Why Study Journalism?

Journalism is all around us. It appears on our televisions, computers, mobile devices, and on the printed page. It is both a discipline that is indispensable to the world's democratic societies, and an approach to communication that has been universally adopted by news organizations and the media industry as well as government bodies, law firms, trade associations, corporations, nonprofit groups, and digital entrepreneurs. In fact, almost every profession uses the knowledge, skills, and mindset of journalism to tell their stories and present information. In short, journalism has become a gateway degree that applies regardless of where your career path leads.

As highly innovative and creative professionals, journalists today use a wide range of digital tools and investigative approaches to produce meaningful, multidimensional content and stories that inform, teach, attract, entertain, and engage audiences. Individuals who produce journalism are adept at finding, questioning, analyzing, interpreting, and explaining complex information and data. While vast opportunities abound for students trained in journalism, the true value of the profession flows from its commitment to seek the truth and provide people throughout the world with accurate, verified information that is used to effect change, chronicle the human condition, and improve and enrich lives, communities, and nations.

## Why Study Journalism at Butler?

The Eugene S. Pulliam School of Journalism offers a newly designed, digitally focused undergraduate degree that prepares students for the demands of the ever-changing media world in which we live. At Butler, we offer:

- Hands-on coursework that integrates audio, video, visual, and interactive technologies and social media with audience-based writing to produce engaging multimedia stories and digital content
- Extensive field-reporting experiences that allow students to gain professional knowledge while making valuable contacts in the Indianapolis metro area
- Publication of professionally produced coursework on news, sports, and community-based websites to enrich résumés and portfolios
- Wide-ranging opportunities to participate in our nationally recognized student-led media organizations
- Fundamental working knowledge of the ethical, legal, economic, and global aspects of the field
- Internship opportunities in Indianapolis and Washington, DC, and an extensive alumni network of successful professionals in Indianapolis and throughout the country


## Journalism Student Learning Outcomes

Students majoring in journalism at Butler will learn to produce professional-quality stories and programming for a variety of audiences in a variety of media formats. In the process, students will develop professional skills, competencies, and knowledge in the following areas:

- Source development, interviewing, observational reporting, documentary/ public records, research, and investigation
- Critical analysis, skeptical thinking, complex reasoning, and evaluation
- All aspects of communication, including various forms of audience-based writing; audio, video, visual, and interactive communication; audio and video presentation and delivery; and social media
- Digital software programs appropriate to the field of journalism
- Team-building and collaboration
- Professional, ethical, and legal standards and responsibilities of the field
- Application of relevant analytical and theoretical frameworks to the practice of journalism in the United States and around the globe.


## Degree Programs

- Major in Journalism (BA)
- Minor in Journalism


## Requirements for the Major

One course in media technology:

- CME106, Survey of Digital Media

One introductory course in print journalism:

- JR112, News Writing: Print

Two introductory courses in electronic journalism:

- JR113, News Writing: Electronic
- JR213, Electronic Journalism

Two courses in multimedia journalism:

- JR212, Multimedia Journalism I
- JR312, Multimedia Journalism II

One course in visual communication or broadcast journalism:

- JR311, Visual Storytelling and Design, or JR313, Advanced Reporting for Electronic Media

One practicum course:

- JR350, Media Internship (3 hours), or JR353, Media Internship (6 hours)

One capstone course:

- JR412, In-depth Journalism

Four conceptual courses:

- JR409, Media Economics and Regulation
- JR414, Mass Communication Law
- JR417, International Communication
- JR420, Mass Communication Ethics

Plus nine hours of additional communication courses in an area of specialization.

## Requirements for the Minor

A minor in journalism consists of 18 credit hours in journalism, six of which are at the 300 and 400 level.

## Journalism Courses

JR10'7, Introduction to Mass Communication:
Media responsibility, government press relations, communication theory. (U)(3) Occasionally.

JR112, News Writing Print: This course introduces the student to the techniques of gathering, writing, and editing news for print media. No prerequisites. (U)(3) Fall and spring.

