B U T L E R U N I V E R S I T Y
I N D I A N A P O L I S , I N D I A N A

$2013-2015$ B U L L E T I N

## 2013-2015 Bulletin Vol. XCIV



## July 2013

Indianapolis, Indiana

## Academic Calendar

## Fall 2013

Aug. 28
Sept. 2
Oct. 17-18
Nov. 25-29
Dec. 14
Dec. 16-20
Dec. 22
Dec. 23

## Spring 2014

| Jan. 13 | M |
| :--- | :--- |
| Jan. 20 | M |
| March 10-14 | M-F |
| Apr. 28 | M |
| Apr. 29 | T |
| Apr. 30-May 6 | W-T |
| May 8 | R |
| May 10 | S |

## Fall 2014

Aug. 27
Sept. 1
Oct. 16-17
Nov. 24-28
Dec. 13
Dec. 15-20
Dec. 21

## Spring 2015

Jan. 12
Jan. 19
Mar. 9-13
Apr. 27
Apr. 28
Apr. 29-May 5
May 9

W
M
R-F
M-F
S
M-F
Sun.
M

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

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 p.m.

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 a.m.
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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The University strives to assure 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

## The goals of the University

Butler University is an independent university composed of a College of Liberal Arts and Sciences and five professional colleges.

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

Butler University is committed to:

- Providing the highest quality of teaching and to achieving the highest ideals of student learning, which include clear and effective communication, appreciation of beauty and a commitment to lifelong learning, community service, and global awareness.
- Being a national university that serves students from other regions and other countries, while recognizing its special responsibility to serve the undergraduate and graduate students of Indiana and the Midwest.
- Being a residential campus, one on which both academic and nonacademic aspects of student life receive important attention.
- Recruiting and sustaining practicing scholars and professionals dedicated to intellectual self-renewal for the benefit of their students.
- Cultivating an awareness and understanding of other cultures in its curriculum and to promoting cultural and ethnic diversity of its faculty and its students.
- Providing intellectual, cultural, and artistic opportunities and leadership in Indianapolis and the surrounding areas.
- Providing opportunities and lifelong support to its alumni in recognition of their special relationship to the institution.


## Student learning

In furtherance of the first goal cited above, Butler has established learning outcomes for all students. The outcomes are assessed in students' coursework and elsewhere throughout their undergraduate years, and the results of these assessments are used to improve teaching and
learning. The University learning outcomes are:

- Students will explore various ways of knowing in the humanities, social and natural sciences, creative arts, and quantitative and analytic reasoning.
- Students will articulate and apply required content knowledge within their area(s) of study. Students will know how to find, understand, analyze, synthesize, evaluate, and use information, employing technology as appropriate.
- Students will explore a variety of cultures.
- Students will recognize the relationship between the natural world and broader societal issues.
- Students will communicate clearly and effectively.
- Students will demonstrate collaborative behavior with others.
- Students will practice ways and means of physical well-being.
- Students will make informed, rational, and ethical choices.
Students will appreciate diverse cultures, ethnicities, religions, and sexual orientations.
- Students will share their talents with Butler and the greater community at large.
- Students will 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 cocurricular experiences.

## Butler University today

In 1855, Butler University enrolled 20 students. Today, Butler is an independent, co-educational university with a total undergraduate enrollment of approximately 4,200 students. The faculty, too, has grown from two when the University was founded, to 406 full-time; 83 percent hold the highest degree in their fields. The original charter of the University established in 1855 required the establishment of departments or colleges for the instructing of students in every branch of liberal and professional education, and for the promotion of the sciences and arts.

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 12 to 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 represent 45 states and 49 countries, reflecting diverse cultures, interests, aspirations, personalities, and experiences. Students can join one of more than 150 student organizations, 15 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

The City of Indianapolis encircles the University, while the 295-acre campus rests in a historic north-side neighborhood. This serene, beautiful area has nearly 30 buildings, playing fields, a formal botanical garden and nature preserve surrounded by well-established residential communities and the White River. Located five miles from the heart of the city, the campus offers easy access to downtown. The campus is home to 70 percent of the University's full-time students.

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 vast resources of the professionals in the surrounding community.

The campus is hailed as one of the most attractive in the Midwest. Arthur Jordan Memorial Hall, built in 1927, was placed on the National Register of Historic Places in 1984. The building has undergone extensive
restoration and renovation to incorporate multiple computer labs, an electronic language laboratory, administrative and faculty offices, student accounts, registration, classrooms, and several departments of the College of Liberal Arts and Sciences and the College of Education.

The Richard M. Fairbanks Center for Communication and Technology houses Computer Sciences and the College of Communication, which includes the Eugene S. Pulliam School of Journalism, the first school to be endowed at Butler.

Adjoining Jordan at its west end is the Dorothy and Edward Gallahue Science Hall, which houses the departments of biological sciences, chemistry, and physics and astronomy, and provides extensive facilities and equipment for faculty and student research.

Linked to Gallahue is the Holcomb Building, home to the College of Business. The structure was originally known as the Holcomb Research Institute, established through a bequest from Indianapolis industrialist J.I. Holcomb. In addition to the college offices, the building also is home to the Ruth Lilly Science Library and the Butler Business Accelerator.

Completing the U-shaped mall is the Pharmacy and Health Sciences Building. A 40,000 -square-foot, four-story addition to the building has LEED gold certification for its environmentally con-scious materials, construction, and operations. Its state-of-theart laboratories, classrooms, and technology support student and faculty collaboration.

Lilly Hall, housing the programs of the Jordan College of the Arts, is located south of the Pharmacy and Health Sciences Building. Adjoining Lilly is Clowes Memorial Hall, designed as a multipurpose hall for the performing arts and other civic functions. Butler students and faculty, as well as internationally renowned artists, perform in the hall, a 2,200seat facility with a 90 -foot stage.

In April 2013, the 450-seat Howard L. Schrott Center for the Arts theatre opened. It provides performance and exhibition space for the theatre, dance, music, and visual arts programs.

To the south of Clowes stands the Irwin Library, designed by world-famous architect Minoru Yamasaki. It provides basic research tools and holds the majority of the University's over 350,000 volumes of books, bound periodicals,
and manuscripts. Butler Libraries also offer 100,000 e-books, access to more than 170 online databases, and 30,000 online journals and magazines. Irwin is home to Butler's rare book and archives collections. The library's digital environment provides access to numerous electronic databases and Internet through dedicated workstations.

Diagonally across a wide grassy mall from the library is Atherton Union. The University bookstore is located here, as is Indianapolis' first Starbucks Café. A student lounge, food service operations, a 24 -hour computer lab, meeting rooms, and lounges round out the union facilities. The Efroymson Diversity Center and the Office of Internship and Career Services are located in the union, along with the offices of Student Affairs, student leadership and service education, international student services, residence life, Greek life, and orientation programs. Various student organizations based in the union include the Student Government Association, Commuter Association, The Drift (yearbook), and different cultural organizations.

Residential College (ResCo) is located on the south end of the campus. ResCo features suites for students, four apartments for faculty-inresidence, and dining services. In addition to the regular facilities for residence hall supervisors, the building accommodates nearly 500 upperclass students. Ross Hall, Schwitzer Hall, the upperclassman residential Apartment Village, University Terrace, and fraternity and sorority houses provide additional campus housing.

At the north end of campus is the Holcomb Observatory and Planetarium with a 38 -inch telescope, one of the largest in the state. Just west of the observatory is Robertson Hall. It houses the offices of admission, financial aid, alumni and parent programs, and the Eidson-Duckwall Recital Hall, a 140 -seat concert venue for faculty and student recitals and guest performances.

From this point, winding roads lead through the most scenic and historic areas of the campus through the 20 -acre Holcomb Gardens.

Like many cities that developed along rivers, Indianapolis was chosen as the state capital because of its proximity to the White River that borders the far-west end of the campus. In the mid-1880s, a canal was built in an effort to link Indianapolis with waterways going to Lake Erie to the north and the Ohio River to the south. Though this effort was unsuccessful, the canal still runs through the city and the Butler campus. The tow path is a favorite walking, jogging,
and bicycling route for students, especially with the addition of two pedestrian bridges that link the main campus to athletic fields, the Center for Urban Ecology's Campus Farm, and Butler Prairie, a nature preserve.

From the Holcomb Gardens entrance, the road winds east, past the Holcomb Carillon and pond, through a quiet wooded area to the Health and Recreation Complex, Hinkle Fieldhouse, and the Butler Bowl. Like Jordan Hall, Hinkle is on the National Register of Historic Places. The 10,000 -seat fieldhouse is the home of Butler basketball and volleyball teams, the physical education program, and spring commencement ceremonies. The Butler Bowl is the site of Butler football and soccer.

## 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, with many enriching 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, non-profit agencies, schools, hospitals, and pharmacies. Butler seeks to continue to strengthen its partnership with a vital, growing city and region.

Butler is located on the north side of Indianapolis in a residential neighborhood. The Hoosier capital is the 12th-largest city in the United States with a metropolitan area of more than 1.8 million inhabitants.
In recent years, the city has emerged as a leader in science, medicine, research, technology, and sports. Indianapolis is on the cutting edge of medical science with research facilities for insulin and advanced genetic engineering. Pharmaceutical giant Eli Lilly and Company is located in the city, as are two of the top 11 teaching hospitals in the United States. The city is considered a leading center of research and development for robotics and automation with more than 100 computer software companies.

Many performing arts companies call Indianapolis home, including the Indianapolis Symphony Orchestra, the Indianapolis Repertory Theatre, Dance Kaleidoscope, and Indianapolis Opera. 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. Popular citywide celebrations include the Indianapolis 500 Festival, Indiana Black Expo, Greek Festival, Penrod Art Fair, International Festival, Circle City Classic, and the Talbot Street Art Fair. Also of interest is the Indianapolis Zoo; Eagle Creek Park, with 4,000 acres including a $1,300-$ acre reservoir; and Circle Centre mall, a vast three-city-block complex for shopping, dining, and entertainment.

Once known only in the athletic world for the annual 500 -mile race at the Indianapolis Motor Speedway, the city has two major league professional sports teams: the Indianapolis Colts of the National Football League and the Indiana Pacers of the National Basketball Association, along with the Indiana Fever of the Women's National Basketball Association. The city also has an AAA professional baseball team and a hockey team representing the United States Hockey League. The city hosts the NASCAR Brickyard 400 and the Indianapolis MotoGP races. In addition, Indianapolis also has hosted hundreds of national and international amateur sporting events, including numerous Olympic trials, NCAA championships, and the 2001 World Police and Fire Games. Indianapolis boasts world-class sports facilities, including a domed stadium, natatorium, track and field stadium, and a 1,300 -acre reservoir certified for international rowing competition.

The home of the NCAA national headquarters and Hall of Champions, Indianapolis has long been an advocate of college athletics. The University has been the proud cohost of the NCAA Men's Basketball Division I Final Four Championships six times since 1991, including the 2010 championship game featuring the Butler Bulldogs versus the Duke University Blue Devils.

## History

## Ahead of its time in higher education

Six years before the Civil War, in 1855, two professors, a couple of assistant teachers, and 20 students walked through the doors of North Western Christian University (later renamed Butler University) located at 13th Street and College Avenue. The University immediately
began establishing precedents virtually unheard of in the world of academia:

- Women were admitted on an equal basis with men-a first for Indiana-and only the second university in the nation to do so.
- Butler admitted students representing all minorities, and has continued to do so throughout its history.
- The first in the state to allow its students, with parental consent, to choose subjects suited to their needs under a new "elective" system.
- In 1870, Catharine Merrill was appointed as Demia Butler professor and was the first female professor of English literature in Indiana. This appointment positioned Butler as the first in the nation to establish an endowed chair specifically for a female professor and only the second university to appoint a woman to the faculty (Maria Mitchell, Vassar College was the first). Merrill also was the first to use the lecture method for any subject other than science. Professor Susan Neville is the current chair.
- Phi Delta Theta fraternity was the first Greek-letter organization on campus in 1859, followed by Sigma Chi in 1865 and Delta Tau Delta in 1878. Kappa Alpha Theta sorority founded a chapter in 1874 before the move to Irvington; Kappa Kappa Gamma, Butler's oldest continuously active sorority, established itself in 1878 . The country's first chapter of Sigma Gamma Rho, Inc. sorority for African-American women was founded on campus on Nov. 12, 1922.

In the absence of high schools or adequate private academies, the University also operated its own preparatory department until 1907. At its inception, this department enrolled about 60 students, with another 54 in the pre-prep classes. In 1875, the board of directors decided to sell the downtown campus and accept a gift of 25 acres in Irvington, then a suburb east of Indianapolis. Four years later the school became known as Butler University, in honor of Ovid Butler, a prominent Indianapolis attorney and abolitionist who wrote the University's charter in 1850 . The handwritten document is preserved in Irwin Library.



## 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 education is the University's core curriculum, a set of academic requirements embodying our definition of what it means to be a liberallyeducated person. Our core curriculum apprises students of the great ideas and dilemmas of human civilization across different times and cultures at the levels of self, community, and world. The human capacities our students develop in the core's educational experience are general and, hence, can be put to use in all parts of their lives. Intellectual capacities provide understanding of the nature of ourselves and of the natural and social world in which we live. Moral and ethical capacities help us discern what is good, and pursue such principles as justice, fairness, kindness, and service. Aesthetic capacities enable us to take pleasure in beauty and also see relationships among form, pattern, harmony, and shape.

Created in 1945, the core curriculum is one of Butler's oldest academic landmarks. 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 was implemented in fall 2010 and is required for all baccalaureate and associate degrees. All Butler students, no matter their major field of study, complete the core curriculum.

Students are expected to consult with their academic advisor prior to registration each semester to plan ways of fulfilling the core curriculum requirements, and to fully engage with the learning opportunities in core courses. For more information on the core curriculum, please see www.butler.edu/core.

## Core Curriculum for Students Matriculating at Butler in Fall 2010 or After

The core curriculum consists of several key components, all of which must be fulfilled prior to graduation.

These key components are:

- The First Year Seminar: Self, Community and World (6 credit hours)
- Global and Historical Studies (6 credit hours)
- Areas of Inquiry: These requirements are designed to provide students with a solid introduction to a variety of intellectual fields and a diversity of learning experiences. Students are required to successfully complete one course in each Area of Inquiry; the number of credit hours required is listed. Students select courses to fulfill each Area of Inquiry from approved course lists presented in the online Course Search each semester and identified by the nomenclature for each area.
The six Areas of Inquiry are:
- AR: Analytic Reasoning (3 credit hours)
- NW: Natural World (5 credit hours, lecture + lab)
- PCA: Perspectives in the Creative Arts (3 credit hours)
- PWB: Physical Well Being (1 credit hour)
- SW: Social World (3 credit hours)
- TI: Texts and Ideas (3 credit hours)

In order to ensure academic quality and integrity, some core curriculum requirements may only be satisfied by taking courses at Butler University. Other core curriculum requirements have provisions which allow for completion via transfer credit, AP, or other exemptions. Details are found under each requirement below.

## 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 and retrieval.

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 program during their first year at Butler.
Exemptions: None.
Course Structure: A two-semester sequence taken in the first year.

## Learning Objectives:

- 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.
- Express themselves clearly and persuasively in exposition and in argument, in both written and oral forms.
- 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 (GHS201209) is an array of interdisciplinary courses that allow students to engage in the investigation of and reflection about cultures different from their own, especially non-western cultures. Students explore these cultures using a variety of sources and disciplines drawn from the arts, the humanities, and the social and natural sciences. Students learn to recognize both the benefits and challenges of living in a culturally diverse and increasingly globalized world, and continue to develop the skills of expository writing introduced in the First Year Seminar.

All students are required to complete two semesters of GHS201-209 (six credit hours), ideally during their sophomore year. One semester of Global and Historical Studies is automatically waived for international students. Other exceptions require the approval of the faculty director of Global and Historical Studies.
Course Structure: Two courses taken in the second year, chosen from a limited selection of three-hour courses. Students may not take both GHS203 and GHS209 to complete their Global and Historical Studies requirement. Any other combination of courses is allowed.
Exemptions: If a student studies abroad in
a Butler-approved program AND completes
nine or more credit hours of coursework while abroad, the student automatically receives a one-semester/three-credit-hour waiver from GHS.

## Learning objectives:

- To employ a conceptual framework for global and historical studies which appreciates cultures as dynamic, heterogeneous, and constantly in conversation with one another.
- To draw on a variety of sources and disciplines-including the arts, the humanities, and the social and natural sciences.
- To recognize both the benefits and challenges of living in a culturally diverse and increasingly globalized world.
- To continue development of skills of expository writing.


## Areas of Inquiry

Analytic Reasoning (AR)
Course Structure: A menu of three-credit-hour courses to be taken in the first or second year. Exemptions: Exempt for students who have completed at least five credit hours of mathematics or computer sciences courses above algebra and pre-calculus; students in professional colleges (COPHS or COB) with college mathematics requirements; or students receiving a 4 or higher on the AP exam for Calculus AB, Calculus BC, Computer Science
A, Computer Science B, or Statistics.

## Learning Objectives:

- To develop capacities for quantitative and analytic reasoning.
- To understand the centrality of these capacities to the natural and social sciences.
- To 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; or students receiving a 4 or higher on the AP exam for Biology, Chemistry, Environmental Science, Physics B, or Physics C (Electricity and Magnetism or Mechanics).

## Learning Objectives:

- To gain awareness of some significant scientific theories and achievements, and to recognize how they are related both to other areas of science and to our understanding of broader societal issues.
- To develop an understanding of the methods of natural science and a capacity to reason scientifically.
- To 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:

- To develop cognitive and affective appreciation for the process and products of artistic creation.
- To participate actively in the creation of an artistic product.
- To reflect on the nature and sources of aesthetic value.
- To develop habits of participation in artistic and cultural events that will lead to lifelong engagement within 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 any time in the first through fourth years.
Exemptions: None.

## Learning Objectives:

- To develop lifelong habits of good health and physical activity.
- To 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; international studies; journalism; organizational communication
and leadership; media, rhetoric and culture; strategic communication; political science; sociology; economics; psychology; STS; communication science and disorders; or majors in the College of Education; or students receiving a 4 or higher on the AP exam for Economics-Macro, Economics-Micro, or Psychology.

## Learning Objectives:

- To study selected questions about human beings and the social, cultural, economic, and political world in which they are embedded.
- To develop an understanding of the variety of quantitative and qualitative research methods social scientists use to study the social world.
- To 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; or students receiving a 4 or higher on the AP exam for English Composition and Literature.

## Learning Objectives:

- To 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.
- To 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 by specific nomenclature:

## Writing Across the Curriculum Requirement (W)

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 Writing across the Curriculum requirements will be designated with a "W" suffix.
Exemptions: None.

## Learning Objectives:

- To refine habits conducive to good writing developed at earlier stages in core education and education in the major.
- To 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 (C)

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 are designated with a "C" suffix.
Exemptions: The Speaking across the Curriculum requirement is suspended for students matriculating between Fall 2010 and Spring 2012.

## Learning Objectives:

- To develop oral communications skills in the context of course- and disciplinespecific materials.
- To use oral communications assignments to aid students in mastery of course- and discipline-specific content.
The Speaking Across the Curriculum (C) requirement is suspended for students matriculating between fall 2010 and spring 2012" (approved by Faculty Senate, Nov. 27, 2012). Students who matriculated (started) at Butler fall 2012 and after must fulfill Speaking Across the Curriculum (C) as a graduation requirement.


## Indianapolis Community <br> Requirement (I or S)

The Indianapolis Community Requirement (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 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, develop intercultural competencies, and foster civic-mindedness. 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.
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:

- To have an active learning experience that integrates classroom knowledge with activities in the Indianapolis community.
- To use an experience in Indianapolis to further the individual student's understanding of the nature of community and the relationship between community and his or her self.
- To further students' commitment to service and ongoing involvement as community actors.


## Butler Cultural Requirement

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 (BCR) 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 their 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:

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


## Core Curriculum for Students Matriculating at Butler Before Fall 2010

The core curriculum for students matriculating at Butler University before fall 2010 consists of two parts: general requirements and distribution requirements.

## 1. General requirements

## First Year Seminar

Students may fulfill the former "Freshman English" requirement (EN102, Freshman Writing Seminar and ID103, Humanities Colloquium) with the First Year Seminar requirement by completing FYS101 (three credit hours) and FYS102 (3 hours).

Students assigned to EN101, Writing Tutorial, must enroll in EN101 during their first semester at Butler, taking EN101 and FYS101 concurrently. Some students also may be required to take EN101 concurrently with FYS102, contingent upon student performance in EN101 or FYS 101.
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 requirement with a total of not fewer than six transferred semester hours.

## Speech

Students who substitute AP, transfer, or other credit for one or both of FYS101 and FYS102 are required to pass COM101, Rhetoric and the American Democracy (three credit hours), during the first year. A student may become exempt by demonstrating a degree of proficiency in public speaking and rhetorical analysis determined by the College of Communication or by approved participation on the forensics team.

## Global and Historical Studies/ Formerly Change and Tradition

Students may fulfill the former Change and Tradition (ID201-202) requirements with two Global and Historical Studies courses. All students are required to complete two semesters of GHS201-209 (six hours), ideally during their sophomore year. One semester of Global and Historical Studies is automatically waived for international students and for students who complete nine or more hours of Study Abroad. Other exceptions require the approval of the faculty director of Global and Historical Studies.

## Physical Well Being/Formerly Physical Education

Students may fulfill the former Physical Education requirement (PE101, Lifetime Fitness, and PE102, Physical Activity) with any Physical Well Being course.

## 2. Distribution requirements

Students satisfy the distribution requirements by completing one course in each of the five divisions, except the division of his or her primary major. A student is exempt from the distribution requirement in the division of his/ her primary major. For the purpose of satisfying the distribution requirement, students majoring in the College of Business or the College of Education are considered majors in Division 3, Social Sciences. Students majoring in the College of Pharmacy and Health Sciences are considered majors in Division 4, Natural Sciences.

The following restrictions must be observed:

- Unless otherwise noted, only the courses listed as follows may be counted toward a fulfillment of the distribution requirements.
- A student may not fulfill the distribution requirement with a course offered by the department of his/her primary major.
- A student may not fulfill the distribution requirement with more than one course offered by the same department.
- Students with double or split majors are exempt from only one of their major divisions in the distribution requirement.
- Distribution courses in divisions one through four, except PS201 and some 300-level PL and RL courses, do not have other courses as prerequisites. However, students should consult their advisors to determine the best order in which to take core courses.
- Prior to fulfilling the Division 5 requirement, all students shall demonstrate proficiency by passing:

1) A placement examination given by the Department of Mathematics and Actuarial Science; or
2) An appropriate algebra or pre-calculus course. This requirement must be completed during the first year.

Students should work with their advisors to determine which current courses are appropriate to satisfy core courses.

## Academic Programs

Today, students discover Butler's challenging learning environment, a wide range of academic programs steeped in the liberal arts, and excellent career and graduate school preparation. Butler offers more than 60 major academic fields of study in six colleges: 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, forestry, 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
College
Accelerated Alternate Program COE
in Initial Licensure in
Mild Interventions
Accounting, B.S., MPA COB
Actuarial Science, B.A., B.S. LAS
Anthropology, B.A. LAS
Anthropology and Psychology, B.A. LAS
Art + Design, B.A. JCA
Arts Administration JCA
B.S. in Arts Administration
B.S. in Dance-Arts Administration
B.S. in Arts Administration-Music
B.S. in Arts Administration-Theatre

Biology, B.A., B.S. LAS
Business Administration, MBA COB
Chemistry, B.A., B.S. LAS
Classical Studies, B.A. LAS
Communication Sciences and CCOM Disorders, B.A.
Computer Science, B.A., B.S. LAS
Creative Writing, M.F.A. LAS
Criminology, B.A. LAS
Criminology and Psychology, B.A. LAS
Dance JCA
B.F.A. in Dance-Performance
B.A. in Dance-Pedagogy
B.S. in Dance-Arts Administration

Digital Media Production, B.A. CCOM
Economics, B.A., B.S.E. LAS, COB
Educational Administration, COE M.S. (EPPSP)

Effective Teaching and COE Leadership, M.S. (METL)
Elementary Education, B.S. COE
English, B.A. LAS
English Writing
Theory, Culture and Criticism
English, M.A. LAS
English, M.F.A. LAS
Entrepreneurship and Innovation, B.S. COB
Finance, B.S. COB
French, B.A. LAS
Gender, Women and LAS
Sexuality Studies, B.A.
General Program, A.A., A.S. LAS
German, B.A. LAS
Graduate Initial Licensure COE
Program (GILP)
History, B.A., M.A. LAS
History and Anthropology, B.A. LAS
History and Political Science, B.A. LAS
Individualized Major, B.A., B.S. LAS
International Business, B.S. COB

International Studies, B.A.
LAS
Africa, Asia, Europe, or Latin America
Journalism, B.A. CCOM
Management Information Systems, B.S. COB
Marketing, B.S.
COB
Mathematics, B.A., B.S. LAS
Media, Rhetoric and Culture, B.A. CCOM
Middle/Secondary Education, B.S. COE
Music, B.A.
JCA
Music Applied
Composition
Music History
Music Theory
Piano Pedagogy
Music, B.M.
JCA
Composition
Music Education (choral/general;
instrumental/general; or area/combined-
five year program)
Performance (orchestral instrument, piano or voice)
Piano Pedagogy
Concentrations in Jazz Studies
Areas of Emphasis
Applied Music
Composition
Music History
Music, M.M.
JCA
Composition
Conducting (choral or instrumental)
Music Education
Music History
Music Theory
Performance (orchestral instrument, piano or voice)
Piano Pedagogy
M.M. with a double major

Organizational Communication
and Leadership, B.A.
Pharmaceutical Science, M.S.
Medicinal Chemistry,
Pharmacy Administration,
Pharmacology, Pharmaceutics,
Clinical Science
Pharmacy, Pharm.D.
COPHS
Pharmacy, Pharm.D./M.S. in
Pharmaceutical Sciences
Pharmacy, Pharm.D./ MBA COPHS/COB
Philosophy, B.A.
LAS
Philosophy and Religion, B.A LAS
Philosophy and Psychology, B.A.
Physician Assistant, B.S.H.S., M.P.A.S.

Physics, B.A., B.S.
LAS
Political Science, B.A.

Psychology, B.A.
Masters of Public Accounting, M.P.A. COB
Recording Industry Studies, B.A. CCOM
Religion, B.A. LAS
Risk Management and Insurance, B.S. COB
School Counseling, M.S. COE
Science, Technology and LAS
Society, B.A., B.S.
Sociology, B.A.
LAS
Specialization in social work and social policy
Sociology and Criminology, B.A. LAS
Specialization in social work and social policy
Sociology and Psychology, B.A. LAS
Specialization in social work and social policy
Software Engineering, B.A., B.S. LAS
Spanish, B.A. LAS
Strategic Communication: Public CCOM
Relations \& Advertising, B.A.
Theatre,
JCA
B.A. in Theatre
B.S. 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 | French |
| :--- | :--- |
| African Studies | Gender, Women and |
| Anthropology | Sexuality Studies |
| Art + Design | Geography |
| Astronomy | German |
| Biology | Healthcare |
| Business | Management |
| $\quad$ Administration | History |
| Business Law | Information Literacy |
| Chemistry | International Business |
| Chinese | International Studies |
| Classical Studies | Jazz Studies |
| Computer Science | Journalism |
| Criminology | Management |
| Dance | Information Systems |
|  |  |

Digital Media Production
Economics
Early Childhood
English as a New
Language
English Literature
English Writing
Entrepreneurship and Innovation
Ethics

French
Gender, Women and Sexuality Studies
Geography
German
Healthcare
Management
History
Information Literacy
International Business
International Studies
Jazz Studies
Journalism
Management

Marketing
Mathematics
Media, Rhetoric and Culture
Music
Peace Studies
Philosophy
Physics
Political Science
Psychology
Reading Teacher

Recording Industries
Studies
Religion
Risk Management and Insurance
Science, Technology, and Society
Sociology

Spanish
Special Education-
Mild Interventions
Strategic
Communication:
Public Relations \&
Advertising Theatre

## Graduation Honors

Butler University offers two types of graduation honors-University and departmental. Students may graduate with University honors, departmental honors, or both. To be eligible for these honors, 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 of 3.70 , or both an average of 3.50 and completion of the University Honors Program.
Magna cum laude-a Butler cumulative grade point average of 3.70 and completion of the University Honors Program.
Summa cum laude-a Butler cumulative grade point average 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 grade point average of at least 3.60 in the academic major (not awarded to students receiving their degree cum laude).
- "in (major) with high honors" is awarded to a nominee who has a grade point average 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 grade point average 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 five 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 credits) with a cumulative grade point average 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 (HN397, 398)

Typically taken during spring semester of the penultimate academic year, the product of the course 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.

## 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 $\mathrm{HN1} 10$ and HN111 together will satisfy the requirements of FYS101, FYS102, and one HN seminar. Completion of HN110 alone will only satisfy the requirement for FYS101. Completion of HN111 alone (four credits) will only satisfy the requirement for CC102 or FYS102 (three 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 only satisfy 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.

## 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. 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 of 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. 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 of 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. Fall and spring.

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

## 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 faculty-led study program in a particular world region. Previous destinations have been Europe, Latin America, 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.

## International Exchange Programs

Reciprocal exchanges provide an opportunity 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 (ISEP). The University's faculty and study abroad 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 several premier universities in other countries including Australia, New Zealand, Canada, Wales, The Netherlands, Germany, France, Spain, Switzerland, Chile, Brazil, Turkey, China, Hong Kong, Taiwan, and Japan. 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, D.C. ISEP is a worldwide network for international education, consisting of 340 institutions from more than 35 different 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 and 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 over 15 other colleges, universities and well-respected 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 classroom based 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 programsthrough 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 study abroad 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.

## Domestic Off-Campus Programs

## Semester Away Programs

## Washington Learning Semester

Butler University runs a semester-long program in Washington, D.C., 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 D.C. experience, such as "The

Public Arts of Washington, D.C." and "Foreign Policy." 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.

## 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 student's academic and professional interests. Prerequisites: Admission to the D.C. Program, second semester sophomore standing, upper level work in the field, and approval by academic advisor. (U)(0) Fall and spring.

DC301, Washington, D.C. Seminar: Offered in D.C., 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 Program. Approval by program coordinator required. Seminar is repeatable for credit. (U)(1) 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. For more information on being part of the Army ROTC program please contact: (317) 274-2691; fax: (317) 274-0069; email: gorotc@butler.edu; or website: 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 distance learning options depending on your schedule. All Air force ROTC (100-400 levels) courses 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. For more information about the Air Force ROTC program, please contact (800) IUB-ROTC or 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 and

 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 and

 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-dutyassignments 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.

## RZ202, Leadership and Teamwork:

Draw on the various components of values, communications, decision making, and leadership to learn about the unique purpose, roles, and obligations of commissioned officers. The capstone case study traces the Army's evolvement from the Vietnam War to the present. Leadership labs, physical training sessions, and a weekend field training exercise are optional, but highly encouraged. (U)(2) Spring.

## RZ301, Leadership and Problem Solving:

Build leadership competencies and prepare for success at the National Advanced Leadership Camp and as a commissioned officer. Practical opportunities to lead small groups and receive
personal assessments make up the leadership development program. Instruction in troop leading procedures is emphasized. Periodic leadership labs, physical training sessions, and a weekend field training exercise are mandatory course requirements. (U)(3) Fall.

RZ302, Leadership and Ethics: Examine the importance of ethical decision making in setting a positive climate that enhances team performance. Training also includes small unit battle drills, road marches, combat water survival, confidence course, and tactical reporting. Periodic leadership labs, physical training sessions, and a weekend field training exercise are mandatory course requirements. (U)(3) Spring.

RZ401, Leadership and Management: Begin the transition from cadet to lieutenant. Focus on attaining knowledge and proficiency in several critical areas to operate effectively as Army officers. Coordinate activities, manage training, and lead the cadet battalion. Periodic leadership labs, physical training sessions, and a weekend field training exercise are mandatory course requirements. (U)(3) Fall.

RZ402, Officership: This course completes the transition from cadet to lieutenant. Topics include the legal aspects of leadership, administrative and logistical management, and reporting to a new unit. A capstone exercise challenges cadets to solve problems commonly faced by junior officers. Periodic leadership labs, physical training sessions, and a weekend field training exercise are mandatory course requirements. (U)(3) Spring.


## Areas of Distinction

## The Butler Institute for Research and Scholarship (BIRS)

Administration

Theresa Bailey, PhD., director
The Butler Institute for Research and Scholarship (BIRS) 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 (RCR), the Institutional Review Board (IRB), the Institutional Animal Care and Use Committee (IACUC), Conflict of Interest, Exports Control, Intellectual Property and the Institutional Health and Safety Committee (IHSC). 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 (CITI), an online program that administers training modules targeted by user 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 for IRB, IACUC or IHSC review. More information about Butler's research compliance programs can be found on its website at www.butler.edu/birs.

## Center for Citizenship and Community (CCC)

Butler University's Center for Citizenship and Community (CCC), founded in 1996, facilitates civic engagement for Butler students, faculty, and staff and serves to create innovative academic learning experiences that extend Butler classrooms into the Indianapolis communityto the benefit of students, the university, and community alike. The CCC coordinates the Indianapolis Community Requirement (ICR), a civic-learning component of the core curriculum
that immerses students in environments wherein they learn about civic-mindedness, diversity, social justice, and personal and social responsibility and thereby enhance their academic learning while becoming better citizens of their communities and of the world.

The center's activities include:

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

For more information, contact: Donald Braid, director, Center for Citizenship and Community, Butler University, 4600 Sunset Ave., Indianapolis, IN 46208-3485, (317) 9408353, dbraid@butler.edu, or visit our website at www.butler.edu/centerforcc.

## Center for Faith and Vocation (CFV)

The Butler University Center for Faith and Vocation at the Blue House 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 religious and 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. Students can experience internships, one-on-one advising, salon-style 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. Also, the Center for Faith and Vocation is home to diverse student religious organizations, from the Butler Catholic Community, to Hillel at Butler, and the Butler

Muslim Students Association. There are diverse evangelical groups such as Campus Crusade, Young Life, Grace Unlimited, and Orthodox Christian fellowships. We encourage students to form new religious groups and support them in networking with the wider religious communities of Indianapolis.