JR113, News Writing Electronic: This course introduces the student to the techniques of gathering, writing, and editing news for broadcast media. The emphasis is on broadcast style, basic aspects of writing news for radio and television, and broadcast news operations. (U)(3) Fall and spring.

JR133, Performance Lab 1: Students engage in hands-on experiential learning using departmental facilities and equipment. Prerequisite: Journalism major or minor or permission of instructor. (U)(1) Fall and spring.

JR212, Multimedia Journalism I: The application of beat reporting assignments in a converged media environment. Prerequisites: Cor above in JR112, JR113, and CME106. Fall.

JR213, Electronic Journalism: This course concentrates on television reporting skills. Students learn to use portable cameras, audio equipment, and lighting equipment to gather and produce news stories for television. Prerequisite: JR113. (U) Fall.

JR235, Digital Journalism: Students learn to use mobile devices and social media platforms to report on important news events and issues. Prerequisites: C- or above in JR112 and JR113. (U)(3) Annually, term varies.

JR309, Feature Writing: Writing the feature story, interviewing, personality profiles, and the human interest story. Prerequisite: C- or above in JR112. (U)(3) Occasionally.

## JR310, Producing Television News:

Techniques of producing, shooting, and editing news for television. Prerequisite: JR213. (U)(3) Occasionally.

JR311, Visual Storytelling and Design: Focuses on the art of telling a story through a variety of digital techniques, media, and design principles. Prerequisite: C- or above in JR212 or JR213 (U) (3) Fall.

JR312, Multimedia Journalism II: Students practice accountability journalism, and learn to cover problems, programs, and policies on public issues such as education, health, public safety, and jobs, while seeking a diverse range of perspectives in a multimedia environment. Prerequisites: C- or above in JR212 and JR213. (U)(3) Fall and spring.

JR313, Advanced Reporting for Electronic
Media: The course concentrates on advanced reporting techniques for the electronic media. Emphasis is placed on writing and on-air presentation as well as strong production values. Prerequisite: JR113, JR213, or permission of the instructor. (U)(3) Spring.

JR315, News Photography: A professional journalism course teaching the importance of the visual image for communicating ideas and information with emphasis on the development of photojournalistic skills. Instruction covers basic photographic concepts, digital camera handling, and the aesthetics of photography. Prerequisite: C- or above in JR112. (U)(3) Fall.

JR316, News Photography 2: Advanced work in news photography. Prerequisite: C- or above in JR315 or the permission of the instructor. (U) (3) Fall.

JR317, Editorial Writing: The nature and purpose of newsprint and electronic editorials. Prerequisite: C- or above in JR 112. (U)(3) Occasionally.

JR333, Performance Lab: Students engage in hands-on experiential learning using departmental facilities and equipment. Prerequisite: C- or above in JR212 or JR213. (U) (1) Fall and spring.

JR350, Media Internship: Supervised training that requires $15+$ hours of work a week in an internship directly related to the student's degree and career objectives. Prerequisites: JR212 and JR213. (U)(3) Fall and spring.

JR352, Post Media Internship: Supervised training at a previous internship. Prerequisites: C- or above in two JR350 classes with different positions and approval of the director. Pass/fail. (U)(1) Fall and spring.

JR353, Media Internship: Supervised training that requires 30+ hours of work a week in an internship directly related to the student's degree and career objectives. Prerequisites: JR212 and JR213. (U)(6) Fall and spring.

JR355, Sports Journalism: The course will provide a foundation for reporting and writing about sports in an urban setting. Prerequisite: Cor above in JR112. (U)(3) Spring.

JR357, Web Design: The introductory course in Web design focuses on website development techniques and skills. Students will learn Webbased software and other critical Web basics. The course includes writing for the Web, design and layout, and best practices. Prerequisite: C- or above in JR112. (U)(3) Occasionally.

JR358, Perspectives in Sports Media: This course will provide an in-depth education about the sports media industry, how the management of sports media is changing, and the effect that sports media has on the relationship between media and sports organizations. Prerequisites: C- or above in JR112 and JR113 or CME202. (U) (3) Fall and spring.

JR401, Independent Study: Provides opportunity for qualified students to pursue a topic of individual interest. Open to juniors and seniors. (U)(1) Fall and spring.

JR402, Independent Study: Provides opportunity for qualified students to pursue a topic of individual interest. Open to juniors and seniors. (U)(2) Fall and spring.

## JR403, Independent Study: Provides

 opportunity for qualified students to pursue a topic of individual interest. Open to juniors and seniors. (U)(3) Fall and spring.JR407, Sportscasting: The course concentrates on advanced techniques in sports coverage for the electronic media. Emphasis is placed on writing and on-air presentation as well as strong production values. Prerequisite: JR313. (U)(3) Spring.

JR409, Media Economics and Regulation:
This course provides an overview of the economic and regulatory concepts that have a distinct application on the structure and performance of media industries and focuses on those factors that direct and constrain the media. Prerequisite: Junior or senior standing. (U)(3) Spring.

JR412, In-depth Journalism: This capstone experience focuses on creating an in-depth, long-form reporting project that is disseminated in one of a variety of media formats depending on the career interest and special skills of the student. Prerequisite: C- or above in JR312. (U) (3) Spring.

JR414, Mass Communication Law: Study of the major legal standards underlying the free speech clause of the First Amendment and the major legal issues confronting mass communicators, including libel, privacy, access to information, journalist privilege, free press/ fair trial, commercial speech, and intellectual property law. Prerequisite: Junior or senior standing. (U/G)(3) Fall and spring.

JR415, History and Literature of Journalism: The historical development of the press and the literature of the field. Historical trends and press freedom, from colonial times to present. Prerequisites: Junior or senior standing (U/G)(3) Occasionally.

## JR416, Mass Communications in Society:

 The role of the mass media and its social determinants, government and social utility, ethics, values, and problems. Prerequisite: Junior or senior standing. (U/G)(3) Occasionally.JR417, International Communication: Study of critical issues in international communication in an era of globalization. Prerequisite: Junior or senior standing. (U/G)(3) Fall and spring.

## JR418, Gender and Media-Global Views:

This course focuses on the representation and participation of women and other disempowered groups in global media. Students will study media that are produced, distributed, and
consumed across national boundaries as well as media in a national context, thereby increasing their awareness of inequalities and avenues for media activism. Prerequisite: Junior or senior standing. (U)(3) Fall and spring.

JR420, Mass Communication Ethics: This course focuses on the application of ethical frameworks to ethical dilemmas faced by the converged news media and mass communication professionals. Students develop skills in analyzing ethical issues and making ethical decisions. Prerequisite: Junior or senior standing. (U)(3) Fall.

## JR42'7, Special Topics in Journalism:

Thematic study of contemporary topics and issues in journalism. May be repeated when topics change. Prerequisite: Permission of director. (U)(3) Fall and spring.

JR499, Honors Thesis. (U)(3) Fall and spring.

## Sports Media

## Administration

Ken Creech, PhD, Co-Chair; Nancy Whitmore, PhD, Co-Chair

## Department Website <br> www.butler.edu/sports-media

## Why Study Sports Media?

The sports media industry has grown into a multibillion-dollar business that involves ongoing technological innovation that allows media professionals to expand sports content across multiple media platforms. While sports continues to deliver massive audiences and advertising revenue to the media, sports coverage has become the product that drives audience interaction and interest in sports. In short, the sports media industry has become the defining commercial and cultural connection for both industries. Given its proliferation, numerous career opportunities exist for graduates with a sports media degree.

## Why Study Sports Media at Butler?

Butler's Sports Media Program places students in one of the nation's leading sports cities, covering NCAA and pro-sporting events like the Final Four, NFL Monday Night Football, and "The Greatest Spectacle in Racing"-the Indianapolis 500. Students develop and broaden their skills and understanding of the industry on the field, in the press box, and in the locker room at some of the nation's biggest sporting events.