For more information, please contact Judith Cebula, (317) 923-7253, jcebula@butler.edu, or visit our website at www.butler.edu/cfv.

## Center for Global Education

The Center for Global Education (CGE) 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, please contact CGE Director Monte Broaded (Jordan Hall, Room 212; (317) 940-8312; mbroaded@ butler.edu) or Associate Director Jill McKinney (Jordan Hall, Room 212; (317) 940-8473; jsmckinn@butler.edu), or visit CGE's website at www.butler.edu/global-education.

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

The CHASE office 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-
wide honors program, programs to support undergraduate research and creative activity, domestic semester-away programs, advising for graduate and professional school, and advising for nationally competitive scholarships and fellowships.

For more information, please contact Judith Harper Morrel, executive director of CHASE, in Jordan Hall, Room 253; (317) 940-9723; chase@butler.edu; or visit our website at www.butler.edu/chase.

## The Center for Urban Ecology (CUE)

TThe vision of the CUE is to be a national leader in the study and practice of urban ecology. 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 mission of the CUE is to innovatively explore, steward and enhance urban ecosystems.

The CUE operates with a foundation in ecological science and facilitates interdisciplinary research and education, place-based 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 the CUE staff.
- Service projects on campus and in the community.
- Outreach programs with local nonprofit organizations, local governments and local schools
- Campus sustainability initiatives.

For more information, please contact Timothy Carter, director, at (317) 940-6506, tcarter@butler.edu, or visit our website at www.butler.edu/cueb.


## Academic Enhancement

The Center for High Achievement and Scholarly Engagement (CHASE)<br>\section*{Administration}<br>Judith Harper Morrel, Ph.D., executive director

The CHASE office, located in Jordan Hall, Room 153, 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 Universitywide honors program, programs to support undergraduate research and creative activity, domestic semester-away programs, advising for graduate and professional school, and advising for nationally competitive scholarships and fellowships. Additional information about any of the CHASE-sponsored programs is available on the CHASE website at www.butler.edu/chase or by emailing chase@butler.edu.

## Undergraduate Research and Creative Activity

With support from the Holcomb Endowment and the Fairbanks Foundation, the Programs for Undergraduate Research (PUR) Committee and the CHASE office 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 of all disciplines to work one-on-one 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. This is a wonderful opportunity for students to experience a close working relationship with a member of the faculty, and 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 over 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.


## Graduate and Professional School Advising

The CHASE office helps students make informed decisions about pursuing a graduate or professional school education. A diverse array of 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 catalogues 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 the CHASE office early in their academic careers.

- 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 prehealth advisor concerning the requirements of the particular professional schools in which they are interested. The prehealth 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 preprofessional 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 at Butler 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. Trained 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 Admissions Test. Students also may participate in engaged-learning experiences such as internship opportunities in Indianapolis or in Washington, D.C., through the Washington Learning Semester.

- Pre-seminary

Butler offers a wide range of advising services to pre-theological students through the Center for Faith and Vocation or the Department of Philosophy and Religion.

## Nationally 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. 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, please visit the CHASE website or contact the CHASE office at chase@butler.edu.

## Internship and Career Services

Administration
Gary Beaulieu, director
The Internship and Career Services (ICS) office provides Butler students and alumni 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, practice interviewing skills, job or internship searching, and networking with alumni. The office also leads the on-campus employment effort at Butler. With over 900 student jobs, working on campus is a great way to earn some extra spending money while gaining valuable work experience.

ICS offers additional resources as well. 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 MBTI. 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 open positions. 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 are available on the ICS website at www.butler.edu/ics. To make an individual appointment, please contact us at (317) 9409383 or by email at ics@butler.edu.

## Learning Resource Center Administration <br> Jennifer Griggs, director

The Learning Resource Center (LRC) is committed to supporting and guiding students as they strive to reach the highest standards of academic excellence. It 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. LRC services are available to Butler students at no cost.

## Academic Transition

The Learning Resource Center 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 registration, 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 the following:

- Time and self-management.
- Effective study habits.
- Exam preparation.
- Memory enhancement.
- Effective reading and note-taking strategies.


## Academic Success Coaching

Individual Academic Success Coaching sessions are available to any Butler student 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. Students will work collaboratively with an academic success coach to develop a plan of action to improve academic performance. Students will learn strategies and techniques to aid in approaching their coursework in an active, engaged, and goal-directed manner.

## Study Tables and Tutoring

Butler students have access to multiple resources that can assist them with coursework. Through departmental study tables and individualized peer tutoring, students have the opportunity to interact with peers who previously have mastered the material and understand the challenges that each subject presents.

Study Tables are group walk-in tutoring sessions that meet at a specified time and place on a regular basis. Each department coordinates study tables and students are notified of the schedule within the first two weeks of each semester. 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. The Study Table program is available in a variety of academic disciplines. Study

Table schedules are available to students via their professors, the Learning Resource Center website (www.butler.edu/learning), as well as in the Learning Resource Center office (Jordan Hall, Room 136).

Individualized peer tutoring is coordinated through the Learning Resource Center and requires the endorsement of the course instructor. Individual tutoring allows the student to meet one-on-one with a qualified and recommended peer tutor. This service is provided on an as-needed basis and is offered to the student for a limited time. The goal of individualized tutoring is to bring the student 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 through the Learning Resource Center, the following conditions should be met:

- Endorsement by the instructor of the course is required.
- Student must be attending all classes and laboratories.
- Student must be completing all assignments to the best of his/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.

If the student has met the above conditions and is referred to the Learning Resource Center for tutoring by the course instructor, the center will pay for the service. 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 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:

- Developmental academic advising.
- Exploratory Studies class (LC103).
- Workshops and guest speakers.
- Self assessments.
- Assistance in setting up job shadowing and informational interviewing opportunities.
- Transitional counseling for students who are in the process of changing majors.


## 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 \& 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) program, 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 \& SPRING

## Student Disability Services

Administration
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 through Student Disability Services (SDS). Written documentation from an appropriate licensed professional should be submitted directly to SDS in Jordan Hall, Room 136. An individualized discussion will then be arranged by SDS staff as part of the process for accommodation consideration. For further information, contact SDS at 940-9308 or 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 myriad other IP-enabled 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 policy. 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 www.butler.edu/labs for hours and locations.

## Center for Academic Technology

Academic computing resources include the Center for Academic Technology, a division of Academic Affairs located in the lower level of Jordan Hall, and Information Commons, a collaboration between the Center for Academic Technology 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/it/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. They 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. Student-consultants are available in the Irwin Library, the Information Commons in Jordan Hall, Room 037, or by individual appointment. Visit www.butler.edu/information-commons or email 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 listed below.

- Email and personal calendaring (BUmail). bumail.butler.edu
- Password management. password.butler.edu
- Moodle-course management. moodle.butler.edu
- My.Butler-grades, course registration, student account, etc. my.butler.edu
- BUfiles-network file storage. www.butler.edu/it/bufiles
- BUconnect-access BUfiles from anywhere. buconnect.butler.edu
- Google Apps-collaborate with others. www.butler.edu/it/google-apps
- PrintSmart-print quotas and environmental impact.
www.butler.edu/it/printsmart
Students also have access to networked printers, personal website hosting, and, through the library, access to $150+$ subscription-based 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.

Students who connect personal computers to the Butler network are required to meet minimum standards by keeping their computer up-to-date and running an updated 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. Visit the IT website at www.butler.edu/it for information and links to the online stores.

## Printing and PrintSmart

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 Frequently Asked Questions 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 technology is supported through the Information Technology Help Desk. The Help

Desk provides phone, email, web, and walk-in support for all Butler technology services.

Help Desk Contact Information<br>Phone: (317) 940-HELP (4357)<br>Web: itrequest.butler.edu<br>Email: helpdesk@butler.edu<br>Walk-in: Holcomb Building, Room 315<br>www.butler.edu/it/help

## 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 core requirement. The Mathematics Tutoring Lab provides free help to students enrolled in prerequisite math courses such as MA101 and MA102, and the core courses AR210MA, 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, from 2:30 to 4:30 p.m. and 7-10 p.m. and Sunday evenings from 7 to 10 p.m. The Mathematics Tutoring Lab is located in Jordan Hall, Room 272C and is the longestrunning tutoring lab on campus. Appointments are not required; students may drop in any time the Tutoring Lab is open. More information can be obtained by calling the Department of Mathematics and Actuarial Science at (317) 940-9521 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 tutor tables, movie nights, and karaoke club to promote language and culture learning. 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, tutors are available Sunday-Thursday to assist students by walk-in or appointment. Services include topic selection, research, outlining, organization, and delivery. For more information, visit their website at www.butler.edu/speakers-lab or contact Director Kristen Hoerl at khoerl@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. The services of the Writers' Studio are free of charge. Hours are generally 10 a.m. -8 p.m., Monday-Thursday; 10 a.m.-2 p.m. on Friday; and 3-6 p.m. on Sunday. Students may either stop by the Writers' Studio in Jordan Hall, Room 304, call for an appointment at (317) 940-9804, or email writers@butler.edu. Additional writing resources are available at www.butler.edu/writers-studio, as well as information regarding Writers' Studio online tutorials.

## Butler University Libraries

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, mathematics, 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 www.butler.edu/library/ask, 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 where 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. A great 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

The Irwin Library opened for service on Sept. 9, 1963. It was dedicated in memory of William G. Irwin, a longtime benefactor of Butler University and member of the Board of Trustees. World-famous architect Minoru Yamasaki designed the building in a unique blending of Middle Eastern, Classical Greek, Italian Gothic, and Japanese influences. Slender columns of pre-cast concrete, an expanse of arched windows, an atrium open to all three stories set off by cylindrical chandeliers and a skylight above, and a fountain and pool on the main level create a unique study environment.

The 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 is located on Irwin Library's third floor. Early or rare books, prints, manuscripts, scores, maps, newspapers, and memorabilia can be found here. 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

Holcomb Building. Comfortable furnishings and a skylight on the third floor create a pleasant and quiet atmosphere for research and study. The Science 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.

## 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

The Division of Student Affairs
strives to integrate educational experiences and co-curricular 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. Residence life, dining services, Greek life, leadership and service programming, recreation, diversity programs, band and spirit programs, health services, health education, and counseling and consultation are within the realm of our services. Through the Division of Student Affairs and under the direction of the vice president for student affairs, programs, activities, and support services are designed to meet the needs of our Butler students. The vice president for student affairs serves as the primary liaison for students and various segments of the University community. Also, rules and regulations governing student life are outlined in the Student Handbook and are 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, food service dining rooms, many offices within the Division of Student Affairs, and the Office of Internships and Career Services. Atherton Union maintains numerous facilities, including student organization offices, the Volunteer Center, the Diversity Center, meeting rooms, student soft space, ATMs, and a computer lab. Snacks, grill, and fountain items are available in the C-Club (Campus Club) and in Starbucks. The Programs for Leadership and Service Education (PuLSE) Office, which is responsible for the operation of Atherton Union, is located in Atherton Union, Room 101. Any concerns regarding the physical space and maintenance of Atherton Union may be directed to the PuLSE Office.

## Campus Safety

The Department of Public Safety's purpose is to maintain a safe and secure environment for
the University community. Student "Right to Know" information, better known as the Clery Act, can be located by visiting the University Department of Public Safety's webpage at www.butler.edu/public-safety.

University Police Department (BUPD)
The University Police are 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 also is responsible for coordinating crime prevention programs for students, faculty, and staff throughout each semester.

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

The Victim Advocate Program at Butler University provides 24 -hour response throughout the academic year by a trained advocate to students who have experienced sexual assault or interpersonal violence. The needs of someone who has been sexually assaulted vary from person to person and may vary 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 Victim Advocate at (317) 910-5572. To report a crime, contact University Police at (317) 940-9396. Additionally, programs and workshops regarding issues such as sexual violence prevention/response, dating violence prevention/response, and healthy sexual choices are available through the Health Education and Outreach Programs Office located in the Health and Recreation Complex, Room 101. You may contact this department at (317) 9408311.

## Diversity Programs

The Office of Diversity Programs, located in the Efroymson Diversity Center, Atherton Union, Room 004, combines campus services
designed to enhance the cultural diversity and awareness of the campus community and exists to support 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 collaborative diversity initiative between Butler University and the Office of the Mayor, and the campus-wide Celebration of Diversity, which presents special 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 more detailed information on Diversity Programs.
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 a wide range of services and opportunities for students attending Butler on a visa, including advice on cross-cultural concerns, 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 (SEVIS/USCIS). Advising is also provided for international student organizations, which serves as the vehicle for coordination of Butler international activities and special projects on campus, and the International Living Unit, located in the Residential College. Visit www.butler.edu/ international for more detailed information on International Student Services.

The Efroymson Diversity Center (DC) of Butler University 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. Dedicated in December, 2006, the Efroymson Diversity 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 Diversity Center. The Center, also known as "The DC," provides office space for several diversity student organizations. Efroymson Diversity Center facilities include a multi-purpose lounge/program area equipped with study tables, reception area, a flat-screen television and entertainment center with comfortable viewing area, a Diversity Resource Library and art gallery, kitchen, prep room, and storage space. The Center has wireless access, cable television, and is equipped with computer terminals for student usage.

The Efroymson Diversity Center is located in Atherton Union, Room 004. For more information, visit www.butler.edu/diversity for a complete listing of programs, hours and other information, or call (317) 940-6570.

## Health and Recreation Complex

The Health and Recreation Complex (HRC) is the administrative home to Recreation programs, Health Services, Health Education and Outreach, Counseling and Consultation Services, and The Zia Juice Bar, which serves a selection of juices, smoothies, and grab-and-go options.
The Health Education and Outreach Programs Office addresses critical wellness issues affecting college students by coordinating peer education programs including Peers Advocated Wellness for Students (PAWS), Greeks as Educators Advocates and Resources (GEAR), and The Red Cup Culture Facilitation Team. The coordinator provides direct programming and consultation to students in areas related to wellness. The Health Education and Outreach Programs office is part of the Division of Student Affairs and is inside the Health and Recreation Complex, Room 101.

Health Services are available to graduate and undergraduate students of Butler University. Office hours are posted on the website. Services are provided by appointment, and emergencies are given priority. The center is staffed by registered nurses, a nurse practioner (NP), and physicians who provide treatment for minor accidents and illnesses on an outpatient basis. Our physician is available by appointment Monday-Friday for acute care and for women's
and men's health issues. Conditions of a more serious nature are referred to local emergency rooms, emergent centers, or to the student's private physician or specialist for treatment. Students are responsible for payment of all medical services. Individual health insurance will be billed, so students must bring their insurance cards when they visit the center. Co-payments 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. A completed health history (online portal, myhealth.butler.edu ), copy of a physical exam completed in the last 12 months, a copy of your original immunization records and proof of health insurance are required to be on file at Health Services prior to attending classes. Health Services is part of the Division of Student Affairs and is located inside the Health and Recreation Complex.

Counseling and Consultation Services (CCS) helps all students on an individual and group basis with many 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, survivor of sexual assault, and other issues, do so through individual and group therapy. Licensed psychologists and closely supervised interns staff the center. The pre-doctoral 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. Counseling and Consultation Services is part of the Division of Student Affairs and is located inside the Health and Recreation Complex, adjacent to Health Services.

The Recreation Department creates opportunities and environments for the University community and guests that inspire people to participate in leisure activities, both passive and active. Through intramurals, challenge education, club sports, fitness, and aquatics programs, Butler Recreation supports the holistic development of Butler University's students, faculty, staff, and alumni while being committed to upholding the mission of
liberal arts and professional education. Butler Recreation is part of the Division of Student Affairs and is located inside the Health and Recreation Complex.

## Residence Life and Dining Services

The Office of Residence Life is an integral part of the Division of Student Affairs. The staff members in this area seek to provide 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. The residence life staff works to provide a living environment that is conducive to students' intellectual, social, cultural, and personal development. The office is 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 will be 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. Beyond offering programming and housing needs, there are many leadership and employment opportunities available to students within the residence halls as well. Hall government, unit representatives, desk assistants and resident assistants all are examples of leadership roles that are available through the Office of Residence Life.

## Dining Services

An "All Access" meal plan is required for all residence hall students. An all-you-care-to-eat meal plan with flex dollars is the feature of 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 is part of the Division of Student Affairs and offices are located on the main floor of the Atherton Union.

## Greek Life

Fifteen national Greek collegiate fraternities and sororities maintain chapters at Butler. The fraternities are Delta Tau Delta, Lambda Chi Alpha, Phi Delta Theta, Phi Kappa Psi, 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 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 honorary, in addition to individual students and organizations. The director is responsible for overseeing recruitment, working with house directors, serving as liaison to the alumni/ ae advisory and housing boards, organizing educational and leadership workshops, and providing individual and group advising for fraternity/sorority members. The Office of Greek Life is part of the Division of Student Affairs and is located in Atherton Union, Room 312.

## 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. PuLSE staff members advise the Student Government Association and supervisethe student-run Volunteer Center, which connects students to service opportunities with Indianapolis agencies. The associate director works to assist students in their service endeavors by acting as a liaison between the community and Butler University.

In addition, the office collaborates with numerous campus offices in the annual coordination of Welcome Week and provides support to faculty in their service-learning based classes. PuLSE sponsors the Emerging Leaders Program, Ambassadors of Change (AOC), Bulldogs into the Streets (BITS), and alternative break trips (FAB and ASB). Students who want to get involved in student organizations or community service should stop by the PuLSE Office to talk with a staff member about their interests. The PuLSE Office is part of the Division of Student Affairs and is located in Atherton Union, Room 101, adjacent to the Reilly Room.
Student organizations are a vital part of Butler students' total educational experience. Butler supports the status of legitimate student organizations and activities as important adjuncts to academic life. In keeping with this tradition, the University offers a wide range of student activities, including honoraries, special interest groups, athletics, service organizations, religious activities, and student government. A list of the various 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 and bands, cheerleaders, and Hink, the University costumed mascot. These student representatives are available for University-wide events, offcampus events, and athletic events. Students are encouraged to get involved in the Butler Marching Band, Basketball Band, cheerleaders, or mascot programs by visiting the band website at www.butler.edu/spirit. University Band and Spirit Programs is part of the Division of Student Affairs and is located in Atherton Union.

## 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 Catholic, Jewish, Evangelical Christian, Mainline Protestant, Orthodox Christian, and Muslim Student Association. Clergy and other religious leaders are available for individual conferences and spiritual counseling. A wide range of programs dealing with religious and spiritual concerns also are offered by the center. For more information, go to www.butler.edu/cfv or call (317) 923-7252.

## Athletic Events

Butler University is a Division I member institution of the National Collegiate Athletic Association (NCAA). Student-athletes at Butler University 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, will compete in the newly formed Big East Conference beginning in July 2013. In addition to Butler, the Big East Conference includes Creighton University, DePaul University, Georgetown University, Marquette University, Providence College, Seton Hall University, St. John's University, Villanova University, and Xavier University. The men field Big East competitive programs in baseball, basketball, cross country, golf, soccer, tennis, and track and field. Likewise, the women field competitive teams 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 and is a member of the Pioneer Football League (PFL), which includes other participating members Campbell, Davidson, Dayton, Drake, Jacksonville, Marist, Morehead State, San Diego, and Valparaiso.


## Admission Information and Requirements

## Admission

Contacting the Office of Admission
Office of Admission
Butler University
4600 Sunset Ave.
Indianapolis, IN 46208-3485
Local: (317) 940-8100
Fax: (317) 940-8150
Toll free: 1-888-940-8100
Email: admission@butler.edu
Web: 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 taking advantage of opportunities to meet with an admission counselor, tour the campus, and interact with current students and faculty. Appointments are generally scheduled from 9 a.m. to $4 \mathrm{p} . \mathrm{m}$. weekdays. The office is open 10 a.m. -1 p.m. 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. To schedule a visit to campus, visit our website at www.butler.edu/visit.

## Freshmen (first-time students)

Prospective freshmen, 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 Indiana students to complete the Indiana Academic Honors Diploma or CORE 40 curriculum in high school for admission to the University.

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.

Scores required for credit have been established by the appropriate department heads and are available in the Office of Admission and on the admission website.

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 Freshman Admission Application Methods

Students who wish to complete the Application for Freshman Admission and Scholarships may apply online at our website, www.butler. edu/apply, or submit the Common Application online at www.commonapp.org. Butler gives equal consideration to both the Butler and Common applications.

## Arts Applicants

All prospective students must submit a Jordan College of the Arts (JCA) program application in addition to the Application for Freshman Admission before an audition or interview can be scheduled. 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 also are available for theatre applicants. An interview is required for all arts administration general students. A portfolio review and interview is required for all Art + Design students.

## I. High school students

An application for freshman admission may be made 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. The Application for Freshman Admission and Scholarships accompanied by the non-refundable application fee. The application fee is waived for applicants who have parents, grandparents, or
siblings who graduated from or are currently attending Butler. The fee is waived for applications filed online, as well.
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, should be sent directly to Butler University (codes: SAT-1073; ACT1180).
5. A writing sample as indicated in the application.
6. A list of activities/résumé as indicated in the application.

## II. International students

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

1. The 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:

- Test of English as Foreign Language (TOEFL) score of 550 (paper-based test), 213 (computer-based test) or 79 (internet-based test).
- 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.)
- American College Test (ACT) English score of 19 .
- International English Language Training System (IELTS) score of 6.0.
- Michigan English Language Assessment Battery (MELAB) score of 80 .
- London or Cambridge General Certificate of Education (GCE)/General Certificate of Secondary Education (GCSE) English Language Exam grade of A or B.
- 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 a letter of recommendation from a guidance counselor or teacher.
B. Completing the application for the I-20: After admission to Butler University, international students must also complete Butler University's Application for Form I-20. This application will provide us with biographical information, an affidavit of support and financial sponsor information we need in order to issue the Form I-20 in the United States Citizenship and Immigration Services SEVIS information system. For the 2011-2012 academic year, the estimated total cost used on the Form I-20 for undergraduates is $\$ 46,478$ 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.

## III. Home-schooled students

Butler welcomes candidates who have received a home-study based education. As is the case with all applicants to Butler University, 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. The Application for Freshman Admission and Scholarships accompanied by the non-refundable application fee. The
application fee is waived for applicants who have parents, grandparents, or siblings who graduated from or are currently attending Butler. The fee is waived for applications filed online, as well.
2. The completed application should include an official copy of the academic record indicating the grade point average; 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 than 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. If you have registered with your state department of education, the registration number and name of the home educator registered should be indicated on documents. If you have not registered, please provide a statement of the home school's mission and structure.
4. Official score reports of the SAT and/or ACT , including the writing component, should be sent directly to Butler University (codes: SAT 1073; ACT 1180).
5. Secondary School Report Form.
6. A writing sample as indicated in the application.
7. Two letters of recommendation.
8. A 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.
- Official General Education Degree (GED) scores General Educational Development

Test (GED) 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. In evaluating students' credentials, the Admission Committee strives to determine potential for success in Butler's rigorous academic program.

## Freshman Application Dates

Butler offers two non-binding admission programs for freshmen, 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/postmarked on or before Nov. 1.
- Decisions will be released on Dec. 15.
- Consideration for the Freshman Academic Scholarship program and the Honors Program.
- Enrollment Form and deposit returned by Jan. 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 a consideration for a Freshman Living-Learning Center.


## Regular Decision

- Complete application submitted electronically/postmarked on or before Feb. 1.
- Decisions will be released on a rolling basis beginning Feb. 15.
- Consideration for the Freshman Academic Scholarship program.
- Enrollment Form and deposit returned by May $\mathbf{1}^{*}$.
*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 Freshman

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 Dec. 1 prior to the spring term. Deposits paid after May 1 for fall enrollment or Dec. 1 for spring enrollment are non-refundable.

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

(Early Registration/New Student 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.

## Freshman Academic Scholarship Program

See Financial Aid-Freshman Academic Scholarship Program.

## 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 unique 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 freshman 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 freshman admission, in addition to submitting official transcripts of all college-level work.

## Applying for Transfer Admission

Students who have completed 12 hours or more of college coursework after high school graduation are considered transfer students. Applications for transfer admission are reviewed on a rolling basis. (Students applying to the College of Pharmacy and Health Sciences should refer to those sections below.) To be considered for admission as a transfer student, students must submit the following:

- The Application for Transfer Admission accompanied by the non-refundable application fee. (The application 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 Office of 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.
- An 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 Test (GED) should submit
official satisfactory GED results. Neither is required of students who have earned a four-year undergraduate degree.
- A 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 the College Level Examination Program (CLEP) exam scores should be sent to the Office of Registration and Records.
- International students must submit the official results of the Test of English as a Foreign Language (TOEFL) indicating a score of 550 (paper-based), 213 (computerbased) 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 dualdegree 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 Academic Affairs Committee of the College of Pharmacy and Health Sciences 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 Dec. 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 Jan. 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.
- Students who submit official results of the Pharmacy College Admission Test (PCAT). It is strongly suggested that students sit for the exam during the fall testing.
- International students must also submit TOEFL scores as described above for transfer students.


## 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 Dec. 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 non-refundable.
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 online at www.butler.edu/media/514885/ renewed_enrollment_form.pdf. 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 of the college. 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 than 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 re-admission by the appropriate college dean.

## Non-degree

Applicants who wish to take courses for credit while not pursuing a degree may apply
for non-degree status. Non-degree applications may be obtained from the Office of Admission, or found on the admission 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 grade point average 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 nondegree.

The following are all non-degree options: Audit for Enrichment (AFE)—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 are not listed on an official transcript nor may you change your enrollment to "credit" later in the semester. You may register as early as the first day of class and all registrations are on a space-available basis. Auditors will not have access to any electronic resources associated with the course. The audit for enrichment fee of $\$ 100$ per credit hour is payable at the time of registration and is not refundable. For an application visit the registrar's office in Jordan Hall, Room 133 or find it online at www.butler.edu/media/ 2885075/audit_for_enrichment_appl.pdf.

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. Applications will be reviewed by the Admission Committee; depending upon the course selection, additional review by academic departments may also be necessary. Students are limited to six hours of credit each semester and no more than 15 total hours at a reduced tuition rate. Students who continue to take work beyond 15 hours will be charged the regular undergraduate tuition rate.

## 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 Magnet High School for Law and Public Policy. Beginning fall 2011, select Shortridge high school students who are in their junior or senior year will 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 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 nondegree application and an official tran-script or statement from the registrar at the home school indicating an overall average of $\mathrm{C}(2.0 / 4.0)$ 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 the Bulletin. Check with the Office of Admission or the Office of Registration and Records for the appropriate application dates.


## Tuition and Fees

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 summer school comprised of two summer sessions. 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 2013-2014

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

## Undergraduate Tuition COB, COE, JCA, LAS, CCOM

Full time (12-20 hours)
1-11 hours
\$16,745/semester
Each hour above 20 hours
\$1,410/hr

College of Pharmacy and Health Sciences
Full-time (12-20 hrs)

## Health Sciences

Health Sciences year 1
(pre-Health)
Health Sciences year 2
(pre-Health)
Health Sciences
year 3 curriculum
Health Sciences
year 4 curriculum
Pharmacy
Pharmacy year 1
(pre-Pharmacy)
Pharmacy year 2
(pre-Pharmacy)
Pharmacy year 3 (P1)
Pharmacy year 4 (P2)
Pharmacy year 5 (P3)
\$16,745/semester
\$16,745/semester
\$16,745/semester
\$18,060/semester
\$18,060/semester
\$16,745/semester
\$18,060/semester \$18,060/semester
\$18,060/semester

Pharm.D. (6th year only) $\$ 39,920 /$ year
1-20 hours is billed:

$$
\begin{array}{ll}
5 \% \text { Summer I } & \$ 2,000 \\
5 \% \text { Summer II } & \$ 2,000 \\
\text { 45\% Fall } & \$ 17,960 \\
\text { 45\% Spring } & \$ 17,960
\end{array}
$$

Each hour above 20 hours is $\$ 1,510$ /hour
1-11 hours* $\quad \$ 1,510 / \mathrm{hr}$
*exception: Pharm D.-6th year

## Graduate Tuition

Tuition rate is based on college of enrollment:

| Liberal Arts and Sciences | $\$ 483 / \mathrm{hr}$ |
| :--- | :--- |
| MFA Creative Writing | $\$ 700 / \mathrm{hr}$ |
| College of Education | $\$ 483 / \mathrm{hr}$ |
| Jordan College of the Arts | $\$ 483 / \mathrm{hr}$ |
| Pharmacy and Health |  |
| Sciences <br> PA Master's - | $\$ 643 / \mathrm{hr}$ |
| Clinical Phase | $\$ 517 / \mathrm{hr}$ |
| MBA | $\$ 700 / \mathrm{hr}$ |
| MPA | $\$ 700 / \mathrm{hr}$ |

## Miscellaneous Fees

Full-time activity fee $\quad \$ 144 /$ semester
Health and Recreation
Complex fee $\quad \$ 295 /$ semester
Applied music fee $\quad \$ 275 /$ credit hour
Welcome Week fee
(first year student)* ${ }^{*} \$ 145$
Welcome Week fee
(transfer student)* $\$ 100$
New student registration fee* $\$ 100$
Residence hall program fee $\$ 40 /$ year
COPHS Mobile Comp.
(P2, P3, PA3)
\$475/semester
COPHS Mobile Comp.
(P1, PA1, PA2) $\quad \$ 175 /$ semester
COPHS Mobile Comp.
Fee (P4)
\$150/semester
*one-time fee
Student Health Insurance** \$1,050 annual
${ }^{* *}$ May be waived by providing evidence of comparable health insurance coverage in an online insurance waiver process. For details, please visit www.butler.edu/student-accounts.

## Room and Board Rates

Ross Hall/Schwitzer Hall (9 month contract)
Triple/Quad Room \$2,205/semester
Double Room \$2,495/semester

Single Room
\$3,710/semester
Residential College (Resco) (9 month contract)
$\begin{array}{ll}\text { Double Room } & \$ 2,785 / \text { semester } \\ \text { Single Room } & \$ 4,010 / \text { semester }\end{array}$
University Terrace ( 9 month contract)
Shared Room
Single Room
Studio Apartment, shared
\$3,240/semester
\$3,825/semester

Apartment Village ( $\mathbf{1 0}$ month contract)
Single Room $\quad \$ 4,410 /$ semester

## Board Rates

All Access Plan
\$2,980/semester
Commuter Meal Plans
75 Block Meal Plan
plus $\$ 315$ Flex/semester
$\$ 885 /$ semester
50 Block Meal Plan
plus $\$ 450$ Flex/semester
\$885/semester

The above charges 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 2014-2015

Tuition and fees for the 2014-2015 academic year will be published in the Fall 2014 Schedule of Classes. This schedule will be available in (E-Bill) March 2014.

## Accept Financial Responsibility

Butler University policy requires all students to complete the Acceptance of Financial Responsibility process now 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 2013 will receive an electronic billing statement (E-Bill) July 10,2013 , for tuition, fees, room and board. (E-Bill notification is via student's Butler email address.) Payment is due in full Aug. 6, 2013 if the student is not enrolled in the Monthly

Payment Plan for fall 2013. 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 time frame 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 2013-2014 payment plan is available at www.butler.edu/student-accounts. Any scheduled payment-plan payment that is not received by the due date on the E-Bill will be assessed a late fee of $\$ 40$. Payment plans will be cancelled if two payment-plan payments are not received in full by the due date on the E-Bill. If the payment plan is cancelled due to late payment, the standard finance charge will accrue against the total outstanding balance. 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 implemented electronic billing (E-Bill) and electronic payment (E-Pay) in summer 2009. Please refer to the Office of Student Account's website at www.butler.edu/studentaccounts for details. Payment is accepted electronically by check (no fee) or credit card. Credit card payments include a 2.75 percent non-refundable convenience fee. Master Card, Discover, American Express, and Visa are accepted. Note: The Office of Student Accounts also accepts paper checks, cash, and money orders for payment.

## Prepaid Tuition

The University provides a tuition prepayment plan, which guarantees a fixed tuition rate for all pre-paid 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 Pharm.D. during the fall and spring terms only. The pre-payment plan does not apply to graduate programs and does not apply to summer tuition charges. Please 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 decal, 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 by logging on to my.butler.edu. Navigation instructions are available at www.butler.edu/student-accounts. 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, particularly the Higher Education Award and Freedom of Choice Grant 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.

## 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. 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 which 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 mid-point 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 non-payment. Any E-Check transaction that is rejected by either banking institution will be charged a non-refundable 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 department-requested 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 re-admission. 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: 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 $A P R$ ). 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 $\$ 2$ fee. A valid Butler I.D. must be presented to purchase a money order.



## Financial Aid

Butler University offers a variety of financial aid programs based on academic excellence, performance ability, or 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 the maximum amount of 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 for scholarships or financial aid submitted by the student and his or her family 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 University, federal, and state regulations and guidelines.

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

Our financial aid counselors will help you explore the options that are right for you. If you'd like to speak with a member of our staff, contact our office at (317) 940-8200, (877) 940-8200 toll free, or by email at finaid@ butler.edu. Forms and applications are available in the Office of Financial Aid and online at www.butler.edu/financial-aid.

## Freshman Academic Scholarships

Recognizing the highest of academic achievements is the purpose of the Freshman Academic Scholarship Program. Butler University offers scholarships to entering freshmen that possess a strong high school academic record. Entering freshmen may be offered an academic scholarship based on a combination of ACT or SAT scores, high school performance, and academic major. All application material for admission must be received by Nov. 1 to receive maximum scholarship consideration. Complete applications for admission received after Nov. 1 will be given consideration for scholarship based on available funds and the quality of the application pool. The scholarships are
renewable for the standard length of the student's academic program or until a bachelor's degree is conferred, whichever comes first, provided the recipient maintains a minimum grade point average.

Continuing students may renew their academic scholarship each year by maintaining a 3.0 or better cumulative G.P.A. (not rounded). If a student does not meet the scholarship renewal criteria, the amount of the scholarship may be adjusted based on the student's cumulative G.P.A. Students may request reinstatement of the original amount of the scholarship upon meeting the required G.P.A. G.P.A.s are reviewed for renewal at the end of the spring semester. Please refer to the original award letter and acceptance form regarding the criteria specific to your award.

## JCA Audition Awards

Audition awards are based upon performance ability and artistic potential. Audition awards are offered after admission. An audition or interview is required. The awards are given toward tuition and may be renewed. Renewal of your talent award is determined by satisfactory academic progress toward a degree in the Jordan College of the Arts (JCA) and artistic achievement. Recipients are selected by the faculty of the Jordan College of the Arts and approved by the Office of Financial Aid. JCA awards may be renewed for an additional six consecutive semesters of enrollment, as long as the student upholds the standards outlined in the scholarship offer.

## Athletic Grant-In-Aid

Athletic Grant-in-Aid for men and women is offered through the Butler University Department of Athletics. Varying amounts for tuition, room or board may be offered, dependent upon athletic ability and the athletic program. Recipients are selected by the coach and approved by the Office of Financial Aid within compliance of NCAA-Division I regulations.

## Grants

Grants do not have to be paid back and are offered to students who demonstrate financial need and are enrolled full time as an undergraduate student pursuing their first bachelor's degree. The Free Application for Federal Student Aid (FAFSA) must be completed each year to determine eligibility for financial aid, such as the Butler Grant and the Federal Direct Loans.

## Indiana State Grants (Frank O'Bannon Grant-Higher Education Award and Freedom of Choice Grant and Twenty-First Century Scholars)

Dependent students, whose parents are residents of Indiana, and independent residents of Indiana, apply for financial aid from the Indiana Commission of Higher Education Division of Student Financial Aid by completing a FAFSA each year. Eligible students must be enrolled full time as an undergraduate student pursuing their first bachelor's degree. Due to limited funds, the FAFSA must be received on or before March 10 each year. Applications received after this date will not be considered.

## Federal Pell Grant

Undergraduate students pursuing their first bachelor's degree will be considered for the Federal Pell Grant by completing the FAFSA each year. Award amounts vary, depending on need and the number of hours for which the student is registered.

## Butler Grant

These awards are made based on financial aid eligibility as determined by the Free Application for Federal Student Aid (FAFSA) and the student's academic strength. Priority is given to students who file the FAFSA by March 1, complete their financial aid file by May 1, and who are enrolled full time for the fall semester by May 15 each year. These awards are not automatically renewed, so it is important to file the FAFSA annually. Butler Grants are available to full-time undergraduate students enrolled in coursework on the Butler campus and pursuing their first degree.

## Loans

Student-loan programs are available and we encourage students to consider what is involved when borrowing to meet educational expenses. Loans must be repaid, and loan levels must be managed carefully.

## Federal Perkins Loan

The Federal Perkins Loan is a low-interest (fixed five percent) federally funded loan administered by Butler University and may be part of the financial aid package. Very limited funds for this program are available each year. This loan is need-based and awarded to undergraduate students to meet financial aid eligibility. A promissory note must be signed for the loan, and repayment of principal and interest begins nine months after graduation.

## Federal Direct Loan

The Federal Direct Loan is a low-interest loan with eligibility based on financial information as reported on the FAFSA each year. The student must be accepted into a degree or aid-eligible certificate program and enrolled at least half time (six credit hours per semester undergraduate, four and one half hours per semester graduate). There are two components to the Federal Direct Loan Program-subsidized and unsubsidized. The terms and conditions of loans made under the unsubsidized Federal Direct Loan are identical to a subsidized Federal Direct Loan except the student is responsible for paying the interest or electing to capitalize the interest onto the loan for repayment after he or she graduates or is enrolled less than half time. The maximum a student can borrow per year as an undergraduate is $\$ 3,500$ as a freshman; $\$ 4,500$ as a sophomore; and $\$ 5,500$ as a third-, fourth- or fifth-year student; or $\$ 8,500$ at the graduate level. An additional $\$ 2,000$ is available to undergraduate students in the form of an unsubsidized loan. For current interest rates, go to www.butler.edu/financial-aid.

## Federal Direct PLUS Loan

Parents who wish to borrow on behalf of the student and who do not have adverse credit history, may borrow up to the cost of attendance less financial aid received for the period of enrollment. Repayment begins within 60 days after the loan is fully disbursed. Deferment options may be available through the lender. For current interest rates, go to www.butler.edu/financial-aid.

## Private Education Loans

These loan programs are specifically designed to provide students and their families with additional loan choices for their post-secondary education. Students must be credit ready/ worthy and may borrow up to the cost of attendance less financial aid received for the period of enrollment. Private loans are based on the borrower's (and co-borrower's) credit and financial history. While we may recommend different programs, approval of any loan will be based on information each lender has obtained and their specific credit criteria. For specific details about the loan programs, go to www.butler.edu/financial-aid/financing-options/education-loans.

## Financial Aid and Study Abroad at Butler University

Butler University is supportive of students who wish to include the study abroad experience in their education. Numerous opportunities for study abroad exist. For example, students studying on a true exchange program, such as the International Student Exchange Program (ISEP), will be able to apply all financial aid to the program costs. Actual award amounts will be available after the student has received a financial aid notification (FAN) for the semester abroad and after the Office of Financial Aid has received all documents necessary to complete the Statement of Financial Responsibility. As always, the amount of tuition-specific financial aid cannot exceed the cost of actual tuition charged.

Institutional policy allows students to use one-half ( 50 percent) of one semester's Butler University funds for their first semester of study abroad programs through non-exchange programs, such as IFSA. Students studying abroad for a second semester will be allowed to use 25 percent of one semester's Butler University funded awards. These awards include, but are not limited to: academic
scholarships, audition awards, Butler University grants, and endowed and departmental scholarships. The full amount of federal and state awards (i.e. Federal Pell Grant, Federal Direct Loans) may be used for the study abroad semester, depending upon the cost of the program.

In order to receive Butler University funds for study abroad programs, the student must complete one full academic year at Butler University prior to beginning the study abroad term.

## Leave of Absence Policy

Requests for a leave of absence without forfeiting merit aid must be made in writing and coordinated by the Office of Financial Aid prior to the start of the semester for which the leave is being requested.

A student may request a leave of absence for up to one year. Only one request for a leave of absence will be granted to a student. The request should be made for each individual semester of leave. Leaves can be for medical and personal reasons. Personal reasons do not include enrolling at another college or university. If, during an academic year, the student enrolls at another college or university, the award is forfeited even if the student reenrolls at Butler at a later date.

## 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. Please see our policy for treatment of outside scholarships at www.butler.edu/financial-aid.

## Satisfactory Academic Progress

Federal regulations require that all student financial aid recipients make satisfactory academic progress toward achieving 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 also 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, please 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 lay-off, and unemployment. Voluntary circumstances are not eligible for consideration. Such voluntary items would include: consumer debt, voluntary leave of employment, 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.



## Academic Regulations and Definitions

All undergraduate students are urged to obtain a copy of the Student Handbook detailing the academic regulations of the University and to refer to it when in doubt as to the rules and regulations in force during their stay at Butler University, or visit www.butler.edu/studentlife. 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 six-week summer sessions.

## Unit of Instruction

Each course offered 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 catalog 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:
A 4.00 grade points
B+ 3.33 grade points
A- 3.67 grade points
B 3.00 grade points

B- 2.67 grade points $D+1.33$ grade points
C+ 2.33 grade points
D 1.00 grade points
C 2.00 grade points
D- 0.67 grade points
C- 1.67 grade points F 0.00 grade points
The following grades are not computed in the grade point average:
W-Official withdrawal. Permitted until the 10th week of a regular 14 -week semester or the fourth week of a six-week summer session. Students should contact registration and records for withdrawal dates for short session courses. The instructor's signature is required for all withdrawals.
$\mathbf{P}$-Passing grade. For courses taken under pass/fail option. Semester hours are counted as hours passed, but are not used in computing the grade point average.
PV—Pass with validation. Grade given in student-teaching classes to students who may be certified to teach.
NC-Enrollment in a course on a non-credit basis. A student may change from credit to non-credit in a course until the 10 th week of a regular semester, fourth week of the summer session. The instructor's signature is required. An instructor may change the non-credit grade to withdrawal if the student does not attend class. 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 " I " 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.

Academic Standing. A student's grade point average is figured by dividing the total number of hours attempted into the total number of grade points earned.

When a student's cumulative grade point average 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 grade point average. 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 grade credit in a given semester may be placed on the dean's list of the college of enrollment if the semester grade point average 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 grade 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.

## LAS, COE, COB, JCFA, COPHS, CCOM

Freshman 0-28 hours
Sophomore 29-58 hours
Junior 59-90 hours
Senior 91+ hours
5th year Pharmacy
6th year Pharmacy
$0-28$ hours
29-58 hours
59-90 hours
91-132 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, 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 from the dean of the college in which the student is enrolled must be secured. 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 (CUE) consists of 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. CUE allows a student of one member institution, under specified conditions, to enroll at another CUE 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/registration/ urban-education 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. Courses taken for pass/fail do not count in the grade point average if passed; if failed, they are counted as F. Upper-division courses taken pass/fail shall count for upper-division 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 noncredit courses at the end of the registration period.

## Grade Reports and Transcripts

After the close of each semester or session, grade reports are posted on My.Butler.edu for each student, providing the student has met his or her financial obligations to the University. The University, only upon the written request of the student, will release transcripts of the student's academic record. A fee is charged for each official transcript.

## 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 grade point average 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 to 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 grade point average (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 . 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 bac-calaureate degree from Butler University; they must complete a minimum of 30 additional hours at Butler University and must meet all the specific requirements for the second degree.

GOAL Verify experimentally


## The College of Liberal ArTs and Sciences

## Administration

Jay Howard, Ph.D., dean; Stuart Glennan, Ph.D., associate dean; Jennifer L. Poor,
Ph.D., associate dean for student affairs
The power, importance, and centrality of the liberal arts are affirmed daily in the College of Liberal Arts and Sciences. The college offers 27 majors and 31 minors across 12 departments and seven 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 SciencesThe 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
continued
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 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, 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; 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 Requirements

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.

## Bachelor 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.

## Bachelor of science degree

In addition to the college and university requirements for the bachelor of arts degree, a student seeking a bachelor of science degree must meet certain requirements determined by the nature of the field of specialization.

For the bachelor of science in natural science, a student must take a minimum of 60 hours in natural science. This includes a major of at least 30 hours in one department.

For the bachelor of science in natural science and mathematics, a student must take a minimum of 60 hours in natural science and mathematics. This includes a major of at least 30 hours in one department.

## 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, and Cultures. American Sign Language also fulfills the language study requirement in LAS. Students should contact the Communication Sciences and Disorders Program for more information.

## 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 declare this change in the Office of the Dean of the college. Students may choose majors from any of the following fields in the college:

- Actuarial science
- Anthropology
- Biology
- Chemistry
- Classical studies
- Computer science
- Criminology
- Economics
- English
- Concentration in literature
- Concentration in creative writing
- Concentration in theory, culture, and criticism
- 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 a specialization in social work/social policy) and Criminology
- Sociology (with a specialization in social work/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
- Classical studies
- Chemistry
- Chinese
- Computer science
- Criminology
- Economics
- English literature
- English writing
- Ethics
- 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 and computer competency requirements of the college.
- Ninety-eight hours (including two hours of physical education) with a minimum grade point average of 2.0. (Transfer students in pre-professional programs of the College of Liberal Arts and Sciences 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 B.A. or B.S. 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, 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 grade point average of at least 2.00 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 four-year degree recipients. Others receive the A.A. 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 History and English Language and Literature Departments.

## Areas of Instruction African Studies Minor

## Administration:

Terri Jett, Ph.D., program coordinator Jordan Hall, Room 347B, (317) 940-8451

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: 18-19 semester hours*
Courses selected from the following (each 3 semester-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

Courses that are listed with special African content or focus in the areas of African literature, international communication, African film courses; topics courses in these departments with African content or focus.

Study abroad: Students who complete a study abroad 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, Ph.D., 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 Department

 AdministrationTravis J. Ryan, Ph.D., department chair

## Professors

Thomas E. Dolan, Ph.D.; Carmen M. Salsbury, Ph.D.; James L. Shellhaas, Ph.D.

## Associate Professors

Shelley Etnier, Ph.D.; Travis J. Ryan, Ph.D.; Katherine M. Schmid, Ph.D.; Philip J. Villani, Ph.D.

## Assistant Professors

Nathanael R. Hauck, Ph.D.; Jennifer R. Kowalski, Ph.D.; Lindsay K. Lewellyn, Ph.D.; Andrew M. Stoehr, Ph.D.

## Instructors

Tim Carter, Ph.D., director, Center for Urban Ecology; Rebecca Dolan, Ph.D., director, Friesner Herbarium; Erin Gerecke, Ph.D.; Marva Meadows, M.S.; Charissa Osborne, Ph.D.; Paula A. Trillo, Ph.D.

## 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 is 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 (BSI), 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. And, 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 programs affiliated with Biological Sciences. 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 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 through our
affiliation with the center. Another option, the Smithsonian Tropical Research Institute (STRI) in Panama, is dedicated to understanding tropical biodiversity. The unique Butler-STRI 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 fieldbased 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 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 Office of Pre-Graduate and Pre-Professional Advising plans co-curricular activities, maintains a reference library of useful publications, and coordinates the application process.

## Biological Sciences 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 a broad knowledge of all general areas of biology.
- Analyze and interpret qualitative and quantitative data using graphic and statistical analyses.
- Recognize the unifying role of evolution to the field of biology.
- Read, critique, and properly use scientific literature.
- Design and perform research using the accepted scientific technique of hypothesis testing.
- Demonstrate proficiency in basic laboratory skills.
- Communicate scientific ideas/concepts through writing and speaking.

BI202 Cellular and Molecular Biologyfundamentals (4 hours)
BI203 Genetics-fundamentals (4 hours)
BI299 Biology Seminar (1 hour P/F)
BI480 Senior Biology Capstone (3 hours)
Note that ALL BI courses numbered 300 and above require a minimum of TWO fundamentals courses as prerequisites. Specific fundamentals prerequisites are listed in parentheses.
BI301* Principles of Zoology (BI201)
BI302* Principles of Botany (BI201)
BI306 Mammalogy (BI201)
BI307 Vertebrate Biology (BI201)
BI308 Tropical Field Biology (BI201)
BI309 Local Flora (BI201)
BI311* Biology of Algae and Fungi (BI201)
BI320 Animal Behavior (BI201)
BI323 Principles of Immunology (BI105 or BI202)
BI339 Philosophy of Biology (two fundamentals courses or by permission of the instructor)
BI401-403 Independent Study
BI405-409 Topics in Biology (two fundamentals courses or by permission of the instructor)
BI411 Principles of Physiology (BI202)
BI413 Vertebrate Histology and Microtechnique (BI202)
BI418 Population and Community Ecology (BI201)
BI419 Conservation Biology (BI201)
BI421 Landscape Ecology (BI201)
BI430 Developmental Biology (BI203)
BI431 Plant Development (BI203)
BI432 Plant Physiology (BI202)
BI435 Molecular Genetics (BI203)
BI436 Genomics, Bioinformatics and Gene Evolution (BI203)
BI438* Microbiology (BI202 and 203)
BI440 Practical Molecular Biology (BI202 and 203)
BI480 Biology Capstone (BI201, 202, and 203)

BI490 Internship in Biological Sciences (two fundamentals courses or by permission of the instructor)
BI499 Honors Thesis (BI201, 202, and 203)

* Designates course that satisfies the organism requirement
${ }^{1}$ In addition, all biology majors must
take general chemistry. (CH105/106
or CH107).
${ }^{2}$ Students must earn a C- or better in
each course to count it towards the
major or as a prerequisite.
${ }^{3}$ BI325 cannot be counted toward the
38-hour minimum required for the
biology major.


## Requirements for the minor

The minor consists of 21 credit hours. Students must complete the three fundamentals courses (BI 201, 202, and 203) and two BI elective courses with lab at the 300 level or above (excluding BI325).

## Core Courses offered by Biological

 SciencesNW200-BI, Biology and Society: This course will examine current societal issues with biological connections, the role scientists and others play toward helping us understanding these issues, and the underlying biological concepts for each topic. Course includes lecture and laboratory components. A course for nonscience majors only. 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 nonscience 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 only recently have environmental scientists begun to explore the ecology in and of cities. 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, socio-economic, racial, and gender issues related to these HeLa cells, including a community outreach project which may be used to satisfy the ICR. (U)(5). Occasionally.

NW261-BI-I, Food: Pasture, Table, Body, and Mind: This course about food will encourage students 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 Science Courses BI105, Introductory Cell Biology: An

 introduction to the basic principles of cell biology for freshmen 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. Open only to students of the College of Pharmacy and Health Sciences. (U)(3). Fall and spring.BI111, Contemporary Issues in Biology: This topic-driven course is designed to illustrate the central connection between biology and current societal issues. Various broad biological issues
will be addressed such as: biodiversity, global climate change, infectious diseases, cancer, sustainability, human population growth, and invasive species. In addition to coverage of background information, a portion of the course will be dedicated to problem-based activities and class discussions. This course is open only to biology majors or exploratory natural science students in their first semester. (U)(3). Fall.

BI201, 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. Prerequisites: BI111 or second-year Butler status. (U)(5). Fall and spring.

## BI202, 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. Prerequisites: BI111 or second-year Butler status. (U)(4). Fall and spring.
## BI203, 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 along with experimental design and scientific communication. Prerequisite: BI 202. (U)(4). Fall and spring.
## BI257, Human Anatomy and Physiology:

A course for non-major students to relate structure and function in the human body. Prerequisite: Any NW-BI course, or two of the following: BI 201, 202, and 203. (U)(5). Fall.

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: BI201 and either BI202 or 203. (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. Prerequisites: BI201
and either BI202 or 203. (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. Prerequisites: BI201 and either BI202 or 203. (U)(4). Occasionally.

BI307, Vertebrate Biology: Phylogeny, taxonomy, behavior, and life histories of the vertebrates. Prerequisite: BI201 and either BI202 or 203. (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: permission of the instructor. (U/G)(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: BI201 and either BI202 or 203, or any NW-BI course. (U/G)(3). Occasionally.

BI310, Evolution: Analysis of organic evolution, the mechanisms of evolutionary changes, and the evolution of higher forms of life. Prerequisite: BI201 and either BI202 or BI203. (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. Prerequisites: BI201 and either BI202 or 203. (U)(4). Occasionally.

BI314, Ornithology: (U)(3). Occasionally.
BI320, Animal Behavior: The adaptive behavior of animals is approached from physiological, developmental, ecological, and evolutionary perspectives. Prerequisite: BI201 and either BI202 or 203. (U)(4). Annually, term varies.

BI323, Principles of Immunology: Basic concepts and techniques of immunology. Prerequisite: BI105 or both BI202 and 203. (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 both BI202 and 203. (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: Two of the following: BI 201, 202, or 203 or permission of instructor. (U)(3). Occasionally.

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: Permission of the instructor. (U/G)(1). Occasionally.

BI406, Topics in Biology: Study of a current biological topic. Prerequisite: Permission of the instructor. (U/G)(2). Occasionally.

BI407, Topics in Biology: Study of a current biological topic. Prerequisite: Permission of the instructor. (U/G)(3). Occasionally.

BI408, Topics in Biology: Study of a current biological topic. Prerequisite: Permission of the instructor. (U/G)(4). Occasionally.

BI409, Topics in Biology: Study of a current biological topic. Prerequisite: Permission of the instructor. (U/G)(5). Occasionally.

BI411, Principles of Physiology: Analysis of the functions of all major systems of the vertebrates with emphasis on mammalian physiology. Prerequisite: BI202 and either BI201 or 203. (U)(4). Annually, term varies.

## BI413, Vertebrate Histology and

 Microtechique: A study of the structure of vertebrate tissues and the techniques used in microscope slide preparations. Prerequisite: BI301 or permission of the instructor. Prerequisites: BI202 and either BI201 or 203. (U/G)(4). Occasionally.
## BI418, Population and Community

Ecology: Fundamental concepts of ecology at the population and community levels of organization, illustrated by modeling, field and/ or laboratory investigations. There will be an emphasis on quantitative reasoning and critical thinking. Prerequisites: BI201 and BI202 or 203. (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. BI201 and either BI202 or 203. (U)(3). Occasionally.

BI421, Landscape Ecology: This course will focus on ecological patterns and processes at the landscape level. An emphasis will be placed on spatial analyses of native flora and fauna using geographic information systems software applications. Students will conduct individual research projects. Prerequisite: BI201 and either BI202 or 203. (U)(4). Occasionally.

BI430, Developmental Biology: A study of embryonic development from the formation of gametes, through fertilization, and up to the development of the multicellar organism. Emphasis will be on the anatomical changes during development and on the cellular and molecular events causing these changes. Prerequisite: BI203 and either BI201 or 202. (U)(4). Occasionally.

BI431, Plant Development: An introduction of the cellular and molecular mechanisms important in the development of members in the plant kingdom, from multi-cellular algae to flowering plants. The laboratory will include techniques important in investigating developmental phenomena such as scanning electron microscopy and tissue culture. Prerequisites: BI202 and 203. (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: BI202 and either BI201 or 203, and CH106 or CH107. (U)(4). Occasionally.

BI435, Molecular Genetics: Molecular structure, biochemical function of the gene as illustrated by the original research literature, viruses, and eukaryotes cells. Prerequisite: BI202 and 203 and CH361. (U)(3). 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. Prerequisites: BI203 and either BI201 or 202. (U)(4). Occasionally.
BI438, Microbiology: Basic principles of microbiology and associated laboratory techniques. Lecture, demonstration, and laboratory. Prerequisites: BI202, 203 and CH106 or 107. (U)(4). Fall.

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. Open only to senior biology majors. (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 Department

Administration
Stacy O'Reilly, Ph.D., department chair Professors
Geoffrey C. Hoops, Ph.D. ; Joseph L. Kirsch, Ph.D.; Shannon G. Lieb, Ph.D.; Stacy A. O'Reilly, Ph.D.; Robert A. Pribush, Ph.D., Anne M. Wilson, Ph.D.
Associate Professors
Olujide Akinbo, Ph.D.; John Esteb, Ph.D.; Todd Hopkins, Ph.D.; LuAnne McNulty, Ph.D.; Michael Samide, Ph.D.

## Assistant Professors

R. Jeremy Johnson, Ph.D.

Instructors
Adam Azman, Ph.D.; Tracy LeGreve, Ph.D.; Paul Morgan, Ph.D.

## 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. It also must ensure that all of these things are done 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 problem-solving 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, 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 accelerating pace of change in chemistry and across science. Students are encouraged
to pursue undergraduate research with faculty whose expertise span a wide range of chemistry sub-disciplines. Departmental poster sessions, weekly seminars, and project-driven laboratories encourage interaction between students and faculty during and outside class starting in the first year curriculum.

## Chemistry Department 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.


## Degrees

- Major in Chemistry
- Minor in Chemistry


## Requirements for the Major

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. 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.

## Requirements for a Major in Chemistry with Certification from the American Chemical Society

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
- CH471 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
- CH493-4, 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
- CH493-4, Undergraduate research
- MA208, Calculus and Analytic Geometry III
- MA334, Differential Equations


## Requirements for a Major in

 Chemistry with Honors EligibilityAt least 32 hours of chemistry, not including
CH392 Chemistry Seminar I, are required.

- 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
- CH471 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 a Major in Chemistry

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 a Minor in

Chemistry
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:

Chemistry and Society is a study of chemistry and its applications to and impact on society. Four hours of lecture/discussion and one twohour laboratory per week. Credit not applicable toward a major in chemistry. (U)(5). Fall, spring, and summer.

NW211-CH-I, Water Quality: Water Quality is a 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.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: CH 351 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: CH 106 or CH 107 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 CH 351 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 three-hour 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. Prerequisites: CH352 with a grade of C or better. Knowledge in introductory biology strongly recommended for this course. Four hours lecture/week. (U)(4). Fall.

CH392, Chemistry Seminar 1: Attendance at and participation in the chemistry departmental seminar series, including pre- and post-seminar reports. (P/F) credit. Prerequisites: 12 hours of chemistry. (U)(1). 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. Prerequisite: 14 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. Prerequisite: 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. Pre-requisite: CH332 with C or better. Corequisite: CH471 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. Prerequisite: 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 enzyme-catalyzed kinetics, using chromatography, electrophoresis, and spectroscopy. This writing-intensive class will also emphasize reading, writing, and peerreview skills involving biochemical literature. One 1-hour lecture and one 3-hour laboratory per week. Prerequisite: 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).

## 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.CH471, 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.

## CH472, Physical Chemistry 2: The

 introduction to chemical thermodynamics and chemical kinetics. Prerequisites: CH 352 or equivalent, MA 107 or equivalent, PH202 or equivalent. (U/G)(3). Fall.
## CH473, Physical Chemistry Lab 1:

Laboratory studies in thermodynamics, chemical kinetics, and physical property measurements. One four-hour laboratory per week including one hour of lecture. Corequisites: CH471 or CH472. (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. Prerequisites: CH 352 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. ( $\mathrm{U} / \mathrm{G}$ )(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. Prerequisite: 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. Prerequisite: 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 Program

Administration
Chad Bauman, Ph.D., department chair
Assistant Professors
Christopher Bungard, Ph.D.
Lynne Kvapil, Ph.D.

## 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 theater 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 Classical Studies 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 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 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 travelling to important sites in Rome and Italy. 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.


## CLA Program Student Learning

 OutcomesStudents 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.

## Degrees

- Major in Classical Studies
- Minor in Classical Studies


## Requirements for the Major:

A minimum of 30 hours combined of CLA, GK and/or LT, including one 300-level course in GK or LT. A minimum of three 300-level courses altogether. Students may test out of the 200-level courses.

## Requirements for the Minor:

A minimum of 18 hours combined of CLA, GK, and/or LT. A minimum of two 300-level courses altogether. 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, participating in democracy, gender roles, warfare, and empire. (U)(3). Spring.

## Classical Studies Courses

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

CLA302, Lyric Poetry / Love Poetry: An indepth study of ancient love poetry. Course will focus on love poetry in Greek and Latin. Other ancient love poetry (Hebrew, Sanskrit, Chinese) may be included. (U)(3). Occasionally.

## 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.

CLA323, Women in Antiquity: We will examine current gender issues and search for their roots in antiquity, particularly in the Near East and Greece. (U)(3). Occasionally.

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

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: GK 101 and 102 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 Peloponnesian War. This course is
repeatable for credit. The author will change each semester. Prerequisite: GK203 and 204, placement into the 300 level, or the permission of the instructor. (U)(3).

GK360, Topics in Greek: In-depth study of works not covered in earlier courses. This course is repeatable for credit. Prerequisite: GK203 and 204, placement into the 300 level, or permission of instructor. (U)(3).

GK402, Independent Study: Directed reading in Greek. Consult head of department before registering. (U)(3). Occasionally.

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: 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, Pliny's Letters.
Prerequisite: LT101 and 102 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, Pliny's Letters. Prerequisite: LT101 and 102 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, the comedies of Plautus and Terence. Prerequisite: LT203 and 204, placement into the 300 level, or permission of the instructor. (U)(3). Spring.

LT360, Topics in Latin: In-depth study of works not covered in earlier courses. This course is repeatable for credit. Prerequisite: LT203 and 204, placement into the 300 level, or permission of instructor. (U)(3).

LT400, Independent Study: Directed reading in Latin. Consult head of department before registering. (U)(1). Occasionally.

LT401, Independent Study: Directed reading in Latin. Consult head of department before registering. (U)(2). Occasionally.

LT402, Independent Study: Directed reading in Latin. Consult head of department before registering. (U)(3). Occasionally.

LT499, Honors Thesis: (U)(3). Occasionally.
Computer Science and Software Engineering

## Administration

Jonathan P. Sorenson, Ph.D., department chair
Web page: www.butler.edu/csse
Professors
Zhi-Hong Chen, Ph.D.; Panagiotis K. Linos, Ph.D.; Jonathan P. Sorenson, Ph.D.

## Associate Professor

Ankur Gupta, Ph.D.

## 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?

There are several reasons we feel our programs are distinctive:

- Our Engineering Projects in Community Service (EPICS) Program combines servicelearning 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
freshman-level CS142 course and in the junior/senior level CS452 course.
- Most of our students add a second major or minor program 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.

## Degrees

- Major in Computer Science
- Minor in Computer Science
- Major in Software Engineering


## CS Program 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, 252, Foundations of Computing I, II
- CS248, Object-Oriented Programming and Data Structures
- CS282 or 283, EPICS I
- CS321, Computer Organization
- CS351, Algorithms
- SE361, Object-Oriented Design
- CS433, Theory of Database Systems
- CS452, Parallel Algorithm Design and Programming
- CS485, Computer Ethics
- CS473, Topics in Computer Science
- One course numbered CS440-459
- One 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
- Twelve additional credit hours of CS or SE 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, 107, Calculus and Analytic Geometry I, II
- MA162, Probability and Statistics
- CS151, 252, Foundations of Computing I, II
- CS248, Object-Oriented Programming and Data Structures
- CS282 or 283, EPICS I
- CS321, Computer Organization
- CS351, Algorithms
- CS433, 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 CS or SE 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.

## 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 102 or equivalent. (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.

CS271, Topics in Computer Science: Indepth study of special topics not covered in regular courses. (U)(1). Occasionally.

## CS 282S, Epics 1 Service Learning:

Supervised team software project for a local charity or non-profit organization. May be repeated for credit. Corequisite: CS248 or permission of the department. (U)(2). Fall and spring.

## CS 283S, Epics 1 Service Learning:

Supervised team software project for a local charity or non-profit organization. May be repeated for credit. Corequisite: CS248 or permission of the department. (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. Consolidates material from CS242 and CS243. 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: CS 248. (U)(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: 248. (U)(3). Fall.

## CS 382S, Epics 2 Service Learning:

Supervised team software project for a local charity or non-profit organization. May be repeated for credit. Prerequisites: concurrent registration in CS351 and SE361 and either CS282 or CS283, or permission of the department. (U)(2). Fall and spring.

## CS 383S, Epics 2 Service Learning:

Supervised team software project for a local charity or non-profit organization. May be repeated for credit. Prerequisites: concurrent registration in CS351 and SE361 and either CS282 or CS283, or permission of the department. (U)(3). Fall and spring.
CS401, 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. ( $\mathrm{U} / \mathrm{G}$ )(1). Occasionally.

CS402, 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. ( $\mathrm{U} / \mathrm{G}$ )(2). Occasionally.
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. ( $\mathrm{U} / \mathrm{G}$ )(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.

CS433, 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, CS252, and CS321. (U/G)(3). Fall.

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, CS 321, and SE 361. (U/G)(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. Spring.

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

CS471, Topics in Computer Science: Indepth study of special topics not covered in regular courses. Prerequisite: permission of department. (U/G)(1). Fall and spring.

CS472, Topics in Computer Science: Indepth study of special topics not covered in regular courses. Prerequisite: permission of department. (U/G)(2). Fall and spring.

CS473, Topics in Computer Science: Indepth 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. Prerequisite: Concurrent registration in SE461 and either CS382 or CS383, or permission of the department. (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. Prerequisite: Concurrent registration in SE461 and either CS382 or CS383, or permission of the department. (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. Prerequisite: 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.

CS491, Senior Seminar: Techniques for giving oral presentations of research results in computer science. Prerequisite: CS490 or permission of the department. (U)(1). Occasionally.

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

## Software Engineering Courses

SE267, Business Application Dev.:
Programming in Visual Basic, with applications to business. Topics include data representation, control structures, arrays, functions, and objects. Prerequisites: none. (U)(3). Fall and spring.

## 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 a 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.

## SE472, Topics in Software Engineering:

In-depth study of special topics not covered in regular courses. Prerequisite: permission of the department. (U/G)(2). 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 Program <br> Professors

Peter Grossman, Ph.D., Efroymson chair of economics; Robert Main, Ph.D.; William Rieber, Ph.D.

## Associate Professor

Kathy Paulson Gjerde, Ph.D.

## Adjunct Faculty

Robert Kirk, Ph.D.; Theodore Kuhn, M.A.; Thomas Litkowski, M.A.; Timothy Zimmer, Ph.D.

## 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/ 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 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 U.S.) 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.

## Degrees

- Major in Economics
- Minor in Economics


## Requirements for the Major

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 Analytical Reasoning.)
- MS100, Basic Excel Skills
- MS264, Statistics
- MS265, Information Technology
- Foundation Course hours: 13 (Not counting MA125 or MA106, and with MS101 being one hour)


## Other Required

- EC332, Intermediate Macroeconomics
- EC354, Intermediate Microeconomics
- EC464, Quantitative MethodsEconometrics
- Other Required Course hours: 9


## Any four courses numbered $\mathbf{3 0 0}$ or $\mathbf{4 0 0}$ level

- Economics Electives hours: 12
- Total Hours: 34


## Requirements for the Minor

- EC231, Principles of Microeconomics
- EC232, Principles of Macroeconomics
- Either EC332, Intermediate Macroeconomics or EC354, Intermediate Macroeconomics
- Three courses numbered 300 or 400 level
- Total hours: 18


## Core Course Offered by Economics SW 220-COB, 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.

## 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: junior standing, 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: EC101 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: EC101 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.

EC350, Managerial Economics: Application of microeconomic theory to the management of firms: demand, cost and pricing; strategic behavior; and the boundaries of the firm. Credit will not be given for both EC350 and EC354. Prerequisites: EC231, EC232, MS264. (U)(3). Occasionally.

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: EC101 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 and EC232. (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. Prerequisite: 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: EC101 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. Prerequisite: 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 EC 231. (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: EC101 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: EC101 or EC231. (U)(3). Occasionally.

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

## Engineering Dual-Degree Program (EDDP) <br> Administration

Joseph L. Kirsch, Ph.D., program director; Jessica R. McCormick, program coordinator

The EDDP (Engineering Dual Degree Program) results from a partnership between the well-established programs at Butler University and the Purdue School of Engineering and Technology at Indianapolis. The EDDP allows students to study at Butler University, which is known for its quality science, humanities, social science,
fine arts, and professional programs and also have access to ABET-accredited engineering programs at the Purdue School of Engineering and Technology at Indianapolis. Students completing this program will earn degrees from both institutions. The EDDP is not a 3-2 program where students are expected to transfer after three years to another school to complete their engineering studies. The EDDP has a curriculum that integrates engineering, science, mathematics, computer science, social sciences, humanities, and fine arts courses and allows residence at Butler University for the duration of the program.

## Engineering Dual Degree Program (EDDP)

Students select a major from both institutions (Dual-Degree Butler University and Purdue School of Engineering and Technology at Indianapolis).