Offered through the Eugene S. Pulliam
School of Journalism and the Creative

Media and Entertainment Department, our interdisciplinary approach to sports media provides students with a solid foundation in multimedia journalism and digital media production. We offer:

- Rich, hands-on education in sports journalism, sports media and information, sportscasting, and sports media production
- High-quality internships with professional sports organizations, such as the NFL Colts, the NBA Pacers, the NCAA, and Indianapolis Sports Corporation
- Wide-ranging opportunities to participate in our student-led, multi-platform sports media outlet, BU:30; produce live streams of Butler Athletics; and build your professional network through Butler's sports industry connections


## Sports Media Student Learning Outcomes

The sports media degree will provide students with a:

- Solid foundation in the fundamentals of multimedia journalism and digital media production
- Rich experiential education in sports journalism, sports media and information, sportscasting, and sports media production
- Broad understanding of the sports media industry; its cultural, legal, ethical, and economic impact; and the role media professionals play in the industry

In the process, students will develop professional skills, competencies, and knowledge in the following areas:

- The sports media industry and its historical, cultural, economic, and evolutionary aspects
- Information gathering, i.e., source development, interviewing, observational reporting, documentary/public records research, and investigation
- Synthesizing information, i.e., critical analysis, skeptical thinking, complex reasoning, and evaluation
- Communicating information, i.e., writing, audio and video communication, on-camera delivery, and mediated communication
- Digital software, platforms, and technology appropriate to the field of sports media
- Team-building, collaboration, and leadership
- Media economics
- Professional, ethical, and legal standards and responsibilities of the field
- Application of relevant analytical and theoretical frameworks to the practice of sports media


## Degree Program

- Major in Sports Media (BA)


## Requirements for the Major

One course in media technology:

- CME106, Survey of Digital Media

One introductory course in print journalism:

- JR112, News Writing: Print

One introductory course in electronic journalism:

- JR113, News Writing: Electronic

Two introductory courses in digital media production:

- CME102, Media Aesthetics and Basic Studio Production
- CME215, Fundamentals of Videography and Video Editing

One introductory course in digital journalism:

- JR235, Digital Journalism

Two applied courses in sports media:

- JR355, Sports Journalism
- JR407, Sportscasting

One elective course in the sports industry:

- STR356, Sports Promotion
- JR427, Special Topics in Journalism: Sports Media Topics

One advanced course in journalism or digital media production:

- CME415, Advanced Editing
- JR312, Multimedia Journalism II

One practicum course:

- JR350, Media Internship (3 hours)
- JR353, Media Internship (6 hours)
- CME455, Internship (3 hours)
- CME475, Internship (6 hours)

One capstone course:

- CME457, Digital Media Project Design and Management
- JR412, In-depth Journalism

Three conceptual courses:

- JR358, Perspectives on Sports and Media
- JR409, Media Economics and Regulation
- CME452, Entertainment Media and the Law


# Strategic Communication: Public Relations and Advertising 

Administration

Rose Campbell, PhD, Department Chair

## Department Website

www.butler.edu/strategic-communication

## Why Study Strategic Communication?

Strategic communication emphasizes the creation and distribution of socially responsible, research-supported, and theoretically sound targeted communication messages for both internal and external audiences. Strategic communication majors, therefore, learn the theories and skills required for successful written, visual, and oral communication. In addition, majors gain valuable skills related to research, strategic thinking, and problem solving that will serve them well in professional careers or graduate school.

## Why Study Strategic <br> Communication at Butler?

While many programs offer courses in advertising and public relations, few have successfully merged their curriculum to reflect the increased blurring of lines between these two disciplines. Butler's Strategic Communication Department, however, recognizes that it is necessary for our majors to understand the synergistic nature of advertising and public relations to succeed in the diverse fields that comprise strategic communication. But success in strategic communication relies on more than this, of course. Our courses are rigorous, highly interactive, and experiential. Students are not only introduced to concepts, processes, and theories, but also are challenged to apply their knowledge to solve real-world strategic communication challenges through problem-based learning and service-learning opportunities, and national-level public relations and advertising competitions. We like to say that our students "practice the profession" from day one. Class sizes are also small, typically around 18 students, and led by passionate and dedicated professors.