## Major Options at Butler University

- Biology
- Chemistry
- Computer science
- Economics
- Mathematics
- Physics
- Science, technology, and society


## Major Options at Purdue School of Engineering and Technology at Indianapolis

- Biomedical engineering
- Computer engineering
- Electrical engineering
- Energy engineering
- Mechanical engineering
- Motorsports engineering


## Summary of program features

1. The dual degree program leads to a degree in engineering from Purdue School of Engineering and Technology at Indianapolis (biomedical, computer, electrical, energy, mechanical, or motorsports) and a degree from Butler University (biology, chemistry, computer science, economics, mathematics, physics or STS).
2. The EDDP s not a 3-2 program where students are expected to transfer after three years to another school to complete their engineering studies. The EDDP has a curriculum that integrates engineering,
science, mathematics, computer science, social sciences, humanities, and fine arts courses.
3. The biomedical, computer, electrical, and mechanical engineering programs are ABET-accredited. The newer energy and motorsports programs will be included in the next ABET review.
4. The dual degree programs are five years with residence available at Butler University throughout the programs.
5. One summer internship is part of the program.
6. Courses in mathematics, sciences, humanities, social sciences, and fine arts are taught through Butler University while the engineering courses are taught through Purdue School of Engineering and Technology at Indianapolis.
7. Normally engineering courses taken during the first three years will be taught at Butler University.
8. Transportation is facilitated between sites (Butler and Purdue School of Engineering and Technology at Indianapolis, approximately 5 miles).
9. Job placement and career services are available to dual degree students at Butler University, Purdue School of Engineering and Technology at Indianapolis, and Purdue University at West Lafayette.

The curriculum for the EDDP can be viewed at www.butler.edu/engineering. Engineering courses are noted on the Butler University transcript with a departmental designation of DD.

## English Language and <br> Literature

## Administration

Andrew G. Levy, Ph.D., department chair Professors
Dan Barden, M.F.A.: Joseph R. Colavito, Ph.D.; Hilene Flanzbaum, Ph.D.; Andrew G. Levy, Ph.D.; Susan Neville, M.F.A.; Carol Reeves, Ph.D.; William P. Walsh, Ph.D.

## Associate Professors

Chris Forhan, M.F.A.: Lee Garver, Ph.D.; Jason Goldsmith, Ph.D.; William Watts, Ph.D.
Assistant Professors
Michael Dahlie, M.F.A.: Ania Spyra, Ph.D.; Brynnar Swenson, Ph.D.

## Instructors

Barbara Campbell, Ph.D.; Angela Hofstetter,

Ph.D.; Alessandra Lynch, M.F.A.; Rebecca Ries, M.A.; Robert Stapleton, M.F.A.; Susan Sutherlin, M.A.

## Why Major in 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 major in 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 major, or the major with a concentration-Creative Writing or Theory, Culture and Criticism. 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 peer-
tutoring program where students help students across the University, 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.

## Requirements for English Major

- Minimum of 36 hours beyond freshman English.


## Sophomore requirements

- EN185, three of the four courses in the Literary and Cultural History sequence (EN245, 246, 265 and 266), EN321 or 322.


## 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 EN 450-level senior essay with emphasis in writing


## Requirements for English Minor

- Minimum of 18 hours beyond freshman English; EN185; 3-6 hours of EN200-level literature courses and 9-12 hours of EN300and 400 -level literature courses.


## Concentration in writing

- Minimum of 21 hours beyond freshman English requirement; EN185, 218 or 219; nine additional hours in writing courses and
six hours of EN literature courses, including at least one course at the 300 -level or above.


## 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 freshman English


## Sophomore Requirements

- EN185, 218, 219, three of the four courses in the Literary and Cultural History Sequence (EN245, 246, 265, and 266); EN321 OR 322


## 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.


## With 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.

## With Emphasis in Literary Theory, Culture, and Criticism

- Minimum of 48 hours beyond freshman English.


## Sophomore Requirements

- EN185, three of the four courses in the Literary and Cultural History Sequence (EN245, 246, 265, and 266), EN321, EN322.


## Junior/Senior Requirements

- EN390, Research Seminar; one 300/400-level course in language or rhetoric; EN385, Studies in Literary Criticism; EN387, Studies in Literary Theory; two 300-level literature courses; two 300/400-level Literary Theory, Culture and Criticism-approved electives; for seniors, one 400 -level seminar and one EN450-level senior essay.


## Core Courses Offered by English

 PCA232-EN, Seeing the World and theSelf: 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 (IMA), 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.

## TI210-EN, Inquiries in Am Lit and His 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.
## TI 211-EN, Inquiries in Am Lit and His

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 Brit Lit and His 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.
## TI 213-EN, Inquiries in Brit Lit and His

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.

## TI 214-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.

## TI 215-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. (P/F) 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: EN 102. (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 102. (U)(3). Annually, term varies.

## 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 non-fiction. Prerequisites FYS101 and $102(\mathrm{U})(3)$. 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 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 theAmerican 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 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 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.

## 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: EN 218 and 219 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. Prerequisites: EN321 or junior/senior status. (U/G)(3). Occasionally.
EN341, Topics in Nineteenth Century A: Studies major writers within the context of nineteenth 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. ( $\mathrm{U} / \mathrm{G}$ )(3). Fall and spring. EN366, Romanticism: Studies British poetry and prose of the late eighteenth through the mid nineteenth 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.

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

EN395, Internship: Directed experience in a career setting. Students apply through the head of the department. Open to junior and senior majors. (U)(3). Fall and spring.

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.

## 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 toward completing their Senior Essay, a 20-25 page literary research-based 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.

EN 455S, 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)(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 eighteenth through the mid-nineteenth 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.

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.

EN501, Graduate Seminar Special Topic: (U/G)(3). Fall and spring.
EN710, Research Problems: (G)(3). Fall and spring.

EN711, Thesis: (G)(3). Fall and spring.
The English M.A. Program offers graduate students the opportunity to pursue one of two possible advanced paths of study. In the thesis track, M.A. students complete 24 semester hours of coursework and six semester hours of M.A. 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.

## M.F.A. in Creative Writing

Butler's M.F.A. 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 Writer's Series, students attend readings and small question-and-answer sessions with nationally and internationally recognized writers. The program also operates a literary magazine, Booth (www.booth.edu), which offers students a variety of editorial and teaching mentorship opportunities, and sponsors a rich variety of community programs through the new Efroymson Center for Creative Writing.

## M.F.A. Courses <br> EN501, Graduate Seminar Special Topic: (U/G)(3). Fall and spring.

EN502, Graduate Prose Workshop: Graduate level 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 M.F.A. in Creative Writing students only (G)(3). Fall and spring.

## EN503, Graduate Poetry Workshop:

Graduate level creative writing workshop in poetry. M.F.A. 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).

## 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).

## Gender, Women, and Sexuality Studies

Administration

Ageeth Sluis, Ph.D., director
Assistant Professor
Brooke Beloso, Ph.D.

## Requirements for a major in Gender, Women and Sexuality Studies:

Required Courses
GWS102 Intersections of Identity: Gender, Race, Class, and Sexuality (3 hrs)
GWS202 Resistance for Social Change (3 hrs)
GWS304 Feminist and Queer Theory (3 hrs)
Transnational Requirement-Select two of the following ( 6 hrs )
GWS303 Special Topics: sexandthecity.org
AN320 Gender and Sexuality in
Globalization
AN322 Sex, Gender and Sexuality in Japan

Gender, Women, and Sexuality Studies provides an interdisciplinary setting in which students can examine gender-the social meaning of the distinction between the sexesand sexuality-sexual identities, discourses, and institutions-as they intersect with race, class, ethnicity, nationality, and transnational movements.

In required courses, students will analyze gender and sexuality from a variety of academic fields, and they will explore the theoretical and historical basis of such study. Upperdivision 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 work force, 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.

AN380 Special Topics: Gender and Colonial: Past and Present
EN393 Special Topics: Gender, Language and Globalization
HST314 Hidden History of Sex: Gender and Sexuality in Latin America
PO380 Special Topics: Politics of Gender and Sexuality in Africa
RL377 Religion, Gender and the Goddess in Asia
SP450 Slavery in the New World
Fifteen credit hours of GWSS-approved electives with no more than six credit hours in any one discipline.

## Requirements for a minor in Gender, Women and Sexuality Studies:

GWS102 Intersections of Identity: Gender, Race, Class, and Sexuality (3 hrs)
GWS202 Resistance for Social Change (3 hrs)
GWS304 Feminist and Queer Theory (3 hrs)
Transnational Requirement-Select one of the following (3 hrs)
GWS303 Special Topics: sexandthecity.org AN320 Gender and Sexuality in Globalization
AN322 Sex, Gender and Sexuality in Japan AN380 Special Topics: Gender and Colonial: Past and Present
EN393 Special Topics: Gender, Language and Globalization
HST314 Hidden History of Sex, Gender, and Sexuality in Latin America PO380 Special Topics: Politics of Gender and Sexuality in Africa
RL377 Religion, Gender and the Goddess in Asia
SP450 Slavery in the New World
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: sexandthecity.org GWS303 Special Topics: Written Out of Wedlock: Living in Sin, Dancing on the Altar

GWS303 Special Topics: Health Disparities
AN320 Gender and Sexuality in
Globalization
AN322 Sex, Gender, and Sexuality in Japan
AN380 Special Topics: Gender and
Colonial: Past and Present
ART315 Postmodernism in the Arts
ART382 Special Topics: Gender in Art
EN343 The American Renaissance and Its Others
EN393 Special Topics: Fin-de-Siecle Literature
EN393 Special Topics: Gender, Language and Globalization
EN493 Special Topics: Sex, Suffrage, and
Empire: Modernism and the New Woman
HST338 The Era of Jim and Jane Crow
HST341 U.S. Women's History
JR418 Gender and Media: Global Views
MRC354 Gender and Communication
MRC420 Queering Film
MRC465 Communication and Cultural Criticism
MRC468 Women and Rock
MRC470 Sports, Media, and Culture
MRC482 Voices of Dissent and Social Change
PO372 Role of Protest in US Politics
PO380 Special Topics: Gender and Generation in War and Peace
PO380 Special Topics: Politics of Gender and Sexuality in Africa
PO386 Black Political Thought
PS305 Psychology of Gender
PS333 Human Sexuality
RL377 Religion, Gender, and the Goddess in Asia
SO317 Gender and Society
SO380 Gender, Race, and Crime
TI234-HST Reel American
TI231-HST Mad Women in America

## Core Courses offered by Gender, Women, and Sexuality Studies

 SW 223-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 lgbt-identified, and the poor have demanded rights and responsibilities. (U)(3). Fall and spring.

SW 232-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 CoursesGWS100, 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).

GWS102, 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).

## GWS201, Introduction to Feminism:

Provides a history of feminist movements and feminist theory, giving students a sense of how feminist thought has developed and how it has influenced our political and domestic lives as well as scholarly endeavors in academic disciplines ranging from literary studies to biology. Primarily for those interested in advanced work in women's studies and for firstand second-year students. Prerequisite: GS 200. Open to non-minors. (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, eco-feminism, alternative families, and others.

GWS301, Gender Studies: Theory and Methods: Theory and Method: Teaches the process of gender critique by applying that process to materials in the content area chosen by the instructor. This may range from literature, to music, to political theory. Students will engage in the inquiry about how gender critique affects the material to which it is applied. This or GS 201 is required for the minor. Prerequisite: GS 200. Open to nonminors. (U)(3).

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: GWS 102 and 202 or junior/ senior status. (U)(3).

## 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; the project must be approved by the gender studies director. Prerequisite: GS 100, GS 300, or 301 , junior or senior standing and completion of six hours of electives. (U)(1). 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. Prerequisite: GS 100, GS 300 , or 301 , 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. GWS490, Internship. (U)(3).

## History and AnthropologyIncluding Geography

## Administration

Elise Edwards, Ph.D., department chair
Professors
Bruce Bigelow, Ph.D.; George Geib, Ph.D.; Paul Hanson, Ph.D.

## Associate Professors

John Cornell, Ph.D.; Vivian Deno, Ph.D.; Elise Edwards, Ph.D.; Scott Swanson, Ph.D; Ageeth Sluis, Ph.D.

## Assistant Professors

Sholeh Shahrokhi, Ph.D.; Zachary Scarlett, Ph.D.

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 together a freshman course, introducing them to each other and to the disciplines in their departments, thus offering all the advantages of self-standing disciplines and interdisciplinary work and becoming themselves a community. Members of the department offer expertise in wide-ranging areas of the world: 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. We do not process our students. The department offers a small student-faculty ratio, individual attention, and abundant opportunities for undergraduate research. Most of our students also study away
from Butler, either abroad or in Washington, D.C., offering them a taste of this increasingly global world we inhabit.

## Why Study Anthropology?

Anthropology explores the human condition, appreciating humans as both biological and cultural creatures. The primary focus of our program is cultural anthropology, which studies the ways that humans create meaning, forge alliances, assert differences, reinforce, and create anew social and political hierarchies, and expose vectors of inequality. Students are trained to read critically and understand the complexities of ethnography-the 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 archeology, public health, social 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 actually happened in the world 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 offer just about the only curriculum in America that weds the depth of history and the breadth of anthropology. Like the blind sages and the elephant, we address basic aspects of life from different perspectives, and then talk about it with each other. 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 not just to listen to us, still less to mimic us, but to do the things we do: 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, grapple with the fundamental moral questions which 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-tofaculty ratio guarantee one-on-one attention, mentoring, and guidance to all majors and
minors. We know our students well. The anthropology and history programs at Butler do not seek to train students for any particular profession but seek instead to equip our students with the skills to become who they wish to be. Because students come to our programs with widely varying interests and goals, we offer them no uniform regimen of study or of practical experience. Each student, grounded in several fundamental courses of method and theory, builds a suitable course of study geared to their specific interests. The department offers more advanced students various opportunities for student research often culminating in honors theses.

We seek to deepen book learning with various kinds of hands-on experience, and our courses, when appropriate, regularly incorporate experiential components. Anthropology students helped Exodus International settle Burmese refugees in Indianapolis and turn what they shared into ethnographies for class. Students in a course on working class history shadowed the Butler grounds crew, cleaners, and cafeteria workers. The department also offers practical experience to test the waters for later life. 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 U.S. Attorney General's Office, the Center for American Progress, archeological fieldsites in Kenya, 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.

The graduates of our programs quickly scatter in all directions. Many first give their energies to help other people through programs like Teach For America and the Peace Corps. Many seek graduate study, law school, and medical school; others enter government, the military or civil service, and still others enter various forms of business. We also number among our graduates a fireman, a missionary, a carpenter, and research chemists, each of whom is happy to explain how studying history and anthropology helped get them where they wished to go. Indianapolis offers much that we use in teaching and learning: Indiana's seat
of government and hard-hit neighborhoods, a Rembrandt self-portrait, Chinese scroll paintings and immigrant communities fresh off the boat, museums and archives, sports teams and political rallies, music, theater, homeless people, domestic violence shelters, ethnic and religious communities of every description. Our courses draw on them all.

## Anthropology Program Student Learning Objectives

The anthropology program seeks to teach students to think for themselves independently and critically; appreciate human and cultural differences and master the basic tools necessary for understanding those differences; employ the ethnographic method; appreciate academic and civil discourse; 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, conduct anthropological research alone and with other people, incorporate the views of other people into their projects, look at problems from a variety of perspectives, share their ideas and research in proper form.

## History Program 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.

## Degrees

- Major in anthropology
- Minor in anthropology
- Minor in geography
- Major in history
- Minor in history
- Master of arts in history
- Combined major in anthropology and psychology (see Combined Majors)
- Combined major in history and anthropology (see Combined Majors)
- Combined major in history and political science (see Combined Majors)


## Anthropology

## Anthropology Requirements

 for the MajorAll anthropology majors are required to complete:

- 36 credits
- AN101, AN102, and GE109
- 3 hours in a subfield of anthropology (200400 level)
- 3 hours of methodology (AN350, 354, 356, or course approved by advisor)
- 3 hours of theory (AN390)
- 12 hours of elective courses, at least 3 hours in area courses, and 3 hours in topics courses
- 3 hours capstone: AN460 or other advisor approved 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.

## Anthropology Requirements for the Minor

The minor in anthropology consists of 18 hours coursework, with at least 12 hours at the upper-division level, AN102, and AN101, GE102, or "subfield" course.

## Core Courses offered by

Anthropology
SW210-AN, Sex, Gender and Sexuality
in Japan: This course explores the sociohistorical 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: Anthro

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. SW262-AN, Sport, Empire and Identity: (U) (3). Occasionally.

## 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.

AN204, Cultures Through Film: An introduction to cultures of the world through film, supplemented by related ethnographic texts. Students consider the role of the film in representation and cross-cultural understanding. (U)(3). Occasionally.

AN300, Religion and Ritual: The crosscultural study of such phenomena as witchcraft and magic; spirit possession; revitalization and millenarianism; and Christianity and Islam, primarily in contemporary, non-Western societies. Theoretical and historical overview of anthropological approaches are addressed. (U/G)(3). Occasionally.

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 identify, 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 crossculturally; 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.

## 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.

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 U.S./ 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 film, 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.

AN335, The Global Society: This course is an exploration of globalization and the social and cultural processes that are transforming local life throughout the world. The course introduces students to the impact of global capitalism, transnational culture and political flows, and the role of global non-government organizations in different regions. (U/G)(3). Occasionally.

AN338, Language and Culture: The course will consider the topic of human language and its use in society. Current linguistic and sociolinguistic assumptions, language differences and similarities, and the influence of cultural factors will be discussed. (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.

## 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, (3) the messages transmitted through media-produced images of sport. (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.

## AN354, The American City: A

methodological introduction to American urban studies from the perspectives of geography and anthropology; geographical and cultural change of the structure of the American city in the nineteenth and twentieth centuries with emphasis upon Indianapolis and the Butler-Tarkington neighborhood. Fieldwork and service learning are highlighted. (U/G)(3). Occasionally.

## AN360, Peoples and Cultures of Africa: A

 study of the rich and diverse cultural traditions of Africa. Topics include: the analysis of stereotypes associated with African cultures; effects of colonialism on contemporary life; religion and cosmology; ecological adaptation; kinship and social organization; the expressive arts; and ethnicity. (U/G)(3). Occasionally.
## AN362, Peoples and Cultures of Latin

America: A survey of the peoples, societies, and cultures of Latin America, giving attention to demographic features, social differentiation, and stratification and the major social institutions. (U/G)(3). Occasionally.

AN364, Native American Cultures: A survey course on the original, indigenous peoples of the Americas. The course will explore stereotypes of Native Americans; the effects of conquest and colonialism; and the resiliency of their traditions in contemporary settings. (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 postcolonialism, 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 Peoples and Cultures 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 nineteenth century to the present. Pre-requisite: AN102 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.

GE402, Independent Study: (U)(3). Occasionally.

## History

## History Requirements for the Major

All history majors are required to complete

- 30 hours in history, at least 21 of which must be taken at the upper-division level (courses numbered 300 or above). 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;
- 6 hours of lower-division courses (HST111, 205, 211, 212, 214), one of which must be U.S. history and one of which must be non-U.S. history;
- At least one course numbered 300-402 from three of the following five areas: 1) U.S.; 2) Latin America; 3) Europe; 4) Asia; 5) Africa and the Middle East;
- HST301, Historiography, typically offered once a year in the fall semester; and
- HST480, Seminar in History.

As a liberal arts major with relatively few program requirements, history works well for many students as a secondary major or minor.

## History Requirements for the Minor

A minor in history consists of 18 hours of coursework, with at least 12 hours at the upperdivision level.

## History Requirements for the Master of Arts

The department offers a master of arts in history. Graduate students 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 36 -hour track must complete at least two HST480 seminars.

## Core Courses offered by History SW264-HST, Japan's Past and Present:

Understanding Japan on the Ground: An introduction to central anthropological concepts "on the ground" in Japan for two weeks. The course will develop students' appreciation of Japanese cultural forms and practices and products of and responses to historical circumstances and exigencies, and the ways they become transfigured as they
shed and accrue meanings over time. (U)(3). Occasionally.
SW265-HST, The Mexican Revolution: As the first social revolution in world history, the Mexican Revolution (1910-1920) toppled a repressive dictatorship and rang in a new era of state formation, nationalism, and modernization. Victorious new leaders sought to alter not only the political structures of the country, but also "revolutionize" Mexican society through a series of far-reaching reforms to "mold the hearts and minds" of New Men and New Women. "The Mexican Revolution and the Archeology of Knowledge" will provide students with the opportunity to study the class, race, and gender politics of the Mexican Revolution as they were shaped through the disciplines of anthropology and history. In analyzing the cultural project of the revolution, especially indigenismo, or indigenism, "the valorization of Mexico's indigenous past and study of indigenous cultures," students will examine the relationship between social science and nation building, historiography and national identity, and knowledge and power. By tracing "IMagined" Mexican cultures through the lenses of archeology, ethnography and history, students will assess the political objectives and consequences of the cultural phase of the revolution. (U)(3). Occasionally.

## TI 231-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.

## 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 U.S. 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. (U)(3). Occasionally.

TI 235-HST, American Visions: American Visions? American Dreams? American Nightmares? What does it mean to be an American? Are their 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.

## 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: Course examines questions in history with a focus on issues of social, political, scientific, and/ or economic concern. Topics vary by instructor. May be repeated once for credit toward 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.

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, longdistanced trade, the spread of diseases, and empire-building. (U)(3).

## HST301, Historical Method and

Historiography: Course examines important methods and approaches to the study of the past and prepares students to undertake significant research projects. Prerequisite: Junior standing. Non-departmental students only by permission of the department. (U/G)(3). Fall.

HST305, Topics in History: Selected topics of significance in contemporary historical scholarship. Freshmen 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. Freshmen admitted only by permission of the department. (U/G)(3). Occasionally.HST308, The Greek World: Freshmen admitted only by permission of the department. (U)(0). Occasionally.

HST309, History of Rome: Freshmen 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. Freshmen 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. Freshmen 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. Freshmen admitted only by permission of the department. (U/G)(3). Occasionally.
HST314, Sex, Gender, Love, and Friendship in Medieval World: A continuation of HS326. Focuses upon dimensions of private life and interplay between private and public worlds in European society during the middle ages. Discussion/seminar format. Freshmen 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. Freshmen admitted only by permission of the department. (U/G) (3). Occasionally.

HST316, Early Modern England: England in the Tudor/ Stuart Era. Freshmen 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 1715 . Freshmen 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. Freshmen 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. Freshmen 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. Freshmen admitted only by permission of the department. (U,G) Occasionally.

HST321, 19th Century Europe: A study of European history from 1815 to 1914. Freshmen 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. Freshmen 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 Mitterand. Freshmen admitted only by permission of the department. (U/G) 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. Freshmen 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. Freshmen 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. Freshmen admitted only by permission of the department. (U/G) (3). Occasionally.

HST331, Colonial America: The first British empire in comparative global perspective. Freshmen 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. Freshmen admitted only by permission of the department. (U/G)(3). Occasionally.

## HST333, The Early American Republic:

 The United States between 1789 and 1850. Freshmen 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. Freshmen 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. Freshmen admitted only by permission of the department. (U/G)(3). Occasionally.

HST337, 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. Freshmen 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 state sanctioned 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. Freshmen admitted only by permission of the department. (U)(3).

HST339, Recent U.S. History: The U.S. from the Great Depression to the present, with an emphasis on contemporary cultural, social, and political issues. Freshmen admitted only by permission of the department. (U/G)(3). Occasionally.

HST341, US 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. Freshmen admitted only by permission of the department. (U/G)(3). Occasionally.

HST342, Topics in Women's History: Topics in Women's History 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. Freshmen 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 U.S. 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. Freshmen 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 twentieth century; emphasis on the development of a distinctive regional culture and interaction of various religious, ethnic, and racial groups. (U)(3). Occasionally.

HST349, U.S. History though Film: Course examines filmic representations of U.S. History. The class focuses on the ideological content of films over their technique. Students are expected to have a familiarity with U.S. history. Topics to vary by instructor and may be
repeated once for credit toward the major and/ or minor. Lecture/discussion/viewing format. Freshmen admitted only by permission of the department. (U/G)(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. Freshmen 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 which have served as the basis for the growth of the federal government. Recent trends are emphasized. Freshmen admitted only by permission of the department. (U/G)(3). Occasionally.

## HST353, U.S. Diplomacy in the 20th

Century: Examines the formation of fundamental principles and issues of U.S. diplomacy in the 20th Century, beginning with the Spanish-American War of 1898, and the evolution and consequences of those principles and issues to the present day. Freshmen admitted only by permission of the department. (U/G)(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. Freshmen admitted only by permission of the department. 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. Freshmen admitted only by permission of the department. (U/G) Occasionally.

## HST372, Peoples and Cultures of China:

This seminar course explores the multi-ethnic nature of the Chinese state from ancient time to the present. It covers such topics as
the relations between China proper and the grassland, Sinification, conquest dynasties, state policies toward minority groups, forms of ethnic identity, and ethnic nationalism. Freshmen 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. Freshmen admitted only by permission of the department. (U/G) (3). Occasionally.

## HST379, Asian Revolutions in Fiction and

Film: This course will explore the literary and visual representations of the Communist and nationalist revolutions in the villages of China, Vietnam, Korea, Japan, India, and/ or other Asian nations, with the purpose of examining Asian values and ideas and understanding Asian peoples, cultures, societies, and histories through literature and film. Freshmen admitted only by permission of the department. (U/G) (3). Occasionally.

HST390, American Military History: The American military from the colonial era to the present; institutional development and the role of the armed forces in shaping and implementing public policy. Freshmen admitted only by permission of the department. (U/G) Occasionally.

HST401, Seminar in History: A particular phase or period of history will be studied each semester. Freshmen 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.

HST701, Research: For graduate students researching a master's thesis. By permission of instructor. (G)(3). Fall, spring, and summer.

HST711, Thesis: For graduate students writing a master's thesis. By permission of instructor. (G)(3).

## Individualized Major Program <br> Administration

Stuart Glennan, Ph.D., chairperson of the LAS Individualized Majors Program Committee

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 cross-disciplinary work to design their own majors. The purpose of the individualized major program (IMP) option 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 non-traditional and returning students as well as to students
who have completed an associate degree and wish to complete a B.A. 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 course work, which must form a coherent whole. This may include work taken at other colleges including work taken through the Consortium for Urban Education (CUE) interchange in Indianapolis. All normal core 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 classroom-based 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 to the IMP

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 which 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 application form to be used in submitting a proposal can be found by going to the Academics page of the Butler website and
selecting the Individualized Majors Program (IMP) from the drop-down list of programs and majors.

## Individualized Major Courses <br> IM401, Independent Study: Offers the

 qualified student in the Individualized Majors Program the opportunity to pursue a topic of individual interest which is related to the Individualized Major Program. Open only to students in the Individualized Majors Program with permission of the instructor and approval by the Individualized Majors Committee. (U) (1). Fall, spring, and summer.IM402, Independent Study: Offers the qualified student in the Individualized Majors Program the opportunity to pursue a topic of individual interest which is related to the Individualized Major Program. Open only to students in the Individualized Majors Program with permission of the instructor and approval by the Individualized Majors Committee. (U) (2). Fall, spring, and summer.

## IM403, Independent Study: Offers the

 qualified student in the Individualized Majors Program the opportunity to pursue a topic of individual interest which is related to the Individualized Major Program. Open only to students in the Individualized Majors Program with permission of the instructor and approval by the Individualized Majors Committee. (U) (3). Fall, spring, and summer.IM405, Internship: Offers the qualified student the opportunity for supervised work experience in a setting pertinent to the area of study of their individualized major. Requires junior or senior standing and approval by the student's individualized major advisor and by the individualized majors committee. (U)(3). Fall, spring, and summer.

IM406, Internship: Offers the qualified student the opportunity for supervised work experience in a setting pertinent to the area of study of their individualized major. Requires junior or senior standing and approval by the student's individualized major advisor and by the Individualized Majors Committee. (U)(6) Fall, spring, and summer.

IM499, Honors Thesis: (U)(3).

## International Studies

Administration
Eloise Sureau-Hale, Ph.D., director
The major cuts across traditional barriers between intellectual disciplines and draws on the resources of the Departments of English, History, Geography and Anthropology, Modern Foreign Languages, Philosophy and Religion, Political Science, and Sociology in the College of Liberal Arts and Sciences; the Departments of Economics, Finances and Management in the College of Business; and the College of Communication. Faculties most directly affiliated with the program are:

## Professors

Kwado Anowka, Ph.D., journalism, international communication, Africa; Robert B. Bennett, Jr., J.D., business in the European Union; Bruce Bigelow, Ph.D., geography, globalization; Terri Carney, Ph.D., Spain; Roberto Curci, Ph.D. international finance, Latin America; Peter Grossman, Ph.D., international economics, comparative economic systems; Paul Hanson, Ph.D., history, France and China; Antonio V. Menéndez-Alarcón, Ph.D., sociology, Europe and Latin America; Gregory Osland, Ph.D., international marketing, Latin America; Katherine B. Novak, sociology, research methods; William Rieber, Ph.D., international economics; Paul Valliere, Ph.D., religion, Eastern Europe; Harry Van der Linden, Ph.D., philosophy, international ethics and justice; Linda Willem, Ph.D., Spanish, Spain

## Associate Professors

Craig Auchter, Ph.D., political science, Latin America; John Cornell, history, contemporary Europe; Bauman Chad, religion, India and Asia; Elise Edwards, anthropology, Japan; Margaretha Geertsema Sligh, communication, international communication; Siobhán McEvoy-Levy, Ph.D., political science, Europe, Middle-East; Gabriela Muñiz, Spanish, Latin America; Margaret Padgett, Ph.D., international organizational behavior; Ageeth Sluis, Ph.D, history, Latin America; Eloise Sureau-Hale, French, France and Francophone World; Sylvie Vanbaelen, French, Francophone World

## Assistant Professors

Krista Cline, Ph.D., sociology, international crime, research methods; Irune Gabiola, Ph.D., Spanish, Latin America, and the Caribbean; Mike Koehler, J.D., legal aspects
of international business; Su-Mei Ooi, Ph.D., political science, international relations, Asia; Robin Turner, Ph.D., political science, foreign policy, Africa, Sholeh Shahrokhi, Ph.D., anthropology, Middle East and Iran
Visiting Assistant Professor
Robert Oprisko, Ph.D., political science, Eastern Europe

## 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 nongovernment 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.

- A student-oriented program.
- A large number of full-time faculty from various departments and areas of studies, rendering the curriculum truly comprehensive and global, and offering the students a great variety of perspectives.
- A curriculum that prepares students to be able to work and be successful in an increasingly multicultural environment.
- A curriculum that prepares students for interdisciplinary research.
- A 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, D.C. internship: Students can intern in many government agencies, in the Congress, nongovernmental organizations, foreign embassies, international organizations such as the OAE, IMF, etc, and think-tanks.
- International internships, where students can acquire hands-on knowledge of many countries around the world.
- A comprehensive study abroad program with opportunities for study in nearly every country of the world.
- Concrete experiences in diplomacy by participating at the Harvard National United Nations Model or McGill University United Nations Model in Montreal (cost of travel and lodging to participate is covered by the program).
- Participation at the Midwest European Union Model.
- Financial support for students conducting thesis research.
- Financial support for travel for students presenting papers at conferences.
- An active student-run International Studies Club


## 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


## Major Requirements

Majors in International Studies must complete 42 credit hours, 33 of which must be fulfilled at the 300 -level or above. Minors must complete 21 hours, 15 of which must be fulfilled at the 300 -level or above.
I. Core ( 21 hrs )
A. Introduction: Take IS101 and one of the other courses listed.
IS101, Introduction to International Studies
GE109, Cultural Geography
PO141, Introduction to International Politics
PO151, Introduction to Comparative Politics
TI 250-RL, Religions of the World
SW 220-COB 01, The Economy and Society
B. International Arrangements and Interactions: Take IS390, United Nations and Other International Organizations, and one of the following courses:
AN320, Gender, Sex Through Globalization
AN326, Youth Conflict, Global Cinema
EC336, Comparative Economic Systems (additional prerequisite: permission of the instructor)
JR417, International Communications
IB320, International Business Environment (additional prerequisite: permission of the instructor)
IB321, The North American Business Environment (additional prerequisite: permission of the instructor)
PO322, International Conflict and Peace Building
SO355, International Crime
C. Research Methods Course

One of the following research methods courses:
AN350, Anthropological Methods
AN352, Ethnography
HST301, Historical Method and Historiography
PO201, Research and Analysis
SO393, Research Methods Seminar
D. International Relations and Diplomacy One of the following
HST381, U.S. Diplomacy in the Twentieth Century
PO355, U.S. Foreign Policy
PO320, International Relations
PL364, Ethics and International Relations
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.

## II. International Studies Area Courses

A. $\mathbf{1 8}$ hrs from two of the following areas- 9 hrs in each area-(two disciplines must be represented).

1. Africa

AN360, Peoples and Cultures of Africa
FR334, Introduction to Francophone Cultures
FR485, Topics in Francophone Studies (will count when at least $3 / 4$ of content focuses on Africa)
PO350, African Politics
2. Asia

AN322, Sex, Gender, and Sexuality in Modern Japan
AN329, Japanese Popular Culture
AN368, Coming of Age in the Middle East
FL320, Chinese Civilization
HST372, Peoples and Cultures of China
HST373, China and the World
HST379, Asian Revolutions in Fiction and Film
IB323, Contemporary Business Issues in East Asia (additional prerequisite: permission of the instructor)
RL353, Buddhism
RL354, Islam: Religion, Culture, and Society
3. Europe

EC438, Economic History of Europe
EN381, Modern British Literature
FR320, Modern French Civilization

FR345, France and the Francophone World: 1900 to present
FR465, 20th -21st Century French Novel and Francophone World
FR475, 20th -21st Century French Drama and Francophone World
GR340, German Studies II: Nation and Identity
GR342, German Studies III: Modernity and Tyranny
HST324, Modern Germany
HST325, Contemporary Germany
HST322, 20th Century Europe
HST323, Modern France
IB495, Business in the European Union
IS301, Model European Union
PO370, Government and Politics of Europe
SO333, European Societies
SP440, Contemporary Spanish Studies
SP340, Spain: 1700 to the Present
SP490, Seminar on Spanish Cultures
4. Latin America

AN362, Peoples and Cultures of Latin America
PO360, Political Regimes in Latin America
PO364, Popular Participation in Latin America
PO362, United States-Latin American Relations
SO331, Latin American Societies
SP330, Themes in Hispanic Studies (will count when at least $3 / 4$ of content focuses on Latin America)
SP345, Hispanic Masterpieces
SP350, Spanish American Culture: Mexico, Central America, Caribbean
SP355, Spanish-American Culture: South America
SP360, Hispanic Film (will count when at least $3 / 4$ of content focuses on Latin America)
SP365, Hispanic Short Story (will count when at least $3 / 4$ 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
SP490, Seminar on Latin American Cultures
5. Foreign Languages

Nine hours at the 300/400-level on one modern foreign language. Classes in French, German, Spanish, and Chinese are offered at Butler University. Classes in other languages such as Arabic, Japanese, or Italian can be taken at other universities in the area (IUPUI) and will transfer.
B. One elective ( 3 hrs .) to be chosen from the following or any 300-400 course in I or II-A above:
AN302, The Body and Society
AN320, Gender and Sexuality in Globalization
EC433, International Economics (prerequisite or permission of the instructor)
EN321, 322, 421, 422, Comparative World Literatures
FN451, International Financial Management (additional prerequisites: FN340 and permission of the instructor)
IB336, Comparative Economic Systems (prerequisites: EC101 or EC231)
IB367, Legal Aspects of International Business (additional prerequisite: permission of instructor)
IB433, International Economics
(Prerequisite: EC231, EC232)
IB460, International Organizational Behavior (additional prerequisite: permission of instructor)
MK491, International Marketing (additional prerequisite: permission of instructor)
PO302, Third World Politics
SO323, Racial and Ethnic Relations
SO343, Popular Culture: A Comparative Study
SO349, Recent Social Movements: A Comparative Study

Any courses such as Special Topics, Seminars, or Studies in major Authors, Poetry, Fiction
or Drama which offer a contemporary
international focus in a given semester.