Strategic communication students also learn outside of the classroom as active participants in the various extracurricular opportunities the program offers. Through participation in the Public Relations Student Society of America Butler University chapter, ADrenaline
advertising club, and an internship program, our students have outstanding experiential learning opportunities with a diverse array of businesses, advertising, and public relations agencies, as well as government and nonprofit organizations in Indianapolis and throughout the country. In this way, students gain the real-world knowledge necessary for a successful career.

## Strategic Communication Student Learning Outcomes

- In keeping with the liberal arts tradition, students majoring in strategic communication will gain a broadbased education that emphasizes an understanding of the larger cultural context in which strategic communication occurs.
- On a practical level, students will also gain the theoretical foundation and industry-relevant skills to create and produce effective oral, written, and visual communication messages for distribution via a diversity of media, including print, broadcast, and digital platforms.
- To achieve these ends, students learn to research, analyze, select, and organize relevant data and information; they learn and apply relevant analytical or theoretical frameworks to professional practices and situations; they critique and evaluate the effectiveness of communication messages; they work collaboratively to achieve desired goals; and they integrate communication technology effectively into all of these efforts.
- Further, as the strategic communication major emphasizes the production of socially responsible messages, students learn to appreciate and respect the professional, ethical, and legal standards that govern our field.


## Degree Programs

- Major in Strategic Communication, with optional specializations in Public Relations or Advertising (BA)
- Minor in Strategic Communication


## Requirements for the Major

- STR128, Promotional Writing I or course equivalent
- STR222, Principles of Strategic Communication
- STR228, Promotional Writing II
- STR251, Design and Production for Strategic Communication
- STR324W, Ethics and Case Studies in Strategic Communication
- STR327, Research Methods for Strategic Communication
- STR329, Strategic Media Planning
- STR350, Strategic Communication Internship (or STR353)
- STR424S, Public Communication Campaigns

One elective course:

- STR321, Advertising Practices
- STR322, Advertising Copywriting
- STR328W, Public Relations Writing
- STR332, Advertising Campaigns (spring)
- STR341, Bateman Case Study Competition
- STR342, Strategic Communication for Nonprofits Practicum
- STR355, Photo Graphic Communication
- STR356, Sports Promotion
- STR357, Hospitality and Tourism Promotion
- STR359, Video Graphic Communication
- STR415, Crisis Communication
- STR426, Special Topics in Strategic Communication

One of these courses in media law:

- JR414, Mass Communication Law
- CME432, Law and Regulation of the Electronic Media
- CME452, Entertainment Media and the Law
- Or current equivalents

One of these courses in international communication:

- JR417, International Communication
- JR418, Gender and Media: Global Views
- COM359, Intercultural Communication
- STR405, Global Strategic Communication
- Or current equivalents

One of these courses in communication theory:

- ORG350, Contemporary Communication Theory
- CCM310, Media and Cultural Theory
- CCM315, Rhetorical Theory
- CCM462, Influence in Public Culture
- STR410, Theories of Persuasion
- Or current equivalents

Requirements for Public Relations Specialization

- All STR major requirements
- STR328W, Public Relations Writing

Two courses in public relations and related areas:

- STR341, Bateman Case Study Competition
- STR342, Strategic Communication for Nonprofits Practicum
- STR355, Photo Graphic Communication
- STR356, Sports Promotion
- STR357, Hospitality and Tourism Promotion
- STR359, Video Graphic Communication
- STR415, Crisis Communication
- STR426 Special Topics in Strategic Communication (PR-focused)
- CCM398, Argumentation and Advocacy
- AA301, Principles and Practices of Arts Administration
- ORG315, Business and Professional Speaking
- Other courses selected with permission of program director


## Requirements for Advertising Specialization

- All STR major requirements
- STR321, Advertising Practices

Two courses in advertising and related areas:

- STR322, Advertising Copywriting
- STR331, Advertising Campaigns (fall, occasionally)
- STR332, Advertising Campaigns (spring)
- STR355, Photo Graphic Communication
- STR356, Sports Promotion
- STR357, Hospitality and Tourism Promotion
- STR359, Video Graphic Communication
- STR426, Special Topics in Strategic Communication (advertising-focused)
- Other courses selected with permission of department chair


## Requirements for the Minor

- STR128, Promotional Writing I or course equivalent
- STR222, Principles of Strategic Communication
- STR228, Promotional Writing II
- STR251, Production and Design for Strategic Communication

One of the following two courses:

- STR324W, Ethics and Case Problems in Strategic Communication
- STR327, Research Methods for Strategic Communication

One elective course in STR:

- STR321, Advertising Practices
- STR322, Advertising Copywriting
- STR328W, Public Relations Writing
- STR332, Advertising Campaigns (spring)
- STR341, Bateman Case Study Competition
- STR342, Strategic Communication for Nonprofits Practicum
- STR355, Photo Graphic Communication
- STR356, Sports Promotion
- STR357, Hospitality and Tourism Promotion
- STR359, Video Graphic Communication
- STR405, Global Strategic Communication
- STR410, Theories of Persuasion
- STR415, Crisis Communication
- STR426, Special Topics in Strategic Communication


## Strategic Communication Courses

STR128, Promotional Writing I: Introduces students to strategic communication writing in a converged media environment, while instilling the important values and responsibilities that underlie communication in a digital world. Prerequisites: None. (U)(3) Fall, spring, and summer.

## STR222, Principles of Strategic

Communication: A survey of strategic communication for students interested in public relations and advertising. Course emphasizes the strategic communication industry, including its history, functions, theories, ethics, and relations to marketing products, ideas, organizations, and people, and the components of strategic communication campaigns. Prerequisite: C- or above in STR128 or JR112. (U)(3) Fall, spring, and summer.

STR228, Promotional Writing II: Applications of strategic communication writing at the intermediate level, for the fields of public relations and advertising; emphasis on professional quality, effective writing for a variety of audiences across a number of media channels, both print and digital, including social media. Prerequisites: STR128, or JR112, and STR222. (U)(3) Fall, spring, and summer.

## STR251, Design and Production for STR:

This course is an introduction to the principles and practice of graphic design for strategic communication. Students will learn foundational design techniques with critical thinking, typography, and an introduction to concept development. Prerequisite: C- or above in STR222. (U)(3) Fall, spring, and summer.

STR321, Advertising Practices: This course introduces the student to the practice of advertising in agencies and organizations, including analyses of agency functions. Students study audience analysis, diversity in advertising, creative briefs, copywriting, and strategic concept development for advertising. Prerequisite: C- or above in STR222, STR228, STR251, and STR327. (U)(3) Annually, term varies.

STR322, Advertising Copywriting: This course is an in-depth examination of creative strategy and advertising copywriting, with a practical emphasis on the application of concepts,
principles, and techniques to develop persuasive copy tailored to various communication media. Prerequisite: C- or better in STR222, STR228, and STR251. (U)(3) Fall and spring.

## STR324W, Ethics and Case Problems in

STR: Ethical approaches in public relations and advertising are examined using the case-study method. The intensive-writing course emphasizes best practices in strategic communication for internal and external publics, as socially responsible global citizens and professional practitioners. Prerequisites: C- or above in STR222 and STR228. (U)(3) Fall and spring.

## STR32'7, Research Methods for STR:

Principles and exploration of qualitative and quantitative methods for research employed in planning, monitoring, and evaluating public relations and advertising projects and campaigns. Prerequisites: C- or above in STR222 and STR228. (U)(3) Fall and spring.

STR328W, Public Relations Writing: Advanced public relations writing, with an emphasis on strategic public relations techniques for internal and external audiences across multiple media channels including print, digital, and social media. Prerequisites: C- or above in STR222 and STR228. (U)(3) Annually, term varies.