## III. Special International Studies Courses

May include:
IS401, 402, and 403, Independent Study in International Studies (1, 2, or 3 hours)
IS404 and 405, Internship in International Studies (3 or 6 hours)

IS470, Selected Topics in International Studies (3 hrs); Prerequisite: permission of instructor IS499, Honors Thesis (3 hrs)
IV. Study Abroad-Highly recommended Experience abroad is strongly encouraged for all international studies students. This 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 and Model

 European Union-Highly recommended International studies majors can participate in the Model United Nations and the Model European Union. We have participated in the Model United Nations organized by McGill University in Montreal, and University of Toronto, Canada, and Harvard Model United Nations, Boston. The Model European Union is held in Saint Louis. These two events 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 and the European Union. The cost for participating in these events (registration, airfare , and lodging) is covered by the International Studies budget.
## Minor Requirements

Minors in International Studies must complete 21 credit hours, 15 of which must be fulfilled at the 300 -level, or above.
I. Core ( 12 hrs )
A. Introduction.

IS101, Introduction to International Studies
B. International Arrangements and Interactions: One of the following courses:
AN326, Youth Conflict, Global Cinema
AN320, Gender, Sex Through
Globalization

EC336, Comparative Economic Systems (Additional prerequisite: permission of the instructor)
IS390, United Nations and Other International Organizations
JR417, International Communications
IB320, International Business Environment
(Additional prerequisite: permission of the instructor)
IB321, The North American Business Environment (Additional prerequisite: permission of the instructor)
PO322, International Conflict and Peace Building
SO355, International Crime
C. International Relations and Diplomacy:

One of the following courses:
HST381, U.S Diplomacy in the Twentieth Century
PO355, U.S. Foreign Policy
PO320, International Relations
PL364, Ethics and International Relations
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.
II. International Studies Area Courses (9 hrs)
(take courses from at least two different areas)

1. Africa

AN360, Peoples and Cultures of Africa
FR334, Introduction to Francophone Cultures
FR485, Topics in Francophone Studies (will count when at least $3 / 4$ of content focuses on Africa)
PO350, African Politics
2. Asia

AN322, Sex, Gender, and Sexuality in Modern Japan
AN329, Japanese Popular Culture
AN368, Coming of Age in the Middle East
FL320, Chinese Civilization
HST372, Peoples and Cultures of China
HST373, China and the World
HST379, Asian Revolutions in Fiction and Film
IB323, Contemporary Business Issues in East Asia (Additional prerequisite: permission of the instructor)
RL353, Buddhism
RL354, Islam: Religion, Culture, and Society
3. Europe

EC438, Economic History of Europe
EN381, Modern British Literature
FR320, Modern French Civilization
FR345, France and the Francophone
World: 1900 to present
FR465, 20th -21st Century French and Francophone Novel (will count when at least $3 / 4$ of content focuses on Europe)
FR475, 20th -21st Century French and Francophone Drama (will count when at least $3 / 4$ of content focuses on Europe)
GR342, German Studies III: Modernity and Tyranny
HST324, Modern Germany
HST325, Contemporary Germany
HST322, 20th Century Europe
HST323, Modern France
IB495, Business in the European Union
IS301, Model European Union
PO370, Government and Politics of

## Europe

SO333, European Societies
SP440, Contemporary Spanish Studies
SP340, Spain: 1700 to the Present
SP490, Seminar on Spanish Cultures
4. Latin America

AN362, Peoples and Cultures of Latin America
PO360, Political Regimes in Latin America
PO364, Popular Participation in Latin
America
PO362, United States-Latin American Relations
SO331, Latin American Societies
SP330, Themes in Hispanic Studies (will count when at least $3 / 4$ of content focuses on Latin America)
SP345, Hispanic Masterpieces
SP350, Spanish American Culture: Mexico, Central America, Caribbean
SP355, Spanish-American Culture: South America
SP360, Hispanic Film (will count when at least $3 / 4$ of content focuses on Latin America)
SP365, Hispanic Short Story (will count when at least $3 / 4$ 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
P490, Seminar on Latin American

IS470, Selected Topics in International Studies (3 hrs) (Prerequisite: consent of instructor)
IS499, Honors Thesis (3 hrs)

## IV. Study Abroad

Experience abroad is strongly encouraged for all international studies students. This 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 and Model European Union

International Studies majors can participate in the Model United Nations and the Model European Union. We have participated in the Model United Nations organized by McGill University in Montreal, University of Toronto, Canada, and Harvard Model United Nations, Boston. The Model European Union is held in Indianapolis. These two events 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 and the European Union. The cost for participating in these events (registration, airfare, and lodging) is covered by the International Studies budget.

## Core Courses offered by

## International Studies

SW270-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. Prerequisites: Any 100-level course in the social sciences or permission of the instructor. (U)(1). Spring.

## 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: Independent Study in International Studies offers the qualified student in International Studies the opportunity to pursue a topic of individual interest. Prerequisite: 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: Independent Study in International Studies offers the qualified student in International Studies the opportunity to pursue a topic of individual interest. Prerequisite: 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: Independent Study in International Studies offers the qualified student in International Studies the opportunity to pursue a topic of individual interest. Prerequisite: 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:

 Internship in International Studies offers the qualified student the opportunity for supervised experience in internationally oriented jobs in U.S. or foreign governments, business, orinternational organizations. A popular and very useful internship for an International Studies major is the Washington internship. (U)(3). Fall and spring.

IS405, Internship in International Studies: 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 an International Studies major is the Washington internship. (U)(3). Fall and spring.

IS410, 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: IS101. (U/G)(3). Spring.

## IS470, Selected Topics in International Studies: 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: 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.). Furthermore, a complete list and description of new courses or topic courses will be published every semester.

## Irwin Library

## Administration

Julie Miller, dean of libraries
IL101, Library Research Methods: This course promotes intelligent and thoughtful use of information and information sources over the course of a student's lifetime. Techniques for developing search strategies that are most appropriate for use in various information structures and for evaluating the quality of information will be emphasized. (U)(1).

## Mathematics and Actuarial Science

Administration

William W. Johnston, Ph.D., department chair; Lacey P. Echols, M.A.T., coordinator of mathematics support services

## Professors

William W. Johnston, Ph.D.; Judith Harper Morrel, Ph.D.; Prem L. Sharma, Ph.D.

## Associate Professors

John W. Gaisser, Ph.D.; Duane Leatherman, M.A.

## Assistant Professors

Rebecca G. Wahl, Ph.D.; Jonathan E. Webster, Ph.D.; Christopher J. Wilson, Ph.D.
Visiting Assistant Professor
Joshua A. Cole, Ph.D.

## Instructors

Lacey P. Echols, M.A.T.; Kathie J. Freed, M.S.; Kelsie Graham, M.A.; Karen Holmes, Ph.D.; Mary Z. Krohn, Ph.D.

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.

## 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 every 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 toprated in quality. It adheres to the CUPM (Committee for Undergraduate Program in Mathematics) guidelines-one of the few collegiate mathematics departments in the U.S. to commit enough teaching resources to do so. In summary, 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 (BSI).
- Dual degrees are available in engineering through a partnership with Purdue University-Indianapolis (IUPUI). One dual-degree option, for example, is that a student can earn a dual major in both mathematics (from Butler) and engineering (from IUPUI). (See Engineering DualDegree Program-EDDP.)


## 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, 107, 208, 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
- Choose one of 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 numbered MA473.


## Requirements for the Minor

- MA106, 107, Calculus, and Analytic Geometry I, II
- MA200, Basics of Advanced Mathematics
- MA205, Discrete Mathematics
- Choose one of 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


## 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 are taught by professional actuaries, giving students a chance to see, from a professional who can provide an industry point of view, how classroom ideas and issues arise naturally in the workplace.
- The departmental curricular program 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, they are the examinations P, FM, MLC and 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, 107, 208, 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, 107, 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
- MA397, 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 upperlevel 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-The Undergraduate Curriculum Requirements for the Major

- MA106, 107, 208, 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

In addition, the following business courses are required:

- AC203, 204, Introduction to Accounting I, II
- MS265, Information Technology (Prerequisite: MS100)
- EC231, 232, Principles of Micro/ Macroeconomics
- FN340, Corporate Finance
- MK380, Introduction to Marketing Management
- MG360, Organizational Behavior

A student must achieve a minimum of $B$ in a given business course to waive the comparable prerequisite ( 400 level) course in the MBA program

## Phase II - The graduate curriculum

Upon successful completion of Phase I, and after meeting the MBA program admission require-ments, 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: 1) students must obtain an appropriate score on the GMAT test; and 2) students must submit to the graduate admission office a graduation admission application, two letters of recommendation, an official transcript, and a résumé.

## Core courses offered by Mathematics and Actuarial Science

AR 210-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.

## AR 211-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.

AR 212-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, the 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.

## 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 (P/F). (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 ( $\mathrm{P} / \mathrm{F}$ ). 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.

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, spring, and summer.

MA162, Statistical Methods: An introduction to inferential statistics with applications in the natural, social, and managerial sciences. Topics include elementary probability, data analysis, descriptive statistics, confidence intervals, hypothesis testing, linear regression, and contingency tables. The Analytic Reasoning core requirement is waived for students who successfully complete MA162. Prerequisite: MA101 or equivalent. (U)(4). 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, isomorphism's, 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, and 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: MA107. (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, 205, 215. (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: MA 312. (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)(3). Spring.
MA334, Differential Equations: Analytical, numerical, and qualitative approaches to differential equations, including linear equations and systems, and nonlinear equations. Prerequisite: MA107. (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. Prerequisites: MA215 and 361. (U) (3). Occasionally.

MA363, Probability Theory 2: Poisson process, multistate Markov transition models, mixed continuous-discrete distributions (including expectation and cumulative distribution), moment generating functions, order statistics, conditional densities, and conditional expectation. Actuarial applications, such as net benefit. Prerequisites: 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. Prerequisites: MA107. (U/G)(3). Occasionally.

MA372, 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) (3). 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. (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: 15 hours of mathematics and junior standing or permission of department. (U)(1). Spring.

MA499, Honors Thesis: (U)(3). Fall and spring.

# Modern Languages, Literatures and Cultures Department 

Administration
Terri Carney, Ph.D., department chair
Professors
Terri Carney, Ph. D; Larry W. Riggs, Ph.D.;
Sylvie Vanbaelen, Ph.D.; Linda M. Willem, Ph.D.
Associate Professors
Eloise Sureau-Hale, Ph.D.
Assistant Professors
Irune del Rio Gabiola, Ph.D.; Xiaoqing Liu, Ph.D.; Gabriela Muniz, Ph.D.; Jose Alexander Quintanilla, Ph.D.; Juan Pablo Rodríguez Prieto, Ph.D.
Visiting Assistant Professors
Sarah Painitz, Ph.D.

## Instructors

Liliana Goens, M.A.; Paul Kanczuzewski, M.A.; Elisa Lucchi-Riester, M.A.; Michelle Stigter, M.A.

## Why Study Modern Languages,

 Literatures, and 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 selfknowledge, and heightens awareness of one's own community and place in the world.

The communicative skills that students sharpen in our classrooms are increasingly valuable in many fields-business, education, fine arts, government, media, social services, and others. A language major or minor pairs well with a variety of other majors, and many of our students choose to combine language study with areas that include: anthropology, biology, health sciences, history, international studies, media, rhetoric and culture, pharmacy, philosophy and religion.

## Why Study Modern Languages, Literatures, and Cultures at Butler?

The Butler Modern Language faculty members hail from all over the world, including Argentina, Austria, Belgium, China, Columbia, France, and Spain, and their wide variety of linguistic and cultural expertise enriches our curriculum and keeps students connected to the
global communities they represent. Students who study with us find they are well-supported by the resources we have available in the Modern Language Center, where they often study for quizzes on our comfy chairs, watch foreign language films, and work on group projects around our computer stations. Modern Language students choose from a wide variety of well-established study-abroad options, from a three-week program in Costa Rica to full-semester programs in Germany and Spain. They can also try a service-learning course that connects them to local language communities, where they can use their language skills to communicate with native speakers. Given the interdisciplinarity of our programs, students often find creative and productive ways to combine our majors and minors with other areas.

## MLLC 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.


## Degrees

- Majors in French, German, and Spanish
- Minors in Chinese, French, German, and Spanish


## Requirements for the Major

A major in French, German, or Spanish consists of 33 hours in the language, at least 24 of these hours being at the 300 and 400 levels. All language majors will need to take at least one 300 -level skills course and two 400 -level courses. Specific area requirements are listed below by language.

## French

French majors must fulfill the following requirements:

- FR300, Oral and Written Communication *All majors must complete this course for the 300-level skills requirement.
ONE of the following Culture/Literature survey courses:
- FR334, Introduction to Francophone Cultures
- FR342, Survey of French Civilization


## German

German majors must fulfill the following requirement:
ONE of the following:

- GR305, Germany Today
- GR310, German for Writing


## Spanish

Spanish majors must fulfill the following area requirements:
ONE 300-level skills course:

- SP300, Spanish Grammar in Context
- SP305, Spanish for Oral Communication
- SP310, Spanish for Written Communication
- SP320WS, Service Learning in Spanish

TWO Culture/Literature courses:

- 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: South America
- 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

ONE Linguistics course:

- SP325, Introduction to Hispanic Linguistics
- SP375, Spanish Pronunciation
- SP410, Topics in Communication Skills in Spanish
- SP435, Spanish Dialectology
- SP445, Topics in Hispanic Linguistics


## 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.

## Study Abroad

Through membership in the International Student Exchange Program, Butler offers programs in Argentina, Austria, Canada (Quebec), Chile, China, Colombia, Costa Rica, France, Germany, Mexico, Spain, and other countries. Students may choose to participate in other programs through Butler-directed study abroad through the Center for Global Education. Students receive credit for study abroad.

## Advanced Placement

All students enrolling in language courses at Butler must take a placement exam before enrolling unless they have completed courses at the college level in the same language. Students who place at the 200 - or 300 -level on this exam earn from three to nine hours of advanced placement credit after completion of six credits of coursework at the 300 -level (with grades of C or better) in that language. Students who have taken the College Board Advanced Placement Test in high school and receive a four or five are placed at the 300 -level of the appropriate language. Those students will also receive an additional three hours of 300 -level credit.

## 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, and gaming systems (DS, Wii, etc.) with games in a variety of languages, etc. 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. The MLC staff is trained in academic technology and research methodology to support all facets of language learning and teaching at Butler.

## Courses in English

Language majors can count one FL course towards a major. Courses taught in English do not satisfy the foreign language competency requirement in the College of Liberal Arts and Sciences.

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.

## 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.

## Courses in Foreign Languages

To help students gain fluency, the target language is used extensively from the first day. Courses on the 300 - and 400 -levels are conducted completely in the target language.

## Core Courses

TI 225-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).

## Chinese Courses

CN101, Beginning Chinese 1: Emphasis on spoken Chinese. Development of speaking, listening, and writing skills, and 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 and 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 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 Language Center. Prerequisite: CN 203, placement by evaluation or the equivalent. (U)(4). 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.

## CN370, 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.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, and insights into French and Francophone cultures. Prerequisite: No previous formal French instruction. (U)(4). Annually, term varies.

FR102, Beginning French 2: Continuation of FR 101. Development of speaking, listening, reading and writing skills, and 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.

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 342. (U)(3). Annually, term varies.

FR325, Intro to French Linguistics: Basic elements of French linguistics, phonetics, phonology and stylistics. Prerequisite: FR334, FR342, or permission of instructor. (U)(3). Occasionally.

## FR334, 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. (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: FR305 or 310 (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.

FR342, 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. (U)(3).

## FR345, France and Francophone

World:1900 to Present: A survey of France and the Francophone world in the 20th and 21 st centuries through the study of literature and other cultural material. Prerequisite: FR310 and either FR334 or FR342, or permission of instructor. (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. (U/G)(3). Occasionally.

FR425, 17th Century France: Study of 17th Century 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. Prerequisites: FR310 and either FR334 or 342 Prerequisites: FRS
or permission. (U/G)(3). Occasionally. The College of LIberal ArTS An

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).
FR435, 18th Century France: Overall view of the French Enlightenment and study of the literary works of the period. Prerequisite: FR310 and either FR334 or FR342, or permission of the instructor. (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: FR310 and either FR334 or FR342, or permission of the instructor. (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. Prerequisites: FR310 and either FR334 or FR342, or permission of the instructor. (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. Prerequisites: FR310 and either FR334 or FR342, or permission of instructor. (U)(3). Occasionally.

FR485, Topics in Francophone Studies: Study of the literatures and/or cultures of French-speaking 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: FR310 and either FR334 or FR342, or permission of instructor. (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. ie of Liberal Arts and Sciences

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 and insights into German speaking cultures. Prerequisite: No previous formal German instruction or placement in German 101. (U)(4). Annually, term varies.

GR102, Beginning German 2: Development of speaking, listening, reading, and writing skills and 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).

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.

GR301, German Conversation: (U)(1).
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).

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).

## 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).

## 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).

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).

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).

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).

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 college German 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.GR400, Internship: A supervised work experience in business, government, media, or other institutions. Primary language must be German. May be complete abroad or in the U.S. Prerequisite: Acceptance into the 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).

GR470, Topics in German Studies: The 19th Century: Study of select writers, genres, or themes within the context of nineteenthcentury 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).
GR475, Topics in German Studies: The 20th Century: Study of select writers, genres, or themes within the context of the twentiethcentury German culture. Topics may include fin-de-siècle literature, Kafka, GDR literature, multicultural Germany. Prerequisite: Three years of college German or equivalent. (U)(3).

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. Prerequisites: 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 Spanishspeaking 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 intermed/adv. 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/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: Two years of college Spanish 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: Two years of college Spanish 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.

## SP 320S, 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: $300-$ level placement, or 305 and 310 preferred. (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: Two years of college Spanish or placement on the $300-\mathrm{level}$. The department faculty strongly advise students enrolling in this course to have completed one 300-level skills course. (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. Prerequisites: Two years of college Spanish or equivalent or placement on the $300-\mathrm{level}$. The department faculty strongly advise students enrolling in this course to have completed one 300-level skills course. (U)(3). Occasionally.

SP335, Spain: Middle Ages to 1700: Use of selected reading and audio-visual materials to study the history, literature, and arts of Spain from the Middle Ages through the seventeenth century. Prerequisite: two years of college Spanish or placement on the 300 level. The department faculty strongly advise students enrolling in this course to have completed one 300-level skills course. (U)(3). Occasionally.

SP340, Spain:1700 to present: Use of selected reading and audio-visual materials to study the history, literature, and arts of Spain from the eighteenth century to the present. Prerequisite: two years of college Spanish or placement on the 300 level. The department faculty strongly advise students enrolling in this course to have completed one 300-level skills course. (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: two years of college Spanish or placement on the 300 level. The department faculty strongly advise students enrolling in this course to have completed one 300-level skills course. (U)(3). Occasionally.

SP350, Spanish Amer Culture: Mexico, C America, Caribbean: Geographically oriented approach to the study of the historical events, literary and cultural artifacts, and individual figures which have shaped and defined the countries of Spanish Mexico and selected countries from Central America and the Caribbean. Prerequisite: two years of college Spanish or placement on the 300 level. (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: two years of college Spanish or placement on the 300 level. The department faculty strongly advise students enrolling in this course to have completed one 300-level skills course. (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: two years of college Spanish or equivalent or placement on the 300 level. The department faculty strongly advise students enrolling in this course to have completed one 300-level skills course. (U)(3). Occasionally.

SP365, Hispanic Short Story: Study of selected stories by Spanish and Latin American authors. Prerequisite: two years of college Spanish or placement at the 300 level. The department faculty strongly advise students enrolling in this course to have completed one 300-level skills course. (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: two years of college Spanish or equivalent or placement on the 300 level. The department faculty strongly advise students enrolling in this course to have completed one 300 -level skills course. (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: three years of Spanish or equivalent. The department faculty strongly advise students enrolling in this course to have completed one 300 -level skills course. (U)(3). Occasionally.

SP380, Spanish Morphosyntax: 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 judgments, and so on. The department faculty strongly advise students enrolling in this course to have completed one 300-level skills course. (U)(3). Occasionally.

SP400, Internship: A supervised work experience in business, government, media or other institutions in a Spanish-speaking country as a part of a year or semester study abroad program or in bilingual settings in this country. Prerequisite: acceptance into the program and
permission of the department chair. (U/G)(3). Occasionally.

SP410, Topics: Communication Skills in
Spanish: Communications Skills in Spanish: Practice in communication in Spanish. Topics vary. Course may be repeated with a different topic. Prerequisite: three years of college Spanish or equivalent. (U/G)(3). Occasionally.

## SP420, Topics: Golden Age of Spain:

Exploration of the 16th and 17th centuries through literature, history, and/or artistic expression. Course may be repeated with each different topic. Prerequisite: three years of college Spanish or equivalent. (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. Prerequisite: three years of college Spanish or equivalent. (U/G)(3). Occasionally.

## SP430, Topics: 18th and 19th Century

 Spain: 18th- and 19th-Century Spain: Study of historical, literary, and/or artistic aspects of the period. Course may be repeated with each different topic. Prerequisite: three years of college Spanish or equivalent. (U/G)(3). Occasionally.SP435, Spanish Dialectology: The geography of Spanish in terms of origin, change, dialects, society, contact with other languages, slang, etc. Prerequisite: three years of Spanish or equivalent. (U)(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. Course may be repeated with each different topic. Prerequisite: three years of college Spanish or equivalent. (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 contact, etc. Prerequisite: three years of Spanish or equivalent. (U)(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. Prerequisite: three years of college Spanish or equivalent. (U/G)(3). Occasionally.

SP460, Topics: 20th Cent Span-Amer
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. Prerequisite: three years of college Spanish or equivalent. (U/G)(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 esthetic concerns of these countries, one nation or a region. Prerequisite: three years of college Spanish or the equivalent. (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. Prerequisite: three years of college Spanish or equivalent. (U/G)(1).(3). 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. Prerequisite: three years of college Spanish or equivalent. (U/G)(2). Annually, term varies.
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. Prerequisite: three years of college Spanish or equivalent. (U/G)(3). Annually, term varies.
SP499, Honors Thesis: (U)(3). Annually, term varies.

## Neuroscience Minor

Administration
Tara T. Lineweaver, Ph.D., program director Jordan Hall, Room 286, (317) 940-9848

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 life span, 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 of the science and 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:

21 semester hours including:
Biology: 12 hours

- BI202 Cellular and Molecular BiologyFundamentals
- BI203 Genetics-Fundamentals
- 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 Studies Program

## Administration

Craig W. Auchter, Ph.D., director
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.


## Peace and Conflict Studies Major

## Requirements

The major in Peace and Conflict Studies (PACS) consists of 36 hours of courses, including six hours of internship or service learning.

## Required Peace and Conflict Studies Courses

A PACS major must complete 21 hours of Peace and Conflict Studies courses. The following courses are required:

1. PACS/PO102: Introduction to Peace and Conflict Studies
2. PACS/PO220: Community Mediation
3. PACS/PO322: International Conflict and Peace Building
4. PACS: One theory or methods class in a relevant discipline (consult with PACS advisor).*
5. PACS: One 400 -level class or thesis (consult with PACS advisor)**
6. PACS: Internship and/or service learning (6 hrs)

Internship and service learning requirements are fulfilled at locations in Indianapolis such as Exodus Refugee Center, Peace Learning Center, Kaleidoscope Youth Center, the Julian Center, or through SP300 Service Learning in Spanish. Students may also fulfill this requirement through Washington, D.C. 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 for PACS or another 400-level seminar class in anthropology or international studies that addresses issues of conflict, peace, and justice.

## Electives

Students in the major are required to complete 15 hours of Peace and Conflict Studies electives at the 300 level or above.

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 PACS director.

## Peace and Conflict Studies Minor

## Requirements

The minor in Peace and Conflict Studies (PACS) consists of 18 hours of courses.

## Required Courses ( $\mathbf{1 2}$ hours)

A minor in Peace and Conflict Studies must complete 12 hours of required courses. The following courses are required:

1. PACS/PO102: Introduction to Peace Studies
2. One of the following:

- PACS/PO220: Community Mediation
- PACS/PO322: International Conflict and Peace Building

3. PACS Internship or Service Learning (3 hrs): Internship and service learning
requirements are fulfilled at locations in Indianapolis such as Exodus Refugee Center, Peace Learning Center, Kaleidoscope Youth Center, the Julian Center, or through SP300 Service Learning in Spanish. Students may also fulfill this requirement through Washington, D.C., semester internships or as a component of study abroad.
4. PACS/PO490: Senior Seminar: Special Topics in Peace Studies (such as Cultures of Peace in Latin America; Youth, Violence, and Peace; War in Iraq).

## Electives (6 Hours)

The remaining six hours are fulfilled by electives.

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 PACS director.

Peace and Conflict Studies electives include, but are not limited to, the following:

## History and Anthropology

- AN368 Peoples and Cultures of the Muslim World: Coming of Age in the Middle East
- AN380 Selected Topics: Youth and Conflict in Global Cinema
- AN380 Selected Topics: Conflict Resolution Through the Arts: Anthropological Inquiry
- AN380 Selected Topics: Trespassing: An Anthropology of Our Segmented Lives
- AN320 Gender and Cross-Cultural Perspective
- AN389 Topics: New Social Movements
- HS340 The Civil War
- HS390 Topics in History: The Cinema of War
- HS390 Topics: War and Peace in the Middle Ages
- HS390 History of Human Rights.
- HS390 1968
- HS344 Jim and Jane Crow


## Modern Foreign Languages

- SP320S 01W Service Learning in Spanish

Philosophy and Religious Studies

- RL354 Islam: Religion, Culture, Society
- RL363 Religion, Politics, and Conflict in South Asia
- RL391 Topics in Religion: CFV Seminar (e.g. Jerusalem and Religious Peacemaking)
- PL364 Ethics and International Relations
- PL375 Ethics of War and Peace


## Political Science

- PO220 Community Mediation
- PO322 International Conflict and Peace Building
- PO350 African Politics
- PO355 US Foreign Policy
- PO362 Popular Participation in Latin America
- PO372 Role of Protest in US Politics
- PO380 Understanding the Israel-Palestine Conflict
- PO380 Understanding Conflict: Northern Ireland
- PO380 The Earth Charter
- PO380 Environmental Justice
- PO380 Youth and Conflict


## Sociology

- SO349 Social Movements
- SO339 Violence, Media, Culture


## Communications

- COM481 Topics Communication Studies: Social Movements
- JR417 International Communication Systems
- COM353 Interpersonal Communication
- COM412 Advocacy


## Other

- SW240 Gender and Generations in War and Peace
- IS390 01 The UN and Other International Organizations
- GWS202 1 Resistance for Social Change in US
- TI262 Self and Service


## Philosophy and Religion

## Administration

Chad Bauman, Ph.D., department chair Professors
Katharina Dulckeit, Ph.D.; Stuart Glennan, Ph.D.; Paul Valliere, Ph.D.; Harry van der Linden, Ph.D.

## Associate Professors

Chad Bauman, Ph.D.; James F. McGrath, Ph.D.; Tiberiu Popa, Ph.D.

## Instructor

Brent Hege, Ph.D.

## 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 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 . All classes are taught by professors; 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 very prestigious law schools.

## PL Program 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.

## Degrees

- Major in Philosophy
- Minor in Philosophy
- Ethics Minor
- Combined Major in Philosophy and Religion
- Combined Major in Philosophy and Psychology


## 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 ( 6 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. Plus 12 hours of additional philosophy courses 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

A combined major in philosophy and religion consists of 42 hours. Detailed requirements are posted at the department website, www.butler.edu/philosophy-religion/ philosophy/program-requirements, or can be obtained at the department's office.

## Requirements for the Combined Philosophy and Psychology Major

A combined major in psychology and philosophy consists of 51 hours. Detailed requirements are posted at the department website, www.butler.edu/philosophy-religion/ philosophy/program-requirements, or can be obtained at the department's office

## Requirements for the Minor

A minor in philosophy consists of 18 hours in philosophy, nine of which should be at the $300-$ or $400-l e v e l$. 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 Ethics Minor consists of 18 credit hours, 12 of which should be philosophy (PL) courses and nine of which should be at the 300 -or 400-level. Specifically:

- A foundational PL course in ethics covering basic moral theories and concepts (3 credit hours).
- Two additional PL courses to be chosen from a wide variety of courses in normative philosophy ( 6 credit hours).
- A course in applied ethics showing how moral deliberation is pivotal to some specific profession or field of human activity (3 credit hours).
- Two electives, to be selected from PL courses or courses with an ethical focus from other disciplines ( 6 credit hours).
For more details, contact the director of the program, Dr. 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 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 Soc and Pol 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: 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 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 metaethical topics may also be covered. (U)(3). Fall and spring.

## Philosophy Courses <br> 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.
0.2083 inPL310, 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.

PL320, Theory of Knowledge: A study of some fundamental problems of epistemology: the nature of knowledge and certainty, the relation of knowledge to belief, evidence and the justification of beliefs, and the problem of skepticism. Prerequisite: one philosophy course or permission of instructor. (U/G)(3). Occasionally.

PL323, Intro to Analytic Philosophy: A survey of some of the important themes in analytic philosophy from the late 19th century to the present, focusing on such figures as Russell and Wittgenstein. 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 twentieth 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's 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: BI110 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 selfinterest, 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. Prerequisite: 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 Vocationto 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 through Butler's Center for Global Education, sometimes with support from departmental awards.
- Close contact with top-notch facultyButler'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, 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 savvyThe 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.

## Degrees

- Major in Religion
- Minor in Religion
- Combined Major in Philosophy and Religion


## Requirements for 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 credit 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
- RL374, Faith and Doubt
- Any approved three-credit internship, field study or study-abroad opportunity

2. Islam and the Asian Faiths (6 credit 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 credit 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, 392, Seminar on Religion and World Civilization (3 total credit hours)
5. RL405, Internship (3 credit hours)
6. RL381W, Theory and Method (3 credit hours)

Plus 33 total hours in religion, 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:

1. Oral Expression Development-Majors will give an oral presentation in their junior or senior year (ask departmental faculty for details).
2. Butler Seminar on Religion and World Civilization-Majors not enrolled in RL391, 392 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

A combined major in philosophy and religion consists of 42 hours. Detailed requirements are posted at the department website, www.butler.edu/philosophy-religion/ philosophy/program-requirements, or can be obtained at the department's office.

## Requirements for the Minor

A minor in religion consists of 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

SW 260-RL, Sects in the City: 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.
TI 250-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.

TI 251-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.
TI 220-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 nineteenth-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).

## Religion Courses

RL304, The Book of Psalms: Study of the book of 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 of 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 second 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.

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 so-called Gnostic Gospels, students will also learn about Gnostic group that has survived from the ancient world down to the present day. (U)(3). Occasionally.

RL347, History of Christianity: Historical development of Christianity from the first century to the present. Special attention to the 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 of 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:

Treats a specific subject area of Judaism or Christianity which 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 which is not the major subject of a regularly scheduled course. (U)(3). Occasionally.

RL368, Topics in Religion and Society: Treats a specific subject area of religion and society which is not the major subject of a regularly scheduled course. (U)(3). Occasionally.

RL369, Topics in Religious Studies: Treats a specific subject area of religion 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 and how 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.

RL372, 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.

RL377, 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.

RL378, 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.

## 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 Prerequisite: Two religion courses or junior standing. (U)(3). Occasionally.

## RL391, Seminar on Religion and World:

Course is based on attendance at four public evening seminars and four Saturday morning workshops during the academic year. Theme varies annually. Students enrolled in RL391 are expected to take RL392 the following semester. (U)(1). Fall.

RL392, Seminar on Religion and World: 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. Prerequisite: RL391 or instructor permission. (U)(2). Spring.

RL397, Field Seminar Abroad: The 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: The 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: The 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)(3). Occasionally.

RL499, Honors Thesis: Undergraduate honors thesis in religion. (U)(3). Occasionally.

## Physics and Astronomy

Administration
Xianming L. Han, Ph.D., department chair
Professors
Xianming Han, Ph.D.; Brian W. Murphy, Ph.D., director, J. I. Holcomb Observatory and Planetarium

## Associate Professor

Dan W. Kosik, Ph.D.

## Assistant Professor

Gonzalo Ordonez, Ph.D.

## Instructor

Jennifer L. Poor, Ph.D.
Associate Director, J. I. Holcomb
Observatory and Planetarium
Richard B. Brown, M.S.

## Why Study Physics?

Physicists 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 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: 7 to 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 belongs to the Southeastern Association for Research in Astronomy, a consortium with telescopes in Chile and Arizona, allowing research through remote observing as well as on-site 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 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 consortium, which operates two remotely operated telescopes located 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 learning and research.
- Butler recently acquired Big Dawg, a supercomputer with 384 compute cores, which we use for departmental research.
- Students can earn a degree in mechanical engineering, electrical engineering, computer engineering, biomedical engineering, energy engineering, or motorsports engineering concurrently through our Engineering Dual Degree Program (see Engineering Dual Degree Program).