STR329, Strategic Media Planning: An introduction to media planning and media relations for students interested in public relations and advertising. Course emphasizes media fragmentation; the concepts, theories, and strategies involved in planning, buying, and pitching messages in traditional and new media; and the development of strategic media plans. Prerequisites: C- or above in STR222 and STR228. (U)(3) Fall and spring.

STR331, Advertising Campaigns: The American Advertising Federation's National Student Advertising Competition will provide the students with real-world experience by creating a fully developed strategic advertising campaign plans book for a corporate sponsor. Prerequisites: C- or above in STR327 and permission of instructor. (U)(3) Occasionally.

## STR332, Advertising Campaigns (AAF

National Student Adv Comp): The American Advertising Federation's National Student Advertising Competition will provide the students with real-world experience by creating a fully-developed strategic advertising campaign plans book for a corporate sponsor. Prerequisite: Permission of instructor. (U)(3) Spring.

STR341, Bateman Case Study Competition:
Student teams develop and implement a communications campaign for a national client in the Public Relations Society of America's annual Bateman competition. Prerequisite: Permission of instructor. (U)(3) Spring.

STR342, Strategic Communication for Nonprofits: This course helps students hone skills while developing professional-quality communication tactics that will be published in a variety of media, distributed to target audiences or staged and presented as a special event. Communication activities are implemented for a nonprofit selected by the instructor(s). Prerequisite: Junior standing and permission of instructor. (U)(3) Occasionally.

## STR350, Strategic Communication

Internship: Supervised strategic
communication training that requires $15+$ hours of work per week in an internship directly related to the student's degree and career objectives. Prerequisites: C- or above in STR222, STR228, STR251, and STR327. (U)(3) Fall, spring, and summer

## STR352, Post Strategic Communication

 Internship: Supervised strategic communication training in an internship. Students work 15+ hours per week in an internship directly related to their degree and career objectives. Prerequisites: C- or above in two semesters of STR350 at different internship sites. (U)(1) Fall, spring, and summer.
## STR353, Strategic Communication

Internship: Supervised strategic communication training that requires $30+$ hours of work a week in an internship directly related to the student's degree and career objectives. Prerequisites: C- or above in STR222, STR228, STR251, and STR327. (U)(6) Fall, spring, and summer.

## STR355, Photo Graphic Communication:

In this course we work on developing the tools necessary for effective visual communication in advertising and public relations through the medium of photography. This course prepares students to enter the real world with a comprehensive knowledge of how to prepare effective photographic collateral materials in a variety of formats and sizes. This course covers the basics of photographic composition, camera operation, photo editing, portraiture, and product photography, as well as how to put it all together in Adobe Photoshop to create professional ad layouts. Prerequisite: STR251 or consent of instructor. (U)(3) Annually, term varies.

STR356, Sports Promotion: Overview of sports promotion, with particular emphasis on team sports. Course includes exploration of promotions, sponsorships, ticket sales, media relations, community relations, and event management. Additionally, the interrelationship of the team, the media, and the corporate and civic communities will be explored. Prerequisites: C- or above in STR222 and STR228. (U)(3) Spring.

## STR35'7, Hospitality and Tourism Promotion:

This course introduces students to the field of hospitality and tourism with the key objective to prepare students for careers in this field. Students will learn essential strategic communication methods to promote cities and attract more tourists and convention groups. Prerequisites: C- or above in STR222 and STR228. (U)(3) Fall.

STR359, Video Graphic Communication: In this course we work on developing the tools necessary for effective visual communication in advertising and public relations through the medium of video. This course prepares students to enter the real world with a comprehensive knowledge of how to prepare effective video collateral materials in a variety of formats and sizes for different distribution methods. This course covers the basics of video pre-production, production, and post-production techniques. Students will earn the language of video and visual storytelling through careful camera operation, editing, and graphics. Students create video press releases, public service announcements, and short-form documentaries. Prerequisite: STR251 or consent of instructor. (U)(3) Annually, term varies.