## Physics Program Student Learning Objectives

Students majoring in physics 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, to evaluate uncertainty, and they will learn to communicate their findings both through speaking and through writing.

## Degrees

- Major in Physics
- Minor in Astronomy
- Minor in Physics
- Major in Physics with Engineering Dual Degree Program (See Engineering Dual Degree Program.)


## Requirements for the Major

- PH201, 202, Introduction to Analytical Physics
- PH301, Modern Physics
- PH303, Electromagnetic Waves and Optics
- PH311, Experimental Modern Physics
- PH321, Intermediate Classical Mechanics
- PH325, Thermodynamics and Statistical Physics*
- PH331 and PH332, Electromagnetic Theory I and II**
- PH495, Senior Seminar
** 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, 421, and 422. Other electives may be advised by the department in consideration of a student's individual career plans. Consideration should be given to the requisites for each course in both math and physics. MA106, 107, and 208 are prerequisites for most 300 -level physics courses. Students wishing to pursue a career in
astronomy and astrophysics should combine the physics degree with the astronomy minor.

## 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, 202, Introduction to Analytical Physics
- AS301, Modern Astronomical Techniques
- AS311, Astrophysics I
- AS312, Astrophysics II

Note that MA106 and MA107 are prerequisites to the upper-division astronomy courses.

## Core Courses Offered by Physics NW262-PH, The Physical World: A one-

 semester 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 twosemester 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 twosemester 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). 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: MA106. (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: An introduction to special relativity and quantum mechanics emphasizing fundamental principles. Topics include Lorentz transformations, relativity, blackbody radiation, photoelectric effect, Compton effect, Schrödinger equation, quantum statistics, lasers, superconductivity, nuclear properties and reactions, and elementary particle properties. Prerequisites: MA208 (may be concurrent) and PH202 or permission of instructor. (U)(4). 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: PH 301 or permission of instructor. (U) 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. Prerequisite: 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. Prerequisite: 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) Spring.

PH331, Electromagnetic Theory 1: A study of classical electric and magnetic fields, boundary value problems, dielectric and magnetic materials, Maxwell's equations, radiation, and special relativity. Three hours of lecture per week. Prerequisites: PH202 and MA208 or permission of instructor. (U/G) Fall.

## PH332, Electromagnetic Theory 2: A

 study of classical electric and magnetic fields, boundary value problems, dielectric and magnetic materials, Maxwell's equations, radiation, and special relativity. Three hours of lecture per week. Prerequisites: PH202 and MA208 or permission of instructor. (U/G) Spring.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: PH 331 and MA334 or permission of instructor. (U/G) 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)
PH413, Independent Study in Physics: (U) (1).

PH421, Quantum Theory 1: A study of the Schroedinger and Heisenberg pictures of simple systems including the harmonic oscillator and inverse-r potential, approximation methods, and the theory of angular momentum. Four hours of lecture per week. Prerequisites: PH301 and PH331 or permission of instructor. (U/G) (4). Occasionally.

PH422, Quantum Theory 2: A study of applications of quantum theory to atoms and molecules, time-dependent theory, second quantization and scattering theory, and relativistic quantum theory. Four lectures per week. Prerequisite: PH421 or permission of instructor. (U/G)(4). Occasionally.

## PH427, 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: PH 321 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: PH427 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)(3).

## 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)(3).

## Core Courses 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 largescale 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 inter-stellar 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.

## Political Science Department

Administration
Siobhán McEvoy-Levy, Ph.D., department chair

## Professors

Margaret A. Brabant, Ph.D.

## Associate Professors

Craig W. Auchter, Ph.D,; Terri R. Jett, Ph.D.; Siobhán McEvoy-Levy, Ph.D.

## Assistant Professor

Robin Turner, Ph.D.; Su-Mei Ooi, Ph.D.
Professor Emeritus
Dave Mason, Ph.D.

## 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, different ways of being and knowing, of 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 Program Student Learning Outcomes

1. Analyze and differentiate various political movements, structures, and institutions in the United States and other countries.
2. Differentiate and make connections between theory and practice, between global and local events, and between political science and other disciplines.
3. Demonstrate an awareness of different cultures and their effect on domestic and international affairs.
4. Demonstrate leadership and collaborative skills through active engagement in service learning and internships.
5. Apply research and communication techniques effectively.
6. Value the fundamental importance of one's membership in the human polity, emphasizing citizenship and political community.

## Degrees

- Major in political science
- Minor in political science


## Requirements for Political Science Major

33 hours of PO 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 writing-intensive departmental seminar (PO490)

## Requirements for Political Science Minor

18 hours of PO 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. (U)(3). Annually, term varies.

## TI 255-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, of 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) Occasionally.

PO101SL, 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 such as social justice, human rights, and peace building with reference to contemporary cases. (U)(3). Annually, term varies.

PO131, Introduction to US 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 patterns in international politics with emphasis on conflict and cooperation, the international economy, resource scarcity, and the foreign policies of major powers. (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.

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, in depth, specific cases of inter-state and intrastate 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.

PO332, State and Local Govt 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.

## PO337, 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).

PO350, African Politics: A study of the problems and policies of African states regarding nationalism, national integration, ideologies of development, democratization, and stability. Focus on sub-Saharan Africa, although a continent-wide consideration for some topics. Prerequisite: PO151 or junior standing. (U)(3). Annually, term varies.

## 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)(3). Occasionally.

## PO358, Foreign Policy Making in

Washington: This course focuses on foreign policy-making as practiced in Washington, D.C.; it examines how politicians, lobbyists, citizens, and diplomats interact in and around Washington's corridors of power to determine international policy outcomes. Firsthand 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. capitol, 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).

## PO371, 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.

## PO372, 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).

PO374, Public Administration: (U)(3). PO375, Public Opinion: This course is an introduction to the design, implementation, use, and abuse of public opinion surveys for social and political research, news and policy analysis, and political campaigns. In the course of the semester, we will develop a survey instrument, conduct interviews with CATI (computer-assisted telephone interviewing) software, and do some basic analysis of the results. Prerequisite: One of the following: PO101, PO201, junior standing, or consent of instructor. (U/G)(3). Occasionally.

PO377, 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, junior standing, or permission of instructor. (U)(3). Fall and spring.

## PO 381S, 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.

PO 383S, 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.

## PO 385SL, 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.

## PO407, 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). 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)(2). 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)(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.

## Psychology Department <br> Administration

Robert H. I. Dale, Ph.D., department chair Professors
John Neil Bohannon III, Ph.D.; Robert H. I. Dale, Ph.D.; Kathryn A. Morris, Ph.D.

## Associate Professors

R. Brian Giesler, Ph.D.; Tara T. Lineweaver, Ph.D.; Joel Martin, Ph.D.; Robert J. Padgett, Ph.D.
Assistant Professors
Amanda C. Gingerich, Ph.D.; Alison L. O'Malley, Ph.D.
Visiting Assistant Professor
Andrew J. Butler, Ph.D.

## 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 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 year-long 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 participated in at least one research project.

Students benefit from participating in student-faculty 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 one-third of our students attend graduate school immediately after completing our program. Another third enter graduate school 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 not only master the core content areas of psychology, but will also value an empirical approach to the study of behavior. In doing so, students will develop the skills to analyze behavior within a theoretical context, design studies to address research questions, and evaluate the validity of scientific claims.

## Degrees

- Major in psychology
- Minor in psychology
- Combined major in psychology and sociology/criminology (see combined majors)
- Combined major in psychology and sociology/social work (see combined majors)
- Combined major in psychology and anthropology (see combined majors)
- Combined major in psychology and philosophy (see combined majors)
- Combined major in psychology and political Science (see combined majors)
- The department participates in the neuroscience minor (an interdisciplinary program)


## 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 (21-23 credit hours) consists of: SW250 or equivalent, or NW220; PS210 and PS211; any three of PS202, PS235, PS320, PS350, PS385, or PS440; and any psychology course at the 300-400 level (including courses in the previous list).

## Core Courses Offered by Psychology 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. This course fulfills the ICR requirement and this entails engaging with local sustainability initiatives. (U)(3). Annually, term varies.

SW 250-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.

NW 220-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.

## NW 221-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.

## 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. (P/F) (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: C- or 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: 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

## 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 biopsycholosocial 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 Psych:

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 and contrast 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, spring, and summer.

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). Occasionally.

## 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: 10 hours or permission of instructor. (U/G)(3). Annually, term varies.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: 10 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: 10 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: 10 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. Prerequisites: 10 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, comparativecognition, theories of learning, eyewitness testimony, or other specialty areas in learning and cognition. Prerequisites: C- or better in PS385 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. Prerequisites: C- or better in PS235 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. Prerequisite: C- or better in PS210, PS211, PS320, 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: 10 hours or permission of instructor. (U/G)(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: 10 hours and permission of instructor. (U/G)(1-6). Fall, spring, and summer.

PS499, Honors Thesis: (U)(3).
Science, Technology and Society
Administration
Carmen Salsbury, Ph.D., director

Is there any part of our world that is not transformed and challenged by science and technology? Our health, our families and communities, and our environment are all impacted by developments in science and technology. Science and technology are also driven by society. Economics, ethical principles, cultural practices, and politics all influence the funding, progress, implications, and the public's overall understanding of science and technology. The Science Technology and Society (STS) major is designed to prepare you for a number of career paths in health, environment, education, law, public policy, communications, and many other fields.

The STS program integrates 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 experience are emphasized in several of these classes. STS internships with local health, environmental, and technological agencies and companies allow students to apply their academic learning to community problems and to network with employers.

## Student Learning Objectives

Students majoring in STS will:

- understand that science and technology influence, and are influenced by, politics, sociology, economics, and other elements of the social sciences.
- understand that science and technology influence, and are influenced by, religion, the various branches of philosophy, ethics, and other elements of the humanities.
- understand that science and technology influence, and are influenced by, language, communication, public translation and transmission, and other elements of rhetoric.
- research, write, and speak about issues concerning science and technology as they relate to society.
- value the interdisciplinary nature of pressing problems related to health, technology, and the environment, and also recognize the necessity of interdisciplinary solutions to those problems.


## Degrees

Major in STS
Minor in STS

## Requirements for the Major

STS core courses (6 hours):
ST200, Introduction to Science Studies
One of these:
ST320, Philosophy of Science
ST330, The Social and Rhetorical Study of Science and Technology

Twenty-four (24) hours of STS elective courses from various departments for a total of 30 hours. Of these, 18 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 (ST405 or ST406) can be used to satisfy this requirement.

Fifteen (15) 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. The 15 hours of science and/or technology courses are not understood to be part of the STS major, and as such, they may be counted toward a minor or major in a science and technology discipline.

Co-curricular requirements: STS majors must participate in at least six (6) designated co-curricular activities-typically public lectures or other events concerned with STS issues. The program publishes a calendar of events that can be used to meet this requirement. Students must submit a report describing their impression of the event to the director of the STS program.

## Requirements for the minor

STS core courses (6 hours):
ST200, Introduction to Science Studies
One of these:
ST320, Philosophy of Science
ST330, The Social and Rhetorical Study of Science and Technology

Twelve (12) hours of STS elective courses from various departments for a total of 18 hours. Of these, nine (9) 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 (ST405 or ST406) can be used to satisfy this requirement.

Ten (10) 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. The 10
hours of science or technology courses are not understood to be part of the STS minor, and as such, they may be counted toward a minor or major in a science and technology discipline.

Co-curricular requirements: STS minors must participate in at least three (3) designated co-curricular activities-typically public lectures or other events concerned with STS issues. The program publishes a calendar of events that can be used to meet this requirement. Students must submit a report describing their impression of the event to the director of the STS program.

## Core Courses offered by Science,

 Technology, and Society TI 261-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 Scienceand 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.

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, The Social and Rhetorical Study of Science and Technology: This course investigates the social and rhetorical processes that participate in the production of scientific and technological knowledge. We investigate the language of science, its development and its conventions, and its use and misuse. We also explore social, economic, and political influences on science. (U)(3). Annually, term varies.

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.

ST405, 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. Open only to juniors and seniors with the permission of the director of the STS program. (U)(3). Occasionally.

ST406, 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. Open only to juniors and seniors with the permission of the director of the STS program. (U)(6) Occasionally.

ST499, Honors Thesis: (U)(3). Fall and spring.

## STS elective courses

Courses counting for STS 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 STS elective courses will be published on the STS website, www.butler.edu/science-technology, each semester in advance of the advising and registration period.

## Sociology and Criminology

Administration
Katherine B. Novak, Ph.D., department chair

## Professors

Kenneth D. Colburn Jr., Ph.D.; Antonio V. Menendez, Ph.D.; Katherine B. Novak, Ph.D.; Marvin B. Scott, Ph.D.

## Assistant Professor

Krista M. C. Cline, Ph.D.

## 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, businesses, 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, socio-cultural 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 life-long, active, responsible, and informed members of the greater community.

## Degrees

- Major in sociology
- Minor in sociology
- Major in sociology with a specialization in social work and social policy
- Major in criminology
- Minor in criminology
- Combined major in sociology and criminology (see "combined majors")
- Combined major in sociology with a specialization in social work and criminology (see "combined majors")
- Combined major in criminology and psychology (see "combined majors")
- Combined major in sociology with a specialization in social work and psychology (see "combined majors")


## Requirements for Sociology

( 39 credit hours + 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 487.

## Additional Area Requirements

 (24 credit hours)At least one course from each of the following four areas:

## Socio-Cultural 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

Socio-Cultural 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 Sociology Minor (21 credit hours) <br> Minor Core Requirements <br> ( 9 credit hours)

- SW200SO, Understanding Society
- SO391W, Social Theory Seminar
- SO393, Research Methods Seminar


## Additional Area Requirements

 ( 12 credit hours)At least one course from each of the four concentration areas in Sociology (see Sociology Major).

## Requirements for Sociology with a specialization in Social Work and

 Social Policy ( 39 credit hours + 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 credit hours)

- SO381, Social Work and Social Policy
- SO383, Social Work Methods
- SO385, Practice Skills in Social Work


## Additional Area Requirements ( 15 credit hours)

At least one course from each of the following four areas:
Socio-Cultural 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

Socio-Cultural 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 Criminology

 (39 credit hours + 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.

## Additional Area Requirements (24 credit hours)

## Law and Crime Area, Five Courses ( 15 credit hours)

- SO321, Crime and Society and
Four of the following:
- SO311, Law and Society
- SO326, Gender, Race, and Crime
- SO339, Violence, Media, and Culture
- SO345, Deviance and Social Control
- SO351, Punishment and Society
- SO353, Juvenile Justice and Delinquency

Socio-Cultural Diversity, One Course ( 3 credit hours)

- SO317, Gender and Society
- SO323, Racial and Ethnic Relations
- SO325, Class, Status, and Power
- SO329, The Sociology of Racism

Global and Comparative Studies, One
Course ( 3 credit hours)

- SO331, Latin American Societies
- SO333, European Societies
- SO335, Global Society
- SO355, International Crime

Sociology Elective, One Course ( 3 credit hours)

- Any other 300-level sociology course excluding SO381, SO383, or SO385.

An internship or service-learning course is required.

## Requirements for Criminology Minor (21 credit hours)

## Minor Core Requirements

( 9 credit hours)

- SW200SO, Understanding Society
- SO391W, Social Theory Seminar
- SO393, Research Methods Seminar


## Additional Area Requirements

 ( 12 credit hours)
## Crime and Law Area, Three Courses ( 9 credit hours)

- SO321, Crime and Society and
Two of the following:
- SO311, Law and Society
- SO326, Gender, Race, and Crime
- SO339, Violence, Media, and Culture
- SO345, Deviance and Social Control
- SO351, Punishment and Society
- SO353, Juvenile Justice and Delinquency
- SO355, International Crime


## Socio-Cultural Diversity, One course ( 3 credit hours)

- SO317, Gender and Society
- SO323, Racial and Ethnic Relations
- SO325, Class, Status, and Power
- SO329, The Sociology of Racism


## Core Courses 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, inequality (inc. class, race, and gender), and social institutions. Prerequisite to all upper-level sociology courses. (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 webbased 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.

SO317, Gender and Society: An examination of gender as a system of stratification and a social construction which 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: SW200SO 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: SW 200 (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: SW200SO. (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: SW200SO. (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.

## SO380, Selected Topics in Sociology: An

 in-depth 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: 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: 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 populations 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. Pre-requisites: SW200, two sociology courses and junior standing. (U)(3). Spring.

SO393, Research Methods Seminar: The principal methods of social researchformation 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)(2). Fall.

SO487, 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)(1). Spring.

SO499, Honors Thesis: (U)(3). Fall.


## College of Education

The College of Education of Butler University was created in 1930 when Butler's Department of Education, established in 1919, and the Teachers College of Indianapolis, founded in 1892, were 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.


## Administration

Ena Goodrich Shelley, Ph.D., dean; Debra Lecklider, Ph.D., associate dean; Angela Lupton, M.S., assistant dean

## Professors

Stephen Bloom, Ph.D.; Deborah Corpus, Ed.D.; Arthur Hochman, Ed.D.; Thomas Keller, Ed.D.; Matthew Maurer, Ph.D.; Ena Goodrich Shelley, Ph.D.; Marilyn Strawbridge, Ed.D.

## Associate Professors

Kathryn Brooks, Ph.D.; Suneeta Kercood, Ph.D.; Debra Lecklider, Ph.D.; Meredith McAllister, Ph.D.; Mindy Welch, Ph.D.

## Assistant Professors

Daniel Abbott, Ph.D.; Nicholas Abel, Ed.D.; Susan Adams, Ph.D.; Susan Adamson, Ph.D.; Rebecca Cramer, Ph.D. (ABD); Kelli Esteves, Ed.D.; Lisa Farley, Ed.D.; Ryan Flessner, Ph.D.; Shelly Furuness, Ph.D.; Brooke KandelCisco, Ph.D.; Brandie Oliver, Ed.D.; Catherine Pangan, Ed.D.

## Instructors

Cathy Hargrove, M.S.; Angela Lupton, M.S.; Theresa Meyer, M.S.; Richard Mitchell, M.S.; Marilyn Sudsberry, Ph.D.

Director of EPPSP:
Marilyn Sudsberry, Ph.D.
Director of School Counseling:
Tom Keller, Ed.D.
Director of METL:
Brooke Kandel-Cisco, Ph.D.
Accreditation Coordinator:
Karen Farrell, M.S.

Director of Student Personnel Services: Sue Stahl, M.S.

The College of Education 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 National Council for Accreditation of Teacher Education.

## 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. Selfmanaged files are appropriately responsive and practical in the era of portfolios and electronic applications and communications. Current job listings for Indiana are on "Blue" on the Butler website or on individual school district websites.

## College of Education Undergraduate Transition Points

The College of Education has set four transition points for delineation and progress through the licensure/degree program. Students who transfer into the College of Education from another Butler University college must have a 2.3 cumulative grade point average. Updates will be made annually. Please check www.butler.edu/coe for updates.

## College of Education Core I and College of Education Core II

Upon completion of COE CORE I and COE CORE II, it is expected that students will have met the following criteria:

1. A cumulative grade point average of 2.5 .
2. A student receiving a grade of $\mathrm{C}-, \mathrm{D}$, or F in FYS 101 and FYS 102 will have repeated the course and received a grade of C or better or obtained a grade of C or above in a comparable or higher-level class.
3. Successful completion of COE CORE I (grade of C or better):
-ED112: Introduction to the Profession of Teaching (grade of $\mathbf{C}$ or better)
-ED245: Introduction to Computers in Education (grade of $\mathbf{C}$ or better)

- PRAXIS I—Passing scores must be received one week prior to the start of classes each semester, or other accepted benchmark indicator is on file.
- Philosophy of Teaching Statement
- Disposition assessment
- Decision based on above criteria by college committee (with appropriate program representation) on ability to continue in the program.

4. Successful completion of COE CORE II
(grade of $\mathbf{C}$ 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)

- Disposition assessment
- Decision based on above criteria by college committee (with appropriate program representation) on ability to continue in the program.

Students who do not meet the above criteria may appeal in writing to the administrative team of the College of Education and may be asked to appear in person.

## Apply to Teacher Education (end of COE CORE II)

In the second semester of the sophomore year, any student who wishes to be admitted to the Teacher Education Program must complete the application available online in Student

Resources/FORMS and meet the following criteria:

1. Recommendation by the College Committee or the senior college.
2. Cumulative grade point average of 2.5
3. Completion of approved professional education courses with a grade point average of 2.5 or better and no grade less than a C (C- is not acceptable). These courses are: ED112, ED245, ED241, ED242, and ED244.
4. Satisfactory completion of appropriate clinical and field experiences.
5. A grade of C- in the major or any education course must be repeated, or with the advisor's permission, a class may be substituted and a grade of C or above attained.
6. Satisfactory progress in completing requirements for a specific major must be met.

## College of Education Core III Program-Specific

To enter COE CORE III the student must have successfully completed COE CORE I and COE CORE II and must be admitted to Teacher Education based on the aforementioned criteria.

Decision is made by the program area for admittance to COE CORE IV: Student Teaching and is based on disposition, assessment rubrics and grades.

## Apply to Student Teaching

1. Candidates for student teaching must have completed COE CORE I and COE CORE II and have 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 online under Student Resources/ Student Teaching. Completed applications (except for fall semester grades) are to be submitted to the advisor by the December published date. Completed applications including fall semester grades are due in JH 185 the first week of the second semester (January published date). If applications are not received by the January date, there is no guarantee that a placement will be made.
3. Candidates must have a cumulative grade point average of 2.5 , a grade point average of 2.75 in the teaching major, and a grade point average 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 administrative team of the College of Education and may be asked to appear in person.

## College of Education Core IV: Student Teaching and Internship

The student must have successfully completed COE CORE I, COE CORE II, and COE CORE III, be recommended for student teaching or internship by the program, and have met all of the above criteria to be admitted.

PRAXIS II, CPR/Heimlich/AED
certification and suicide prevention training are required for original licensure.

Recommendation for licensure is made by the program area based on disposition, assessment rubrics, and grades.

## Elementary Education

In addition to a comprehensive liberal arts background, the elementary education program prepares students 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 Information Literacy. Specific curriculum requirement sheets are available online at www.butler.edu/coe under Student Resources. This program addresses these University Student Learning Objectives.

- SLO \#1. Students will articulate and apply required content knowledge within their area(s) of study. (Cognitive)
- SLO \#2. Students will communicate clearly and effectively. (Psychomotor)
- SLO \#3. Students will share their talents with Butler and the greater community at large. (Affective)


## Middle/Secondary Education

The Middle/Secondary Program at Butler University 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 as they should be, not simply perpetuating schools as they currently exist. The Middle/Secondary Program at Butler University 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 the classroom for undergraduates seeking licensure in grades 5-12 in these areas. Indiana teacher licensure for Physical Education, Health Education, and Music Education is P-12. Minors and/or licensing are also available in English as a New Language, Special Education, and Information Literacy. Specific curriculum requirements for each content area are available online at www.butler.edu/coe under Student Resources.

The Middle/Secondary program is grounded in a set of beliefs, which serves as a compass to guide the work we do with students within our program and are the principles that we hope will guide the work our candidates will do with their future students. We believe in the:

## 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.
- Student needs are social, cultural, linguistic, developmental, physical, emotional, and cognitive in nature.
- Meeting the foregoing needs provides safe opportunities for students to take risks that lead to individual growth.
- Students come first.


## Ethic of Care: Core Value: <br> 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 life-long learning.
- Having a deep understanding of this knowledge base strengthens teachers' 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.
- 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 a teacher's work.

These beliefs further reflect our college's core values and guide the student learning outcomes we strive to achieve. The Student Learning Outcomes (SLO) are as follows:

- SLO \#1: Based on both formative and summative assessments, develop, implement, and adapt developmentally appropriate, inquiry-based, and engaging instructional lessons for students in middle school and high school.
- SLO \#2: Using critical reflection as a basis for improving their professional practices, create positive and inclusive instructional environments using their understanding of social, cultural, literacy, academic, and cognitive developmental characteristics of adolescent learners.
- SLO \#3: Demonstrate responsibility for their interpersonal and instructional interactions with students, parents, colleagues, and community partners.


## 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, Intro 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.

ED227S, 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 organization aimed at meeting the range of developmental needs of early adolescents and young adults. Field experience is required. Prerequisite: Completion of COE CORE I, may co-enroll in COE CORE II and ED228. (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, 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. Includes 15 hours of non-class time field experiences. Prerequisite: Successful completion of COE CORE I and Praxis I. (U) (2). Fall, spring, and summer.

ED243, Methods and Materials: Strategies for Teaching Students w/ Mild Disabilities: Methods and Materials: Strategies for Teaching Students with Mild Disabilities This course examines the application of research-validated practices in the areas of placement, differentiation instruction and assessment, adaptations to curriculum areas,
and common instructional strategies used for students who require support in the general education classroom or resource room. Instructor guided fieldwork is required. (U)(3). Both 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 for the College of Education. 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.
ED307, 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 Arts: Middle 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, 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, 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 Instructional 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 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: The Perspective in Leadership course 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 of the course is to create a learning experience where you will come to understand leadership theories, styles, and skills. You will learn leadership development is a process of leading yourself before trying to lead others through the development of your own Personal Leadership Plan (LDP). You will collaborate with university and community leaders on how leadership styles are applied and practiced. (U)(3). Spring.

## ED371, Intro to Information Literacy-

 undergraduate: This information literacy course is designed to help education majors, and others, 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 inhibitand support learning English and content will be analyzed. Prerequisites: ED241, 242, 244. $(\mathrm{U})(3)$. 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 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 effectively teaching all learners. (U/G)(3). Occasionally.
## ED407, 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.

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 teaching," 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, 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 I, evennumbered 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)(3). 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 personnel services, and satisfactory completion of ED243, ED307, ED404, and ED412. (U/G)(3). Occasionally.
## ED 418S, Teaching Science: Middle

Childhood: This course focuses on inquirybased 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, 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 non-fiction 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 on-line setting. Prerequisite: Completion of COE CORE I, ED227, ED228, and ED327 or Co-Enrollment. (U/G)(3). Fall.

## ED423, Student Teaching Jr/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. (P/F) (U)(5). Fall and spring.

## ED425, Secondary Student Teaching 1:

Taken only in conjunction with ED423 or 426. 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. (P/F) (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. (P/F) (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 content specific 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 $\operatorname{COE} \operatorname{CORE} \operatorname{III}(\mathrm{U})(2)$. Fall and 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, the 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. (P/F) (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, the 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. (P/F) (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 technology related 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).

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 are 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 include ED408, ED490, and 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 selfreflection on their professional practices with multilingual learners. Using state ENL licensing standards, students will document how they support multilingual learners. Prerequisites include ED 408, ED490, ED497, ED498, and ED465. (U/G)(3). Spring.

## 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). Occasionally.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 (P-12) is included. (G)(2). Spring.

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 and spring.

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 and spring.

ED492, Special Education Law: This online course will cover information on P.L. 94-142-IDFA/IDEA-97; Section 504; Article 7 and its implication for teachers. The online activities will include reviewing articles, power point presentations, hand-outs and case studies, and participating in discussion via e-mail. 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 ( $\mathrm{K}-3$ ) 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 ED 440. 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 which demonstrate competency of the INTASC/CEC teaching standards for mild intervention. Concurrent with ED 442. 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 which 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 and spring.

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 second language 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. (Fall and spring). (U/G)(3). Fall, spring, and summer.

ED499, Honors Thesis: Fall and spring.
SW 219-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.

## Human Movement and Health Science Education (formerly Physical Education/Health Education)

The mission of the Human Movement and Health Science (HMHS) Education 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 HMHS Education Program is nationally recognized by two Specialized Program Associations: the National Association for Sport and Physical Education (NASPE), and the America Association for Health Education (AAHE). The HMHS Education Program functions as 1) an academic content-specific teacher licensure program in Physical Education (P-12) and Health Education (P-12), 2) a pre-professional preparation program for allied careers in non-school settings, and 3) a post-graduate school preparation program for various allied disciplines.

1. Teacher Licensure: Candidates who successfully 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 HMHS Education program can pursue careers including but not limited to the following: Coaching-sports for all ages, abilities and levels; Fitness-personal training, corporate wellness, group fitness instruction; Athlete Development and Sports Performance-strength and conditioning for secondary, collegiate, and professional level teams, sport-specific 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, 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. Post-Graduate Studies: Candidates who successfully complete the HMHS Education 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 HMHS Education program of study prepares all candidates to sit for credible professional certifications such as: the Certified Health Education Specialist (CHES), the American College of Sports Medicine (ACSM), Certified Personal Trainer (cPT), Health/Fitness Instructor (ACSM-HFT), National Strength and Condi-tioning Association (NSCA), Certified Personal Trainer (NSCA-CPT), and/or Certified Strength and Conditioning Specialist (CSCS) exams.

## Courses

PE127, Intro to Health, Physical Education, Recreation, and Dance: An orientation course for physical education 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.

## PE202, Skills Series: Basketball/Soccer:

 Course emphasizes content knowledge and development of competent or proficient motor skill performance using basic sportrelated skills that are foundational to effective teaching and coaching. Related emphasisincludes 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 sportrelated 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.

## PE204, Skills Series: Tennis/Badminton:

Course emphasizes content knowledge and development of competent or proficient motor skill performance using basic sportrelated 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.

PE207, Skills Series: Weight Training/
Fitness-Track and Field/Cross Country: Fitness-Track and Field/Cross Country: Course emphasizes content knowledge and development of competent or proficient motor skill performance using basic sportrelated 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.

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.

PE237, 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 +/ 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. (U)(2). Prerequisite: Physical Education major or permission of instructor. 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.

## PE297, Orientation to Internships in 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 Center for Disease Control 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 long term exposure to exercise training. Prerequisite: BI257 or equivalent. (U)(3). Spring.

## PE325, The Adapted Program in Physical

 Education: (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 CORE I and CORE II. (U)(3). Fall.PE330, Introductory Methods for Physical and Health Education: This course provides instruction for developing teacher effectiveness in 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 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 long term planning through seminar and field practicum. Prerequisite: PE331. (U)(5). Fall.

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: PE 323 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 PE 266 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, III. (U/G) (3). Fall.

## PE445, Internships in Physical Education:

This course is a fulltime, field-based internship at approved agencies under the guidance of site-based 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 CCORE I-III. Concurrent enrollment PE445 (U/G)(3). Fall, spring, and summer.

PWB101, 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 life-long 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: This course reflects cultural diversity and dance infusion of Israel. Dance as a lifetime movement activity is the primary emphasis with additional focus on a variety of dance performance, dance as a socially constructed pastime, lyrical interpretation, dance history, Biblical and liturgical connections, and Hebrew and Arabic languages. No previous dance experience necessary. Open to students who have not completed a PWB course. (U)(1). Fall and spring.

## PWB103-DA, Beginning Ballet II (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.

PWB 105-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, qualityof 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.

## PWB128-PE, Enhancing your Physical

Activity: Open to students who have not completed a PWB course. (U)(1). Occasionally.

## PWB129-PE, Strength and Conditioning:

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: 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 life-long 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 health-related 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 bootcamp 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.

PWB 150-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, Sport 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.

PWB 162S, Wagging, Walking, and Wellness: This course is designed to foster life-long 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:

 Introduction to Physical Well Being through the 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.
## PWB 164-DA, Continued Study of Yoga:

Continuing Physical Well Being through the 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. Pre-requisite, two years prior experience; yoga mat required. (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 toward sustaining a health-enhancing and physically active lifestyle. During Fall and Spring terms, open to students who have not completed a PWB course. (U)(1). NOTE: Enrollment is reserved for students currently participating on an NCAA Division I Butler intercollegiate sports team. Fall and spring.

PWB167, Independent Study: During Fall and Spring terms, open to students who have not completed a PWB course. (U)(1). Occasionally.

## College of Education

 Graduate ProgramsGraduate 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 (see Wiles and Krueger scholarship programs described in this Bulletin).

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/graduate/programs.

## Experiential Program for Preparing School Principals (EPPSP)

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 two-year, 36 -credit-hour program resulting in a master of science degree. A cohort of approximately 25 students begins in January of each year. Requirements for admission to EPPSP may be found at www.butler.edu/educational-administration.

## 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.


## EPPSP Student Learning Outcomes (SLO)

1. The 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.
2. The student has the knowledge and ability to promote the success of all students by collaborating with families and other community members, responding to diverse community interests and needs, and mobilizing community resources.
3. The student has the knowledge and ability to promote the success of all students by promoting a positive school culture, providing an effective instructional program, applying best practice to student learning, and designing comprehensive professional growth plans for staff.
4. The student has the knowledge and ability to promote the success of all students by understanding, responding to, and influencing the larger political, social, economic, legal, and cultural context, and by acting in a fair and ethical manner.
5. The student has the knowledge and ability to promote the success of all students by managing the organization, operations, and resources in a way that promotes a safe, efficient and effective learning environment.

## EPPSP Student Learning Outcomes Aligned with Courses

|  | SLO <br> $\# 1$ | SLO <br> $\# 2$ | SLO <br> $\# 3$ | SLO <br> $\# 4$ | SLO <br> $\# 5$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| ED557 | I | I | I |  |  |
| ED558 | R | R | R |  |  |
| ED559 |  |  | R | I | I |
| ED561 | R | R | R | R | R |
| ED562 | R | R | R | R | R |
| ED563 | R | R | R | R | R |

## Courses

For course descriptions not given, see previous education course listings.

## ED557, School Principalship-Phase

I: 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

II: 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, The School Principalship-Phase
III: 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 IV:

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
I: 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

II: 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.

## Effective Teaching and Leadership Program (METL)

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 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 presentation of the thesis research project. More information about the program can be found 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 or corporation, or continue studies at the doctoral level.


## METL Student Learning Outcomes (SLO)

1. The 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.
2. The student displays a commitment to educational practice and research as moral, intellectual, and creative work that demands knowledge, skill, imagination, and care.
3. The student appropriately applies an understanding of research design by conducting data collection and analysis strategies pertinent to classroom research.
4. The student demonstrates an understanding of teacher leadership and commitment to teacher leadership by serving as educational leaders.

METL Student Learning Outcomes Aligned with CORE Curriculum Courses

|  | SLO <br> $\# 1$ | SLO <br> $\# 2$ | SLO <br> $\# 3$ | SLO <br> $\# 4$ |
| :--- | :--- | :--- | :--- | :--- |
| METL CORE <br> courses |  |  |  |  |
| ED530-531 | I | I | I | I |
| ED504 | R |  |  |  |
| ED569 | R |  | R |  |
| ED535 |  | R | R | R |

## Courses

ED407, 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 I, evennumbered years) (U/G)(3). Summer.

ED420, Adolescent Literature and Strategies
for Teaching: This hybrid course familiarizes students with a wide variety of fiction and non-fiction 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 on-line 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 include ED408, ED490, and ED498. (U/G)(3). Fall.

ED467, Standards-Based Professional Practices for Multilingual Learners: Through a professional learning community seminar model, students will engage in critical selfreflection 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). 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 and spring.

## 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 second language 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)(1). 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)(1). 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. (G)(3). Prerequisites: 530, 531. Fall.

ED507, Developmental Reading: This course focuses on the research in reading development, including stages of oral language acquisition and literacy development. Students will explore the psychological, cognitive, and sociological foundations of reading development from preschool through adult levels. Prerequisite: ED408 or similar course. (Summer I, evennumbered years) (G)(3). Summer.

## ED508, Assessments and Interventions

 for Reading Difficulties: Students will enhance their knowledge of literacy and literacy learning, particularly as it applies to recognizing, understanding, and working with reading and writing difficulties. Students' work with children experiencing reading difficulties will frame class discussions of current research. Prerequisite: ED408 or similar course. (G)(3). Spring.
## ED509, Literacy Coaching: Literacy

 coaches will learn to constructively provide an evaluation of their own and others' teaching practices. They will gain practice in assisting classroom teachers and paraprofessionals as they work to improve their reading instruction. Prerequisites: ED 508. (G)(3). Fall.ED510, Advanced Literacy Coaching: This course is a continuation of ED509. The literacy coaches will deepen their ability to evaluate teaching practices and track student and teacher progress. The literacy coaches will supervise and coach teachers and paraprofessionals as they work to improve their reading instruction. Prerequisites: ED 509 (G)(3). Spring.

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).

ED515, Intro to Information Literacygraduate: This 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). 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.
## ED527, 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). 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.

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).

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. (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, 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. (G)(3). Spring.

ED700, Project/Thesis (M.S.): 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)(3). Occasionally.

## ED744, 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)(l) 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.

## ED751, 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.
## 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)(1). Occasionally.
## Graduate Initial Licensure Program (GILP)

The Graduate Initial Licensure Program (GILP) is a non-degree graduate program designed for initial licensure in secondary education. Licensure content areas include English/Language Arts, Mathematics, Science (Life Science, Physical Science, Physics, Chemistry, Earth/Space Science), Social Studies (Economics, Geographical Perspectives, Government and Citizenship, Historical Perspectives, Psychology, Sociology), and Foreign Languages (Spanish, French, German). GILP will be "housed" within the Master's in Effective Teaching and Leadership (METL) Program, and by completing the GILP requirements, candidates will make progress toward the M.S. degree. GILP candidates will not, however, be mandated to complete the M.S. degree as a part of the GILP requirements.

## Admission

Those interested in applying to the program should demonstrate a readiness for graduate studies. Additionally, applicants must:

- Possess an undergraduate degree from an accredited college or university
- Complete the application for the METL program (https://adm.butler.edu/apply/) There is an option for GILP within the METL application.
- Submit either a GRE or MAT score, unless undergraduate GPA is a 3.0 or higher.
- Complete an admission interview with a COE faculty member.
- Demonstrate content expertise, which includes the following:
- Pass Praxis II in an area of intended licensure.
- Undergraduate major or master's degree from an accredited university in the content area of intended licensure OR submit a portfolio providing evidence of competency in the content area of intended licensure based upon the Indiana Content Standards for that area.
- There are additional requirements from the Indiana Department of Education. Those applying to the program should visit the IDOE website for additional requirements.


## GILP Plan of Study

## First Summer

Summer I:

- ED450
- ED534a

Summer II:

- ED534b

Fall

- ED420
- ED528
- ED528a
- ED584

Spring

- ED438
- ED580 or ED581

Second Summer
Summer I:

- ED530

Summer II:

- ED531


## Courses

ED420, Adolescent Literature and Strategies
for Teaching: This hybrid course familiarizes students with a wide variety of fiction and non-fiction 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, ED 227, ED 228, and ED 327 or Co-Enrollment. (U/G)(3). Fall.

ED438, Seminar for the Secondary Clinical Capstone Experience: 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). 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.

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.

ED 528A, 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 ED 528. 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). 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 ED 438. Prerequisite: Permission of the GILP director and director of student personnel services. (G)(5). Fall and 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 ED 438. Prerequisite: Permission of the GILP director and director of student personnel services. (G)(5).

## ED584, Strategies for Teaching Children

 Needing Mild Intervention: This course examines the application of research validated 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.
## School Counseling Program Master of Science in School Counseling

The 48 -semester-hour master's degree program in school counseling is nationally accredited by the Council for Accreditation of Counseling and Related Educational Programs (CACREP) and meets its 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 faculty-student interaction. Our program has partnerships with a local non-profit organization to assist grieving children and a local high-risk inner-city school. Our counselor education faculty is committed to respecting diversity 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 of our graduate students and alumni.

The School Counseling Program complies with all the national standards of CACREP, 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 and skills and practices in the following areas: 1) Foundations of the Counseling Profession, 2) Counseling, Prevention and Intervention, 3) Diversity and Advocacy, 4) Assessment, Research and Evaluation, 5) Academic Development, 6) Collaboration and Consultation, and 7) Leadership

## Courses

ED547, Appraisal: Theory and Technique: 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.

ED572, Fundamental Counseling Theory and Techniques: A study of basic counseling theories and techniques, followed by application of those techniques to real and roleplaying 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.

ED577, Group Procedures: A study of group interactions, occasions for group counseling, and techniques of group counseling. (G)(3). Spring.

ED630, Diversity and Similarity: This course is designed to help students develop multicultural and advocacy competencies for working with people of diverse groups in 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). Summer.

## 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: ED 572 and ED 577 (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, 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). Occasionally.

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).

## ED679, Contextual Dimensions of Mental

 Health Counseling: This class will provide an overview of community agency counseling, the roll 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). Occasionally.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:

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 compliment this on-the-job training program. (G)(3). Occasionally.

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)(l) Occasionally.

ED753, Independent Study: Counseling: Independent study arranged with program adviser. (G)(2). Occasionally.

## Accelerated Alternative Program for Initial Licensure in Mild Intervention (P-12)

Students will be accepted to the program by fulfilling the following:
A. Successfully passed PRAXIS I by meeting the cutoff scores in all three areas of: Reading-176; Math-175; Writing-172. Successful passing scores must be submitted as part of the application. PRAXIS-I-PPST (PreProfessional Skills Test) is a basic skills test. The three-part battery of tests measures the ability to understand, analyze, and evaluate written messages, solve mathematical problems with skills and knowledge acquired through secondary school, and write effectively.
B. Submitting three letters of recommendation on your potential with children with exceptional learning needs.
C. Providing an undergraduate transcript from an accredited university showing a cumulative 3.0 grade point average or above. Applicants must provide evidence
of having achieved a 3.25 or higher in the following subjects: Math, Social Science, Natural Science, and English.
D. Successfully completing an interview with a Butler faculty panel.
E. Completing the application to be a non-degree seeking, initial-licensure-only graduate student at Butler University.
F. Demonstrating prerequisite knowledge: To assess prior learning, the candidate will show the faculty panel that he or she has CLEP scores to show documentation of testing out of other course work.

## Program Requirements: Total of $\mathbf{3 0}$ semester hours

Note: Schedules for courses are not finalized until one semester prior.
Spring Semester: six hours

- ED480
- ED583
- ED492

Summer I and II: nine hours

- ED490
- ED491
- ED408

Fall Semester: nine hours

- ED584
- ED479
- Elective reading class

Spring Semester: six hours

- ED589
- ED454
**any other classes deemed necessary to complete the entrance to Butler University as decided by the faculty panel.


## 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 are 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. ( $\mathrm{U} / \mathrm{G}$ )(3). Occasionally.

## 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 (P-12) is included. (G)(2). Spring.ED490, Assessment of Children 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 and spring.

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. 15 clock hours of instructor-guided fieldwork are required. (U/G) (3). Fall and spring.

ED492, Special Education Law: This online course will cover information on P.L. 94-142-IDFA/IDEA-97; Section 504; Article 7 and its implication for teachers. The online activities will include reviewing articles, power point presentations, hand-outs and case studies, and participating in discussion via e-mail. Prerequisite: Completion of COE CORE I. $(\mathrm{U} / \mathrm{G})(1)$. 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. 15 clock hours of instructorguided fieldwork are required. (G)(3). Spring.

ED584, Strategies for Teaching Children Needing Mild Intervention: This course examines the application of research validated 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 (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 standards-based teaching portfolio will be assembled and critiqued as it demonstrates competency in all INTASCCEC teaching standards for mild intervention. (G)(3). Spring.


## The College of Business

## The guiding theme in the College of Business

 is "Real Life, Real Business."Undergraduate business students in the College of Business (COB) receive a rich, wellrounded, 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 Freshman 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 Accelerator, which is 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 freshman 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 (MPA) 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 in their course of study, including a Becker FastPass CPA review course and an international study trip.

## Our Vision

The Butler University College of Business will become a recognized national center of excellence in business education.

## Our Mission

The mission of the Butler University College of Business 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.

## Administration

Chuck Williams, Ph.D., dean; Roberto Curci, Ph.D., associate dean; William K. Templeton, Ph.D., associate dean; Robert B. Bennett Jr., JD, chair of economics, law, and finance; Craig Caldwell, Ph.D., chair of marketing and management; William Terando, Ph.D., chair of accounting, management information systems, operations, and statistics; Sarah Lutomski, MA, academic advisor; Larry A. O'Connor, MBA, executive director of Butler Business Accelerator Professors
Robert B. Bennett Jr., JD; Roberto Curci, Ph.D.; Peter Z. Grossman, Ph.D.; Sakthi Mahenthiran, Ph.D.; Robert S. Main, Ph.D.; Gregory Osland, Ph.D.; William Rieber, Ph.D.; William K. Templeton, Ph.D.; Chuck Williams, Ph.D.

## Associate Professors

Priscilla Arling, Ph.D.; Craig Caldwell, Ph.D.,; Steven Dolvin, Ph.D.; Richard E. Fetter, Ph.D.; Kathy A. Paulson Gjerde, Ph.D.; Anne Kelly, Ph.D.; Barry E. King, D.B.A.; Larry J. Lad, D.B.A.; Robert Mackoy, Ph.D.; Daniel H. McQuiston, Ph.D.; Margaret Padgett, Ph.D.;

James F. Sander, Ph.D.; Deborah Skinner, Ph.D.; William Terando, Ph.D.; Karel A. Updyke, Ph.D.

## Assistant Professors

Hilary Buttrick, JD.; Courtney Droms, Ph.D.; Stephanie Fernhaber, Ph.D.; Jill Kirby, Ph.D.; Peter Prescott, JD; Sheryl-Ann Stephen, Ph.D.; Denise Williams, Ph.D.; George Wilson, Ph.D.; Hongjiang Xu, Ph.D.

## Instructors

Jason Davidson, MBA; Zachary Finn, M.S., director of the Davey Risk Management and Insurance; Richard Halstead, MBA; Kathryn King, MBA; Thomas Litkowski, M.A.; Richard McGowan, Ph.D.; James McKneight, JD;
Stephen Nelson, MBA; Pamela Rouse, MBA; Sonali Shah, Ph.D.

## Adjunct Faculty

Eric Bedel, MBA; J. Douglas Boles, JD; Leah Bovell, Ph.D.; Donald Broad, JD; David Castor, MBA; Donald Coffin, Ph.D.; Richard Forsythe, MBA.; Ryan Fuhrmann, MBA; David Futrell, Ph.D.; Richard Hofstetter, JD; Robert Kirk, Ph.D.; Ted Kuhn, M.A.; John Lucas, MBA; Patrick Meister, Ph.D.; David Morton, MBA; Jill Novotny, MBA; Lisa Pearo, DBA; John Peri, M.S.; Tim Robinson, JD; Laura Rodman, MBA; Robert Rush, MBA; Steve Schelonka, MBA; Michael Simmons, MBA; Marietta Stalcup, MBA; Brant Voight, JD; Tim Zimmer, Ph.D.

## Executives in Residence

Mark Foglesong, Ph.D.; Ed Friel, B.S.; Ronald Gress, B.S., Rhoda Israelov, M.S.; Marvin Recht, B.B.A.; Jane Surges, M.S.; Jerry Toomer, Ph.D.; Scott Troyer, M.S.; Karen Valencic, B.S.; Charles Williams, B.S.

## COB Staff

Katie Abernathy, MBA, business development manager, B.B.A.; Mary Allen, reception; Joyce Bacone, secretary, graduate programs; Melissa Beckwith, MBA, project manager, B.B.A.; Angela Chaplin, career development consultant; Sandra Coppadge, secretary, career development; Kelley Hahn, secretary, executive education; Gina Head, secretary, dean's office; Kathleen Hood, MBA, director of budgets and analyses; Stephanie Judge, MBA, director of marketing and communications; Brian Landis, M.S.I.A., managing director, B.B.A.; Carrie Meyer, career development consultant; Jill Novotny, coordinator of undergraduate career development; Chris Stump, MBA, project manager, B.B.A.; Ronald Thomas,
director, executive education; Diana Todd, administrative assistant, B.B.A.

## Undergraduate Program Requirements for Graduation

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 innovations, 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 grade point average 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 grade point average 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.

1. Describe and explain how generalized business knowledge is used to make decisions and solve business problems.
2. Recognize and apply specialized, functional business knowledge to make decisions and solve business problems.
3. Identify contemporary, global macroenvironmental trends and issues, and describe opportunities and threats they present to businesses.
4. Display knowledge and skills in the areas of teamwork and leadership.
5. Display clear, concise, and professional communication skills.
6. Display critical thinking skills, including the ability to integrate and analyze information, make decisions, and solve problems.
7. 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 description of each major below.

## Curriculum

Essential elements of the undergraduate curriculum are the university core, 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. 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 freshman or sophomore.

Common business studies. The purpose of these courses is to 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: The purpose of this portion of the program is to help the student develop a career interest, a sense of emerging professionalism, problem-solving skills, and communication experience, as well as aid in attaining entrylevel 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 topics-financial, 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 objectivesgraduates will be able to:

1. Explain and apply the purpose and process of financial reporting, which conveys useful information to decision-makers by reflecting an organization's financial position, the results of operations, and cash flows (this includes the accounting process, from gathering and recording information to preparing financial statements).
2. Explain and apply concepts of the theoretical foundation and authoritative sources in the profession that drive the analysis, measurement, recording, and reporting of transactions in the financial statements of for-profit companies.
3. Identify and describe the information system's internal control procedures, as required by external accounting regulators.

## Economics

The major in economics builds on the nine-hour requirement of economics taken by all business students and focuses on the behavior of both large and small decisionmaking 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 not-for-profit) and for a variety of job responsibilities, from an entry-level position in a managementtraining 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 objectivesgraduates will be able to.

1. Determine how market structure affects market prices, quantities, and profitability.
2. Investigate the relationship of the international economy to the domestic economy, including the role of exchange rates.
3. 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 action-oriented 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 not-for-profit. 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:

1. Explain how innovativeness, pro-activeness, and calculated risk-taking contribute to the creation of something unique and of value.
2. Understand how to identify, critically evaluate, plan, and exploit an opportunity in an effective manner.

## Finance

The finance major is designed to provide students 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:

1. Explain investment decisions based on time value of money principles.
2. Appropriately structure a portfolio of investments applying the related concepts of diversification, portfolio theory, and asset allocation.
3. 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 with an IB major 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 not-for-profits, 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:

1. Identify contemporary, global macroenvironmental trends and issues, and describe opportunities and threats they present to businesses.
2. Demonstrate the ability to conceptualize business from a global perspective.
3. Demonstrate 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:

1. Identify and define basic concepts and terminology associated with information systems.
2. Design and implement a database.
3. Analyze and design specifications for information systems and communicate the solution to stakeholders.
4. Identify, define, and apply basic concepts and terminology associated with data networks in developing basic data networks.
5. 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 major 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 objectivesgraduates will be able to:

1. Analyze and create a strategic marketing plan, including: mission and objective development, situational analysis, target marketing development, marketing mix, control and evaluation.
2. Implement multiple marketing strategic frameworks.

## 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, healthcare management, international business, marketing, management information systems, and risk management and insurance, as well as a general business minor.

There are separate minor programs in healthcare management and management information systems designed for students with a major in business. Details and curriculum guides for all of the minors are available in the College of Business office and online

## Accounting Courses

AC 100S, 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. (U)(1). (P/F) 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: AC 203. (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 AC 302. 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: AC 203 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 master's in professional accounting courses. Prerequisites: 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: AC 204. (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: AC 301 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: AC 204, MS 265, and junior status. (U)(3). Fall.

## 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: AC 203, AC 204, and FN 340. (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 tax-payers. 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 reportingconclusions are stressed. Prerequisite: AC 204. (U)(3). Fall.

AC411, Advanced Accounting Topics: Examines the theory, procedures, and problems associated with advanced accounting issues. Course will include such topics as consolidations, foreign currency transactions and financial statement translations, Securities and Exchange Commission reporting, non-for-profit accounting, and other current issues of importance to the accounting profession.
Prerequisite: AC 302. (U)(3). Occasionally.

## 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 year-long 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 year-long 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 COB 101 or COB 201. 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: COB 201 and 44 hours. (U)(1). Fall and spring.

COB301, Professional and Career
Development III: This year-long 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 COB 300. Prerequisites: COB major and COB 201 or COB 301. (P/F) $(U)(0)$. 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, COB 300, a grade of at least Cin both MS 265 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 COB 401. The student is encouraged to broaden his/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: COB 401. (U)(3). Fall, spring, and summer.

## Core Courses offered by Economics SW 220-COB, 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.SW 221-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. I would expect the course to be cross-disciplinary and to 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: EC 231. (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: junior standing, EC 231 and EC 232. (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: EC 101 or EC 231. (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: EC 101 or EC 231. (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.

EC350, Managerial Economics: Application of microeconomic theory to the management of firms: demand, cost, and pricing; strategic behavior; and the boundaries of the firm. Credit will not be given for both EC 350 and EC 354. Prerequisites: EC 231, EC 232, MS 264. (U)(3). Occasionally.

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: EC 101 or EC 231. (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: EC 231 and EC 232. (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 EC 350 and EC 354. Prerequisites: EC 231 and EC 232. (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. Prerequisite: EC 231, EC 232. (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: EC 101 or EC 231. (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. Prerequisite: EC 231, EC 232. (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: EC 101 or EC 231. (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: EC 101 or EC 231. (U) 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: EC 231, EC 232, and MS 264 or MA 260. (U)(3). Spring.

## EC495, Special Topics in Economics:

Seminar in selected economics topics. Course content will vary from semester to semester. Prerequisite: EC 101 or EC 231. (U) Occasionally.

EC499, Honors Thesis: Occasionally.

## EC501, Independent Study in Economics:

 Occasionally.
## EC503, Independent Study in Economics: Occasionally.

## Entrepreneurship and Innovation

 CoursesEI101, Freshman Business Experience: Introduces freshman 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: Freshmen 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: EI 101 (formerly MG101), or sophomore standing. (U)(3). Fall and spring.

## EI202, Real Business Experience 2: A

continuation of EI 201. Students will launch a start-up business and operate it throughout the semester. Prerequisite: EI 201 (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 and EI201 (formerly MG201). (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.

## 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: Junior Standing, AC204, EC 231, EC 232, MS264, and MS 265. (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: AC 203, AC 204, and FN 340. (U)(3). Occasionally.
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: FN 340. (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: FN 340. (U) Fall.

FN371, 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 FN371. Prerequisite: FN 340. (U) 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. Prerequisites: 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: FN 340. (U) (3). Spring.

## FN470, 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; 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. Prerequisites: FN347, senior status, and permission of the instructor. (U)(3). Fall and spring.

FN495, Special Topics in Finance: Seminar in selected finance topics. Course content will vary from semester to semester. Prerequisite: FN 340. (U)(3). 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 EC 101 or SW220 or (EC 231 and EC 232). (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: EC 232, EC 101, or SW220; or permission of instructor. (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: EC 101 or EC 231. (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. Prerequisites: MG 365. (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. Prerequisite: EC 231, EC 232. (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: FN 340. (U) (3). 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. Prerequisites: MG 360. (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. Prerequisites: MK 380 or MK 280. (U)(3). Fall, spring, and summer. IB495, Special Topics in International Business: Seminar in selected international business topics. Course content will vary from semester to semester. (U)(3). Occasionally.

## Core Courses offered by Law and Ethics

TI 264-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. (U)(3). Fall, spring, and summer.

## Law and Ethics Courses

LE263, Legal Environment of Business:
Examines: (i) sources of law, legal process, and dispute resolution; (ii) legal issues relevant to formation and operation of a business organization (including the legal roles of management and the providers of capital); and (iii) laws governing an organization's relationship with its employees and agents. Prerequisites: EI101 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. Prerequisites: junior standing and LE262 or LE263. Fall, spring, and summer.

## Management Courses

 MG303, Leadership London: Leadership London is a seminar-style, site-based course taught in London, England that 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). Fall.

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. Prerequisites: junior standing. (U)(3). Fall and spring.

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 healthcare and utilization, health care expenditures, health care facilities, personnel, alternative delivery systems, and healthcare 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, Administrative Policy: The tasks of the manager in formulating short- and longrun corporate strategy. Using the case method, a framework is developed for integrating skills learned in other required business courses. Prerequisite: senior standing, CBA 401, MG 350, MG 360, MG 365, MK 380, and FN 340. (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: (G)(1). Occasionally.

## Core Courses offered by Marketing

 PCA 261-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 productprototypes 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 MK 380 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: junior Standing and AC 204, EC 231, and MS 264. (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: MK 280 or MK380. (U)(3). Fall and spring.

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. Prerequisite: MK 380 and MS 264. (U)(3). Annually, term varies.

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. (U)(3). Prerequisites: MK280 or MK380. Spring.

MK401, Independent Study: (U)(1).
Occasionally.

MK402, Independent Study: (U)(2). Occasionally.
MK403, Independent Study: (U)(3). Occasionally.

## MK471, 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: MK 380. (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: MK 380. (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, MG350, and MG360. (U) (3). Fall and spring.

## MK481, Advanced Selling Contemporary

Business Environment: This class will expand the students' understanding and ability of advanced sales techniques. Topics covered will include building long-term relationships with customers, team selling, negotiation strategies, use of multi-media presentations, and roleplaying. Prerequisites: MK 381 and MK 385. (U)(3). Occasionally.

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. Prerequisites: MK 380. (U) 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. Prerequisites: MK 380 or MK 280. (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. (P/F) 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, AC 204, EC 231, MS100, and MS 264. (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: MS 265 and SE267. (U)(3). Spring.

MS372, 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. Prerequisites: MS 265. (U)(3). Fall and spring.

MS374, 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 decisionmaking and business systems. Students will investigate how websites can be constructed to support a wide variety of objectives. Prerequisite: MS 265. (U)(3). Fall.

## MS375, 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: MS 265; 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 healthcare legislation such as HIPPA, application of electronic health records, decision support
systems, integrated hospital information systems, and control techniques. Prerequisite: MS 265. (U)(3). Spring.

## MS378, 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. Prerequisites: 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. Prerequisites: 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, 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. Prerequisites: RM350. (U)(3). Occasionally.

RM370, 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). Spring.

## 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. Prerequisites: 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.
## Graduate Programs <br> MBA Program

The master of business administration (MBA) degree is a professional degree, offered primarily to early- and 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 33 graduate credit hours. Students also may be required to complete up to 10 credit hours of foundation courses, depending upon grades and the currency of business-related courses in their undergraduate curriculum. Students must accumulate a minimum of two $G$ 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 the following concentrations:

- finance
- international business
- leadership
- marketing


## 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.

1. Identify the fundamental drivers of business and show how integrated business knowledge can be used to solve business problems.
2. Identify the dynamics affecting business in the international economy.
3. Display the ability to work effectively in teams.
4. Practice high ethical standards in decisionmaking.
5. Accept and support that organizational change is a natural business process.

## Curriculum

Three components comprise the MBA curriculum.

- Foundation Core (10 credit hours): provide the necessary background and competency in functional areas to prepare for the graduate core courses.
- Graduate Core ( 25 required credit hours): offer an integrated framework on contemporary leadership perspectives and management practices. Analytical tools and ethical aspects of decision-making are incorporated. International business considerations are an important part of the coursework. The objective is to provide an integrated management educational experience appropriate for leaders in a dynamic business environment and a growing international economy.
- Concentration courses (eight credit hours): allow students to develop expertise in finance, international business, leadership or marketing.


## MBA Courses

MBA410, Organizational Behavior: Provides a broad overview of the field to develop an understanding of the principles which 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.

## MBA420, 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 break-even analysis. (Z)(2). Fall, spring, and summer.

## MBA425, 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.

MBA430, 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. Prerequisites: MBA 420 must either be completed before taking MBA 430 or taking MBA 420 concurrently with MBA 430. (Z)(1). Fall, spring, and summer.

MBA435, Foundations in Marketing: An introduction to contemporary marketing strategies and practices. Content issues covered include: (1). marketing mix allocation, (2). segmentation, targeting and positioning, (3). internal and ethical considerations in marketing, (4). services marketing, and (5). relationship marketing. (Z)(1). Fall, spring, and summer.

MBA440, 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.

## 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 degreeseeking students in good standing only; 1-3 credits by agreement with sponsoring professor. Prerequisites: MBA 410, 420, 425, 430, 435, 440. (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 degreeseeking students in good standing only; 1-3 credits by agreement with sponsoring professor. Prerequisites: MBA410, 420, 425, 430, 435, 440. (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 degreeseeking students in good standing only; 1-3 credits by agreement with sponsoring professor. Prerequisites: MBA410, 420, 425, 430, 435, 440. (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, MBA410, 420, 425, 430, 435. (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 degree-seeking status, MBA410, MBA420, MBA425, MBA430, MBA435, 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 preventative 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, MBA410, MBA420, MBA425, MBA430, MBA435 (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 degreeseeking status, MBA410, MBA420, MBA425, MBA430, MBA435, MBA440, and MBA505 must either be completed before taking MBA520 or taking MBA505 concurrently with MBA520. (G)(3). 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 degreeseeking status, MBA410, MBA420, MBA425, MBA430, MBA435, MBA440, 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, MBA410, 420, $425,430,435,440$, 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: 1) buyer behavior, 2) market segmentation, targeting and positioning, and 3) management of the marketing mix. Research methodology topics include study design, data collection, and forecasting methods. Prerequisites: MBA degree-seeking status, MBA410, MBA420, MBA425, MBA430, MBA435, MBA440, and MBA505 must either be completed before taking MBA535 or taking MBA505 concurrently with MBA535. (G)(3). Fall, spring, and summer.
## MBA540, Operations Management and

Systems: This course deals with managing operations and information for strategic advantage. It deals with materials management for manufacturing and services, Japanese just-in-time concepts, work force scheduling for service organizations, substituting information for inventories, the hype and realities of the information super-highway, and using information to advantage in an age of timebased competition. Prerequisites: MBA degreeseeking status, MBA410, MBA420, MBA425, MBA430, MBA435, MBA440, and MBA505 must either be completed before taking MBA540 or taking MBA505 concurrently with MBA540. (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, and production) and integrates it 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. Theapproach relies heavily on in-depth case analysis and class discussion. Prerequisites: MBA degree-seeking status, MBA505, MBA510, MBA 515, MBA520, MBA525, MBA530, MBA535, MBA540. (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, the need for "win/win," maintaining a positive employee relation's climate, and other related subjects. Prerequisite: MBA510. (G)(2). Fall.

## 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). Spring.

## 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). Summer.

MBA557, Managing Change: Exposes students to the theory and practices necessary to plan, implement, and analyze the effectiveness of organizational change programs. Explores methods which promote autonomy, diversity, and continuous learning. Seeks to help students become effective internal and external change agents. Prerequisite: MBA510. (G)(2). Spring.

## 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. Prerequisites: MBA510. (G)(2). Summer.

## 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). Fall.

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: MBA 530. (G)(3). Spring.

## 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)(3). Fall.

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 an MBA finance elective. Prerequisite: MBA530. (G)(2). Summer.

## 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. Prerequisites: 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.

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 two-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 seven 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). Fall.

## 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). Annually, term varies.

## 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: 1) provide an overview of the concepts, theories, and models that will help the student understand buyer behavior; 2) provide exposure to the various research tools that organizations use to listen to the voice of the customer; and 3) develop the ability to use this information in formulating and evaluating marketing strategies. Prerequisite: MBA535. (G)(2). Spring.

MBA587, Marketing Research: A course designed to acquaint the student with basic marketing research methodology skills. Among content issues addressed in this class are: (1). exploratory, descriptive, and experimental research designs; (2). primary and secondary data (including scanner data) collection sources and methods; (3). hypothesis formulation and testing (qualitative and quantitative analysis methods); and (4). survey design. Ethical matters and international issues are incorporated across most content areas. Course content includes both parametric and nonparametric 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 decisionmaking process in sustainable establishing competitive advantage. Prerequisite: MBA535. (G)(3). 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, MBA410, MBA420, MBA425, MBA430, MBA435, MBA440. (G)(2). Occasionally.

MBA595, Special Topics: Seminar in selected topics. Course content will vary each semester. Prerequisites: MBA degree-seeking status, MBA410, MBA420, MBA425, MBA430, MBA435, MBA440. (G)(3). Occasionally.

## MPA Program

The Butler University College of Business offers the master of professional accounting (MPA) 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. Non-accounting majors are eligible to apply only if they have completed all of the prerequisite courses. The MPA degree, when combined with an undergraduate business degree, will enable students to meet the CPA certification requirement of 150 hours of postsecondary education mandated by most states.

## Requirements for Graduation

The program requires 30 graduate credit hours. These credit hours are divided into three categories: core (17 credit hours), concentration ( 9 credit hours) and Electives ( 4 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.

## Student Learning Objectives

The faculty of the COB has identified the following objectives for students completing its MPA curriculum. They address what students should know, be able to do, and value.

1. Demonstrate general knowledge of advanced financial accounting, managerial accounting, auditing, law, tax, and other accounting-related business concepts.
2. Demonstrate specialized knowledge of various accounting concepts, including international or multi-state financial accounting or tax concepts.
3. Demonstrate broad-based professional business and decision-making skills, such as critical thinking, problem-solving, oral, and written communication.
4. Display teamwork and leadership skills.
5. Apply appropriate ethical standards in professional decision-making.

## Curriculum

Three components comprise the MPA curriculum.

- MPA core (17 credit hours): provide the necessary foundation in financial accounting and reporting, managerial applications, auditing, and taxation.
- Concentration ( 9 credit hours): allow students to develop fluency and expertise in financial reporting or taxation.
- Elective (four credit hours): give students an opportunity to explore areas beyond their concentration, such as law, nonprofit and government, or international accounting.


## MPA Courses <br> 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 one to three credits by agreement with sponsoring faculty member. Prerequisites: MPA degreeseeking status and permission of graduate program firector. (G)(2). 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. Prerequisites: 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. Prerequisites: 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. Prerequisites: 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. Prerequisites: MPA degree-seeking status or permission of graduate program director. (G) (2). Fall.

MPA573, 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. Prerequisites: MPA degree-seeking 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 asses risk and corporate performance. Prerequisite: undergraduate degree in accounting or its equivalent. (G)(3). Fall.
MPA579, 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. Prerequisites: MPA degree-seeking or permission of graduate program director. (G) (3). Spring.

## 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. Prerequisites: 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. Prerequisites: 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 covered in this course include the topics 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. Prerequisites: MPA degree-seeking status or permission of graduate program director (G) (2). Occasionally.



## Mission Statement

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 life-long 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 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 the importance of an interdisciplinary approach by providing effective and innovative programs for undergraduate, graduate, and professional-level 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.


## Administration

Mary H. Andritz, Pharm.D., dean; Bruce D. Clayton, Pharm.D., associate dean; Bonnie K. Brown, Pharm.D., assistant dean for student affairs; Pamela L. Crowell, Ph.D., department chair of Pharmaceutical Sciences; Julia M. Koehler, Pharm.D., associate dean for clinical education and external affiliations; Jane M. Gervasio, Pharm.D., department chair of pharmacy practice; Michael S. Roscoe Ph.D., M.P.A.S., assistant dean for interprofessional education and chair, department of health sciences; Jennifer A. Snyder, M.P.A.S., director of the physician assistant program.

## Professors

Mary H. Andritz, Pharm.D.; Bruce D. Clayton, Pharm.D.; Pamela L. Crowell, Ph.D.; Julia M. Koehler, Pharm.D.; Jennifer A. Snyder, M.P.A.S.; Michael A. Vance, Ph.D.; Jeanne H. Van Tyle, Pharm.D.; W. Kent Van Tyle, Ph.D.

## Associate Professors

Jarrett R. Amsden, Pharm.D.; Alex J. Ansara, Pharm.D.; Meghan M. Bodenberg, Pharm.D.; Bonnie K. Brown, Pharm.D.; Henry F. Cole, Ph.D.; Nandita G. Das, Ph.D.; Sudip K. Das, Ph.D.; Alexandre M. Erkine, Ph.D.; Donald R Frosch, M.S.; Dennis C. Gardner, Pharm.D.; Jane M. Gervasio, Pharm.D.; Todd W. Hrubey, Ph.D.; Joseph K. Jordan, Pharm.D.; Laurence A. Kennedy, Ph.D.; Chad A. Knoderer, Pharm.D.; John A. Lucich, M.D.; Carrie M. Maffeo, Pharm.D.; Laurie L. Pylitt, M.H.P.E.; Carriann E. Richey-Smith, Pharm.D.; Michael S. Roscoe, Ph.D.; Kevin M. Tuohy, Pharm.D.