STR401, Independent Study: Provides opportunity for qualified students to pursue a topic of individual interest. Open to juniors and seniors. (U)(1) Fall, spring, and summer.

STR402, Independent Study: Provides opportunity for qualified students to pursue a topic of individual interest. Open to juniors and seniors. (U)(2) Fall, spring, and summer.

STR403, Independent Study: Provides opportunity for qualified students to pursue a topic of individual interest. Open to juniors and seniors. (U)(3) Fall, spring, and summer.

## STR405, Global Strategic Communication

 Introduction to advertising and public relations in the global and cross-cultural context. Topics include the role of culture in strategic communication; intercultural communication theories, ethics, and regulatory issues; historyof globalization; new media technologies; international advertising and PR cases; and communication strategies for diverse audiences. Prerequisite: Junior or senior standing. (U)(3) Occasionally.

STR410, Theories of Persuasion: Through readings and lectures, students are exposed to the different challenges that make advertising a unique application of the creative process. This course challenges students to develop their creative potential by developing advertising copy and design materials with hands-on projects. (U) (3)

## STR415, Strategic Crisis Communication:

Crisis communication is the sub-specialty of public relations designed to protect and defend an individual, company, or organization facing a public challenge to its reputation. A combination of lectures, readings, and in-class activities will help prepare you to recognize, assess, and respond ethically to a wide range of crisis situations. By the end of the semester, you should be able to distinguish among several categories of crises and determine suitable communication
responses for each. Prerequisites: STR222, STR228, and junior or senior status. (U)(3) Annually, term varies.

STR424S, Public Communication Campaigns:
Application of research-based strategic communication campaign methods to address specific client problems and opportunities for nonprofit organizations. The service-learning course integrates the theories and skills required for professional practice; the course serves as the capstone course for the major and fulfills an ICR requirement. Prerequisites: C- or better in STR222, STR228, STR251, STR324, and STR327. (U)(3) Fall and spring.

STR426, Special Topics in Strategic
Communication: Thematic study of contemporary topics and issues in strategic communication. May be repeated when topics change. Prerequisite: Permission of director. (U/G)(3) Fall, spring, and summer.

STR499, Honors Thesis. (U)(3) Annually, term varies.


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Judith Harper Morrel, executive director, Center for High Achievement and Scholarly Engagement, and professor of mathematics
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William Ney, founder and director, SpeechLanguage Pathology Program (now Communication Sciences and Disorders)
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Stephen A. Perrill, professor of biological sciences
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Constantine Poulimas, associate professor of music
Daniel W. Pugh, associate professor of theatre
Virginia A. Rumph, serials librarian and associate professor.
Paula Saffire, associate professor of classics
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Beverly Sandmann, professor of pharmacy
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Chief of Staff and Director of Public Safety, Chief of Police
Director, Conferences and Special Events
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Benjamin Hunter
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Associate Provost
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Dean, College of Communication
Dean, College of Education
Dean, College of Liberal Arts and Sciences
Dean, College of Pharmacy and Health Sciences
Dean, Jordan College of the Arts
Dean, Libraries
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Director, Study Abroad
Director, Center for High Achievement and Scholarly Engagement
Director, Butler Institute for Research and Scholarship
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Director, Center for Faith and Vocation
Director, Center for Academic Technology
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Director, Institutional Research and Assessment
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Director, Diversity Programs
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Director, Programs for Leadership and Service Education
Director, Recreation
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Alumni and Parent Programs
Director, Special Projects
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Marketing and Communications
Vice President, Marketing and Communications
Director, Account Planning
Director, Web Marketing Communications
Director, Creative Services
Director, Marketing Strategy
Director, Arts and Culture Marketing

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Stephanie Cripe
Meg Liffick


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Butler's mission is to provide the highest quality of liberal and professional education and to integrate the liberal arts with professional education, by creating and fostering a stimulating intellectual community built upon interactive dialogue and inquiry among students, faculty, and staff.



[^0]:    ED753, Independent Study-Counseling: Independent study arranged with program adviser. (G)(2) Occasionally.