## Assistant Professors

Erin L. Albert, Pharm.D., M.B.A., J.D.; Kendra M. Atkinson, Pharm.D.; Kimberly M. Beck, Ph.D.; Tracy J. Costello, Pharm.D.; Medhane G. Cumbay, Ph.D.; Lauren M. Czosnowski, Pharm.D.; Patricia S. Devine, Pharm.D.; Stephanie L. Enz, Pharm.D.; Hala M. Fadda, Ph.D.; Samuel L. Gurevitz, Pharm.D.; Carolyn M. Jacobs-Jung, Pharm.D.; Kena J. Lanham, Pharm.D.; Larry W. Lynn, M.D.; Annette T. McFarland, Pharm.D.; Kristen R. Nichols, Pharm.D.; Sarah A. Nisly, Pharm.D.; Angela V. Ockerman, Pharm.D.; Emily C. Papineau, Pharm.D.; Sheel M. Patel, Pharm.D.; Amy S. Peak, Pharm.D.; Cathy M. Ramey, Pharm.D.; Darin C. Ramsey, Pharm.D.; Jason T. Range, J.D., Ph.D.; David J. Reeves, Pharm.D.; Laura F. Ruekert, Pharm.D.; Priscilla T. Ryder, Ph.D.; Lindsay M. Saum, Pharm.D.; Michele A. Schultz, M.P.A.S.; Dane L. Shiltz, Pharm.D.; Tracy L. Sprunger, Pharm.D.; Daniel P. Sturm, M.M.S.; Alison M. Walton, Pharm.D.; Jessica E. Wilhoite, Pharm.D.; Kristal L. Williams, Pharm.D.; Deborah S. Zeitlin, Pharm.D.; Jennifer S. Zorn, M.S.

## Instructors

Jennifer R. Guthrie, B.S.H.S.; Jennifer S. Myers, B.S.N.; Margaret S. Stratford, Pharm.D.

## History

Butler University's College of Pharmacy and Health Sciences had its origin in 1904 with the founding of the Winona Technical Institute. Subsequently, the pharmacy department separated from the institute to become the Indianapolis College of Pharmacy, one of the first pharmacy colleges in the country to adopt a four-year curriculum. In 1945, the

Indianapolis College of Pharmacy affiliated with Butler University. With the completion of a new pharmacy building in 1951, the college moved to the Butler campus. It celebrated the centennial of its founding in 2004. The original building was extensively renovated in 2007-2009. A new addition doubled the building size. Teaching laboratories, research laboratories, classrooms, and offices were added, renovated, and upgraded into a state-of-the-art facility.

In 1994, the College of Pharmacy and Health Sciences collaborated with Methodist Hospital to develop a physician assistant (PA) program. Today, the PA program is operated solely by Butler University, which administers all aspects of didactic training on Butler University's campus. Students now complete a three-year professional phase of training in classes of about 50 students each. Graduates are awarded a Master of Physician Assistant Studies degree.

## Accreditation

The Butler University 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 accredited by the Accreditation Council for Pharmacy Education (ACPE), and the physician assistant program is accredited by the Accreditation Review Commission on Education for the Physician Assistant (ARCPA).

## 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 college of pharmacy, 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.

To become licensed as a physician assistant in Indiana, a person must have successfully completed an accredited educational program for physician assistants and must have passed the Physician Assistant National Certifying Examination (PANCE). Temporary certification may be granted to an individual who has graduated from an accredited program but has not yet taken the certifying examination, or is awaiting the results of the examination.

## Degree Programs

The College of Pharmacy and Health Sciences offers the doctor of pharmacy (Pharm.D.) degree that provides eligibility for licensure as a pharmacist. The college also offers a doctor of pharmacy with research emphasis, a doctor of pharmacy with medical Spanish emphasis, a graduate program leading to a master of science in pharmaceutical sciences degree, a doctor of pharmacy/master of science in pharmaceutical sciences degree, and a doctor of pharmacy/master of business administration program that awards both the Pharm.D. and MBA degrees upon simultaneous completion of the respective degree requirements. The College of Pharmacy and Health Sciences also offers a master of physician assistant studies (M.P.A.S.).

## Doctor of Pharmacy Professional Degree

The College of Pharmacy and Health Sciences offers a doctor of pharmacy (Pharm.D.) degree program that prepares students to become advanced 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. Doctor of pharmacy practitioners are capable of contributing to the interdisciplinary delivery of primary health care and can function as drug therapy information resource specialists. Students also are prepared for specialty professional studies and for graduate study in the pharmaceutical sciences.

## Doctor of Pharmacy Program <br> 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.


## Medical Spanish 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/her understanding of Hispanic/Latino cultural influences into patient care activities, including therapeutic recommendations and patient counseling activities with Hispanic/ Latino patients


## Research Track 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.


## Doctor of Pharmacy Admission Requirements

Applicants to the preprofessional 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 Foriegn Language (TOEFL) scores.
The doctor of pharmacy curriculum requires that the student complete two preprofessional years and four professional years. Acceptance into the professional phase of the pharmacy program allows students to begin the first professional year (P1) coursework of the six-year curriculum. All students entering the fall semester of the first professional year (P1) must satisfactorily complete all math/science preprofessional coursework prior to beginning their fall P1 semester. Acceptance of students into the professional pharmacy program by either the automatic advancement option or the PharmCAS application option is contingent upon enrollment capacity limitations of the pharmacy program. The College of Pharmacy and Health Sciences reserves the option to modify its pharmacy program admission and advancement procedures and curriculum at any time. Students may consult the academic affairs office in the Pharmacy and Health Sciences Building, Room 107B, (317) 940-9969 for PCAT applications and administration dates.

## Automatic Advancement Procedure for Prepharmacy Students Entering Butler University as Freshmen

Students enrolling as freshmen at Butler University and declaring prepharmacy as their initial major are eligible to be automatically admitted to the P1 year of the professional pharmacy program upon the completion of their third semester of Butler enrollment if they meet the following criteria:

- Cumulative grade point average (GPA) at Butler University greater than 3.0.
- GPA greater than 3.0 in 10 selected, critical prepharmacy courses listed below.
- No grade less than C- in any of the 10 prepharmacy courses stipulated below. For the purposes of automatic advancement, none of these 10 courses may be repeated to improve the student's GPA. If a student must repeat a course to satisfy a subsequent course prerequisite, the first grade received in the course is used in the calculation of the student's advancement GPA. (NOTE: A withdrawal during the fall semester, sophomore year from one of the 10 classes used in the automatic advancement formula will result in loss of automatic advancement.)
- Students must take the Pharmacy College Admission Test (PCAT) no later than January of their second preprofessional year and achieve a minimum composite percentile score of 55 and a writing score of 3.0.
- 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


## Ten courses that determine the automatic advancement GPA:

- CH105 General Chemistry
- CH106 General Chemistry
- MA106 Calculus and Analytical Geometry
- BI105 Introductory Cell Biology
- FYS101 First Year Seminar
- COM102 Public Speaking or elective
- CH351 Organic Chemistry
- PX311 Human Anatomy
- PX100 Health Sciences Seminar
- PX325 Ethical Issues in Health Care

Eligibility for automatic advancement into the P1 year of the professional pharmacy program ceases after the student's review for professional phase admission at the end of the third semester at Butler University. Students seeking professional pharmacy program admission by the automatic advancement option may not count more than
two courses transferred from another university or awarded through advanced placement (AP) toward the calculation of their automatic advancement GPA.

Students failing to automatically advance to the professional pharmacy program will be considered for admission to the professional program on a competitive, space-available application basis. Application for admission by this process must be made by completing an internal application available from the pharmacy dean's office. This process considers the student's cumulative GPA for all coursework completed at all universities, performance on the Pharmacy College Admissions Test (PCAT), and an attribute assessment through an interview.

## Professional Phase Application Procedure for Transfer Students Entering Butler University as Preprofessional Students

Students who enter Butler University with 13 or more credit hours completed following high school graduation are classified as transfer students. Students entering Butler University as transfer students and declaring prepharmacy as their intended major are not eligible for advancement to the P1 year of the professional pharmacy program via automatic advancement. Transfer students may apply for admission into the P1 class along with all internal and external program applicants on a competitive, space-available basis. This process considers the student's cumulative GPA for all coursework completed at all universities, performance on the Pharmacy College Admissions Test (PCAT), and an attribute assessment through an interview. Application is made by completion of an internal application available from the academic affairs office, Pharmacy and Health Sciences Building, Room 107B.
Professional Phase Application Procedure for
Butler University Students Not Classified as Prepharmacy Students Upon Entry into the University as Freshmen (including changes of majors)

Students enrolling at Butler University as freshmen who declare a major other than prepharmacy or COPHS exploratory are not eligible for the automatic advancement option for entry into the P1 year of the professional pharmacy program. Such students may apply for admission into the P1 class along with all
internal and external program applicants on a competitive, space-available basis. This process considers the student's cumulative GPA for all coursework completed at all universities, performance on the Pharmacy College Admissions Test (PCAT), and an attribute assessment through an interview. Application is made by completion of an internal application available from the academic affairs office, Pharmacy and Health Sciences Building, Room 107B.

Students who do not gain admission into the professional pharmacy program following their fourth semester of Butler University enrollment may continue as preprofessional pharmacy students at Butler University to repeat the requisite coursework to improve their GPA, and/or they may retake the PCAT examination for a maximum of six semesters. If students elect to repeat preprofessional coursework and/or retake the PCAT examination, they will be admitted into a subsequent P1 class under the admission criteria and curriculum in effect for the P1 class they will be entering, contingent upon program enrollment capacity. To be eligible for entry into the P1 year of the pharmacy program, a student must have completed all of the preprofessional coursework required as prerequisites for enrollment in P1 professional coursework. If students fail to achieve admission into the P1 class at the end of six semesters, they will be required to change their major.

## Professional Phase Application Procedure for Students Transferring to Butler University and into the Professional Pharmacy Program (P1 Year)

A student who enters Butler University with 13 or more credit hours completed following high school graduation is classified as a transfer student. Transfer students not currently enrolled at Butler University should contact the academic affairs office in the Pharmacy and Health Sciences Building, Room 107B, (317) 940-9969 for program admission information.

All students who satisfy the requirements to transfer to Butler University may apply for admission into the P1 class on a competitive, space-available basis. This process considers both the student's cumulative GPA for all coursework completed at all universities and performance on the Pharmacy College

Admissions Test (PCAT), and an attribute assessment through an interview. To be eligible for the P1 year of the pharmacy program, a student must have completed all preprofessional prerequisite coursework prior to beginning his/ her P1 professional coursework. Because of the sequential nature of the doctor of pharmacy curriculum, transfer students entering the professional phase of the program must enter the program in the fall of the P1 year. Students seeking transfer admission into the P1 year of the pharmacy program must complete a PharmCAS application no later than Jan. 7 prior to the fall semester of desired P1 program admission. Information on the PharmCAS application process may be obtained at www.pharmcas.com.

## Doctor of Pharmacy Degree Requirements

Students are required to complete the program of study of not less than six academic years with a minimum of 210 credit hours.

Successful completion of the professional curriculum requires that the student not exceed five credit 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 must be completed before beginning the experiential rotations in the P4 year of the curriculum.

## Doctor of Pharmacy Curriculum for

 Classes Graduating Beginning 2014The college reserves the right to change the Doctor of Pharmacy curriculum at the discretion of the college faculty.

First Year—Prepharmacy Credit Hours
FYS101, First Year Seminar
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) Credit Hours
FYS102, First Year Seminar 3
CH106, General Chemistry (with lab) 5
BI105, Intro Cell Biology 3
Elective 2
Core (TI, PCA, or SW) *** 3
PWB, Physical Well Being 1
Total semester hours 17
Second Year-Prepharmacy Credit Hours
GHS201-209, Global and Historical Studies 3
PX311, Human Anatomy 3
CH351, Organic Chemistry (with lab) 5
PX325, Ethical Issues in Health Care 3
Core (TI, PCA, or SW)*** 3
Total semester hours 17
*TI = Text and Ideas, PCA = Perspectives in the Creative Arts., SW = The Social World, AR
Analytical Reasoning
**Students (except previously degreed students) must take at least one core course in each of the divisions listed.

| Courses (Spring Semester) | Credit Hours |
| :--- | ---: |
| GHS201-209, Global and Historical Studies | 3 |
| BI325, Pathogenic Microbiology | 3 |
| CH352, Organic Chemistry (with lab) | 5 |
| PX315, Human Physiology | 4 |
| PX200, Intro to Pharmacy Practice | 1 |
| Total semester hours | 16 |
|  |  |
| First Professional Year (Third Year) | Credit Hours |
| RX301, Intro to Pharmacy Practice Experience | 0 |
| RX312, Clinical Biochemistry | 4 |
| RX316, Pathophysiology | 4 |
| BI323, Immunology | 2 |
| RX350, Intro to Pharmaceutical Care I | 3 |
| Liberal Education Elective | 3 |
| Total semester hours | 16 |

Courses (Spring Semester) Credit Hours
RX302 IPPE Service Learning 1
RX314 Pharmaceutical Biotechnology 3
RX318, Intro to Principles of Drug Action 5
RX320, Delivery of Health Care 3
RX324, Clinical Assessment 2
RX351, Intro to Pharmaceutical Care II 4
Total semester hours 18


RX403, Therapeutics I Case Studies 1
RX411, Prin of Drug Action 1
RX413, Therapeutics I 3
RX415, Self-care and Health Promotion I 2
RX421, Introduction to Dosage Forms 4
Liberal Education Elective 3
Total semester hours 17
Courses (Spring Semester) Credit Hours
RX404, Therapeutics II Case Studies 1
RX412, Prin of Drug Action II 4
RX414, Therapeutics II 3
RX416, Self-care and Health Promotion II 3
RX422, Advanced Dosage Forms 4
RX432, Personnel and Financial Management 3
Total semester hours 18
$\begin{array}{lr}\text { Third Professional Year } & \text { Credit Hours } \\ \text { RX501, IPPE III } & 0 \\ \text { RX503, Therapeutics III Case Studies } & 1 \\ \text { RX511, Principles of Drug Action III } & 4 \\ \text { RX513, Therapeutics III } & 3 \\ \text { RX522, Pharmacokinetics/Biopharm } & 3 \\ \text { RX527, Biostatistics and Research Design } & 3 \\ \text { RX6xx, Professional Electives } & 2 \\ \text { Total semester hours } & 16\end{array}$
Courses (Spring Semester) Credit Hours
RX500, Intro to Exper Rotations 1
RX504, Therapeutics IV Case Studies 1
RX514, Therapeutics IV 3
RX528, Advanced Drug Information 2
RX523, Clinical Pharmacokinetics 3
RX526, Pharmacy and the Law 3
RXxx, Professional Electives 3
Total semester hours 16
Fourth Professional Year Credit Hours
RX 6-Ten Experiential On-site Rotations 40
(4 hours each)
7 Required Pharmacy Practice Rotations:

- 1 General Medicine Rotation
- 2 Acute Care Rotations
- 2 Community Pharmacy Rotations
- 1Ambulatory Care Rotation
- 1 Underserved population Rotation
- 3 Elective Pharmacy Practice Rotations

RX607, Pharm.D. Senior Seminar I $\quad 1$
Total hours 42

## Doctor of Pharmacy with Research Emphasis Years 1-3 as above

Second Professional Year Credit Hours
RX401, IPPE ..... 0
RX403, Therapeutics I Case Studies ..... 1
RX411, Prin of Drug Action I ..... 4
RX413, Therapeutics I ..... 3
RX415, Self-care and Health Promotion I ..... 2
RX421, Introduction to Dosage Forms ..... 4
RX602/603 Independent Study ..... 2-3
Total semester hours ..... 16-17
Courses (Spring Semester) Credit Hours
RX404, Therapeutics II Case Studies ..... 1
RX412, Prin of Drug Action II ..... 4
RX414, Therapeutics II ..... 3
RX416, Self-care and Health Promotion II ..... 3
RX422, Advanced Dosage Forms ..... 4
RX432, Personnel Management ..... 3
Total semester hours ..... 18
Third Professional Year Credit Hours
RX501, IPPE ..... 0
RX503, Therapeutics III Case Studies ..... 1
RX511, Principles of Drug Action III ..... 4
RX513, Therapeutics III ..... 3
RX522, Pharmacokinetics/Biopharm ..... 3
RX527, Biostatistics and Research Design ..... 3
RX, Pharmaceutical Science elective ..... 2-3
RX634, Seminars in Pharm Sci ..... 1
Total semester hours ..... 17-18
Courses (Spring Semester) Credit Hours
RX500, Intro to Exper Rotations ..... 1
RX504, Therapeutics IV Case Studies ..... 1
RX514, Therapeutics IV ..... 3
RX528, Advanced Drug Information ..... 2
RX526, Pharmacy, Policy and the Law ..... 3
RX523, Clinical Pharmacokinetics ..... 3
Liberal Education Elective ..... 3
RX609-80, Sp Top:Current Topics in Pharm. Sci ..... 1
Total semester hours ..... 17
Fourth Professional Year Credit HoursRotations

- 3 Research Rotations**
(12 weeks total)—May thru July **(Prerequisite for Research Rotations: Grade of C or better in Research Track Basic Science Courses; All three research rotations are to be completed consecutively)
- 5 Required Pharmacy Practice Rotations:
- 2 General Medicine, or Internal Medicine, or Family Practice Rotations
- 2 Community Pharmacy Rotations
- 1Ambulatory Care Rotation
- 2 Elective Pharmacy Practice Rotations RX 607, PharmD Senior Seminar I
Total hours


## Total Credit Hours Required for Graduation: 212

## Doctor of Pharmacy with Medical Spanish Emphasis

Students may formally declare the COPHS Medical Spanish Track either as preprofessional or professional phase pharmacy students. Successful completion of the COPHS Medical Spanish Track requires the completion of a minimum of 12 credit hours of medical Spanish coursework taken as medical Spanish courses having the RX course designator, and the 12 credit hours must include RX692, an APPE rotation with a Spanish-language focus. Students receiving a placement of SP305 or higher on the Spanish language placement test will be awarded three hours of "back credit" for RX615, Introduction to Medical Spanish, upon completion of nine credit hours of COPHS medical Spanish courses. RX617, Advanced Medical Spanish, or permission of the instructor, is a prerequisite for the RX692 APPE rotation. The following courses may be used to satisfy completion of the Medical Spanish Track:

- RX615 Introduction to Medical Spanish (204-level) - 3 credit hours
- RX617 Advanced Medical Spanish (300-level)—3 credit hours
- RX619 Medical Spanish Service Learning (300-/400-level)—3 credit hours
- RX611-68 Spanish Language Immersion trip to Mexico (100-300- level)—3 credit hours
- RX692 APPE Rotation-4 credit hours


## Doctor of Pharmacy/Master of Science in Pharmaceutical Sciences Degree

One of the factors that limit many doctor of pharmacy students from pursuing advanced degrees is the time commitment of 8-9 years required to complete the Pharm.D. degree plus an advanced pharmaceutical degree. The objective of this program is to provide students a time- and financially-efficient way for students to meet their professional goals. The curriculum for the Pharm.D./M.S. dual degree integrates the existing curricula of the Pharm.D. degree and the M.S. in pharmaceutical sciences degree, allowing students seeking their doctor of pharmacy degree (Pharm.D.) to simultaneously complete a master of science (M.S.) degree in pharmaceutical sciences.

The Pharm.D. degree allows students to work in many facets of the practice of pharmacy. Offering a Pharm.D./M.S. dual degree allows doctor of pharmacy students to pursue additional training in the area of pharmaceutical sciences research. Having a Pharm.D./M.S. dual degree will aid in the recruitment and retention of outstanding pharmacy students with a strong interest in research. A Pharm.D./M.S. degree will also make Butler graduates more competitive for positions in the pharmaceutical industry or for academic positions.
Years 1-3 as above

## Summer Research following P1 Year

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 Credit Hours

RX401, Intro to Pharm Practice Experience 0
RX403, Therapeutics I Case Studies 1
RX411, Prin of Drug Action I 4
RX413, Therapeutics I 3
RX421, Introduction to Dosage Forms 4
RX415, Self-Care and Health Promotion I 2
Liberal Education Elective 3
RX634, Seminars in Pharmaceutical Sci 1
RX 601, Independent study 1
Total semester hours 19

clinical component. During the preclinical phase, students receive instruction in anatomy, physiology, pathology, social and professional issues related to medical practice, techniques of history-taking and physical assessment, clinical medicine, pharmacology, therapeutics, medical procedures, and research methods. The instruction is supplemented by laboratory experiences to enable students to practice what they have learned. The clinical component consists of rotations in major medical disciplines, with emphasis on primary care. Students have the option of taking electives in medical and/ or surgical specialties, or continuing to gain additional primary care experience.

## Physician Assistant Program Student Learning Outcomes

- Demonstrate core knowledge about established and evolving biomedical and clinical sciences and the application of knowledge to patient care.
- Assess, evaluate and improve patient care practices.
- Interpret and respond to the larger system of health care to provide patient care that is of optimal value.
- Use investigatory and analytic thinking approaches to clinical situations.
- Display interpersonal and communication skills that result in effective information exchange with patients, patients' families, physicians, professional associates, and the health care system.
- Show care that is effective, patientcentered, timely, efficient, and equitable for the treatment of health problems and the promotion of wellness.
- Display a high level of responsibility and sensitivity to a diverse patient population.
- Conform to high standards of ethical practice and to legal/regulatory requirements.


## Eligibility and Admission

Requirements
There are three pathways by which candidates can gain admission into the physician assistant program. The details of these pathways are outlined below.

## Pathway 1: Automatic Advancement Process

Admission into Pre-Health Science/Pre-PA program
To be admitted to the auto-advance, pre-health science (i.e., pre-PA) program as freshmen at Butler University, students will be required to meet the auto-advancement entrance criteria of the College of Pharmacy and Health Sciences with regard to GPA and standardized test scores. The number of students admitted as auto-advance, pre-PA students will be limited to approximately 30 per year, and offers of admission will be made on a competitive basis. It is recommended that applications be submitted as early as possible in the admission cycle.

## Admission into PA Program

Auto-advance, pre-PA students will be automatically advanced (offered admission) into the PA1 year of the PA Program upon completion of their second, fall semester of Butler enrollment (not including summer sessions) if the requirements for automatic advancement are met:

1. Cumulative GPA at Butler University of at least 3.0.
2. No grade less than C in any course used to satisfy the requirements of the prephysician assistant curriculum.
3. No withdrawal from or repeat of any course used to satisfy the requirements of the pre-physician assistant curriculum.
4. Cumulative GPA (i.e. science GPA) equal to or greater than 3.0 in the following courses: CH105, CH106, BI105, CH351, PH107, PX311.
5. No conduct code violations.

Students are required to be enrolled fulltime during the regular (i.e. fall and spring) semesters and must complete all prerequisite courses by the conclusion of the second spring semester of enrollment while maintaining compliance with the above requirements.

The credit from no more than two transfer or AP courses may be substituted for any of the courses listed in the pre-physician assistant (pre-PA) curriculum (see table below). The official Butler GPA is not affected by the grades earned from transfer courses or associated with AP credit. However, transfer courses and/
or AP credit will affect the cumulative Butler GPA and science GPAs upon which eligibility determinations for auto-advancement will be based according to the following guidelines: grades from accepted transfer courses will be included in GPA calculations according to the scale in the Butler University Student Handbook, and an "A" ( 4.0 score) will be awarded for each course from which AP credit was earned and accepted.

Any student who fails to meet any of the above criteria will be dismissed from the automatic advancement process, but may be eligible to apply for admission through either of the other two pathways described below.

Eligibility for automatic advancement into the PA1 year of the PA program ceases after the student's initial review for professional phase admission at the end of their second fall semester at Butler University.

First Year (Pre-Physician Assistant Curriculum, PrePA-1):

|  | COURSES <br> (FALL SEMESTER) | SEM <br> HRS |  | COURSES <br> (SPRING SEMESTER) | SEM <br> HRS |
| :--- | :--- | :---: | :---: | :--- | :---: |
| FYS101 | First Year Seminar-1 | 3 | FYS102 | First Year Seminar-2 | 3 |
| CH105 | General Chemistry (with <br> lab) | 5 | CH106 | General Chemistry (with <br> lab) | 5 |
| BI105 | Introductory Cell Biology | 3 | - | Core (AR, PCA, SW, TI) | 3 |
| - | Core (AR, PCA, SW, TI) | 3 | - | Core (AR, PCA, SW, TI) | 3 |
| PWB | Physical Well Being | 1 |  | BCR |  |
|  | Butler Cultural Require- <br> ment (BCR) |  |  | Indianapolis Community <br> Requirement |  |
|  | Total semester hours | $\mathbf{1 5}$ |  | Total semester hours | $\mathbf{1 4}$ |

Second Year (Pre-Physician Assistant Curriculum, PrePA-2):

|  | COURSES <br> (FALL SEMESTER) | SEM <br> HRS |  | COURSES <br> (SPRING SEMESTER) | SEM <br> HRS |
| :--- | :--- | :---: | :---: | :--- | :---: |
| GHS | Global and Historical <br> Studies | 3 | GHS | Global and Historical <br> Studies (Different from fall <br> course) | 3 |
| CH351 | Organic Chemistry-I (with <br> lab) | 5 | CH352 | Organic Chemistry-II (with <br> lab) | 5 |
| PH107 | Physics-I (with lab) | 4 | BI325 | Pathogenic Microbiology <br> (with lab) | 3 |
| - | Core (AR, PCA, SW, TI) | 3 | - | Elective Liberal Education <br> Course/s | 3 |
| PX311 | Human Anatomy | 3 | PX315 | Human Physiology | 4 |
|  | BCR |  |  | BCR |  |
|  | Total semester hours | $\mathbf{1 8}$ |  | Total semester hours | $\mathbf{1 4}$ |

## General Information Regarding Pathways 2 and 3

Pathways 2 or 3 are the processes all non-auto-advance students interested in applying to the PA program must follow. Non-autoadvance applicants will be classified as belonging to one of two categories: Butler and non-Butler. Butler applicants are those who
have been or are currently enrolled at Butler University AND have completed less than 12 hours of credit (excluding AP or IB credits) at institutions of higher learning other than Butler University. Non-Butler applicants are those who have earned 12 or more hours of credit (excluding AP or IB credits) at institutions of higher learning other than Butler University.

Applications for the PA Program must be submitted through an electronic application processing service (CASPA). CASPA is a service of the Physician Assistant Education Association (PAEA) and offers applicants a convenient, Web-based application service that allows application to participating PA educational programs by completing a single application. The online application was specifically designed for ease and convenience. With far less paperwork, streamlined processing, and ongoing communication with applicants, CASPA offers the ability to apply to multiple programs across the country.

Pathways 2 and 3 are competitive. Thus, it is important that applications be submitted as soon as possible once the application cycle opens (generally mid-April). It is also important that applicants clearly indicate on the CASPA application classes completed, those currently being completed and those expected to be completed by May 31 of the year in which the applicant wishes to matriculate into the PA Program.

Non-Butler applicants who have completed 12 hours or greater of credit (excluding AP or IB credits) outside of Butler University by the time of the submission of their completed application to CASPA are required to include GRE scores (School Code: 1073) at the time of application. These same applicants are required to earn a BS/BA degree or higher by May 31 of the year of intended matriculation into the PA program. Butler applicants will not be required to earn a BS/BA degree by May 31 and will not be required to include GRE scores providing they identify themselves as a "Non-AutoAdvance, Butler Applicant" in an e-mail to Dr. John Lucich at jlucich@butler.edu by Oct. 1 (for Pathway 2 applicants) or by Nov. 15 for Pathway 3 applicants.

The majority of communication regarding invitations to interview, offers of admission, etc. will be conducted by e-mail, so it is very important that the PA Program (via CASPA) has an accurate e-mail address for all applicants and that applicants check their e-mail accounts on a daily basis. Generally, responses to program requests must be accomplished within three days or less. Failure to promptly respond to requests may result in loss of eligibility for admission.

The criteria for admission and the policies that guide the admission process have been carefully developed and empirically derived. As such, few if any requests for exemptions from the criteria/policies are granted. However, should an applicant feel that his/her circumstances warrant special consideration, the applicant may forward an appeal in writing (via e-mail) to the chair of the admissions committee, Dr. John Lucich at jlucich@butler. edu. To be considered, the appeal e-mail must include "Appeal Request" in the subject line, state the policy/criteria for which an exemption is being requested, and provide a detailed rationale for the request.

General questions regarding the admissions process should be directed to Mary Kay Liverett at 317-940-6529 or mliveret@butler.edu.

## Pathway 2: Early Decision Process

The minimum eligibility requirements for admission via Pathway 2 are:

1. A cumulative GPA from all institutions of higher learning of at least a 3.5 as calculated per CASPA protocol.
2. The submission of a completed application to CASPA by Sept. 1 and verification of that application by CASPA by Oct. 15 of the year prior to the year of desired enrollment into the PA Program.* It is the applicant's responsibility to monitor and ensure adherence to these deadlines. The applicant's credentials will be assessed according to the information in the application at the time it was verified by CASPA. As such updates to GPAs, GRE scores etc. will not be considered within an application cycle.
3. The ability to provide evidence of successful completion of the math/science prerequisites (listed below) or their transfer equivalents with a grade of C - or better by May 31 prior to matriculation into the PA Program. See Curriculum for details. Non-auto-advance Butler applicants without a BS/BA degree must also earn C- or above in ALL other courses used to satisfy the requirements of the pre-physician assistant curriculum prior to matriculation into the PA program.
4. Receipt by Butler University of a deposit by Feb. 1 (if offered admission).
*Be advised that for an application to be deemed "completed," it must be
accompanied by college transcripts, letters of recommendation, GRE scores, and any other documents required for processing by CASPA.

## Required Math/Science Prerequisite Courses* for Pathway 2 Applicants

General Biology [cell] (BI105)
General Chemistry with lab (CH105)
General Chemistry II with lab (CH106)
Organic Chemistry with lab (CH351)
Organic Chemistry II with lab (CH352)
Microbiology (BI325)
General math course (above algebra)
Physics (PH107)
Human Anatomy (PX311)
Human Physiology (PX315)
*Equivalent transfer courses are also acceptable.
Applicants satisfying the above criteria are eligible to be ranked and considered for invitation to a "non-academic evaluation" (NAE). The composition of an NAE will typically include one or more interviews, an opportunity to meet current students, various information sessions, and any other activities deemed desirable by the PA Admissions Committee. Invitations for the NAE will generally be issued to the most highly ranked Pathway 2 candidates near the first of November and the NAE will generally be conducted on or about the second Saturday of November. The NAE scores and other behavioral assessments of applicants will be used by the PA Admissions Committee to adjust the pre-NAE rankings of candidates and will inform decisions regarding which applicants will receive offers of admission and which will be wait-listed. These decisions will generally be communicated via e-mail to applicants within 10 to 15 days of completion of the NAE.

## Pathway 3: Standard Decision

## Process

The minimum eligibility requirements for admission via Pathway 3 are:

1. A cumulative GPA from all institutions of higher learning of at least 3.2 as calculated per CASPA protocol.
2. The submission of a completed application to CASPA by Dec. 1 of the year prior to the year of desired enrollment into the PA Program and verification of that application by CASPA by Jan. 15 of the
year of desired enrollment into the PA Program.* It is the applicant's responsibility to monitor and ensure adherence to these deadlines. The applicant's credentials will be assessed according to the information in the application at the time it was verified by CASPA. As such updates to GPAs, GRE scores etc. will not be considered within an application cycle.
3. The ability to provide evidence of successful completion of the math/science prerequisites (listed below) or their transfer equivalents with a grade of C - or better by May 31 prior to matriculation into the PA Program. See Curriculum for details. Non-auto-advance Butler applicants without a B.S./B.A. degree must also earn C- or above in ALL other courses used to satisfy the requirements of the pre-physician assistant curriculum prior to matriculation into the PA program.
4. Receipt by Butler University of a deposit by May 1 (if offered admission).

* Be advised that for an application to be deemed "completed," it must be accompanied by college transcripts, letters of recommendation, GRE scores, and any other documents required for processing by CASPA.


## Required Math/Science Prerequisite Courses* for Pathway 3 Applicants

General Biology [cell] (BI105)
General Chemistry with lab (CH105)
General Chemistry II with lab (CH106)
Organic Chemistry with lab (CH351)
Organic Chemistry II with lab (CH352)
Microbiology (BI325)
General math course (above algebra)
Physics (PH107)
Human Anatomy (PX311)
Human Physiology (PX315)
*Equivalent transfer courses are also acceptable.
Applicants satisfying the above criteria are eligible to be ranked and considered for invitation to a "non-academic evaluation" (NAE). The composition of an NAE will typically include one or more interviews, an opportunity to meet current students, various information sessions, and any other activities deemed desirable by the PA Admissions Committee. Invitations for the NAE will generally be issued to the most highly ranked Pathway 3 candidates near the first of February,
and the NAE will generally be conducted on or about the second Saturday of February. The NAE scores and other behavioral assessments of applicants will be used by the PA Admissions Committee to adjust the pre-NAE rankings of candidates and will inform decisions regarding which applicants will receive offers of admission and which will be wait-listed. These decisions will generally be communicated via e-mail to applicants within 10 to 15 days of completion of the NAE.

Requirements and deadlines for Pathways 1, 2 and 3 are subject to change. Should a change occur, it will be posted on the COPHS website and the PA program will make every effort to communicate the change as soon as possible to all those in the application pipeline for whom email addresses are available.

## Degree Requirements

Students are required to complete 192 semester hours with a comprehensive Butler GPA of 2.0 or greater in all courses to be awarded the master of physician assistant studies degree. All students who complete the first four years of the curriculum will be awarded the bachelor of science in health sciences degree.

Successful completion of the professional curriculum requires that the student not exceed five credit hours of coursework with earned grades less than C (2.0) in PX and AP courses numbered 300 or higher. Additionally, the student's professional GPA must be 2.0 or higher. For the purposes of this calculation, the professional curriculum consists of those courses designated AP or PX. The proper sequence of courses must be maintained in the professional phase. The student is responsible for making certain that he or she has completed all required courses in the curriculum.

The curriculum of the PA program should be viewed as being offered in three sections (PA1, PA2 and PA3 years) that are individually indivisible and to be taken in an uninterrupted sequence over three years. Therefore, it is expected that students first matriculated into the PA1 year will maintain simultaneous enrollment in all professional courses offered as a component of each year's curriculum. Students may not progress to the professional coursework in the next year of the program until they have successfully completed all
professional courses within the current year. Professional phase PA students must earn a grade of C or better in all courses within the professional phase for the courses to be considered successfully completed. PA students may be dismissed from the college following failure of any two professional phase (APdesignated) courses, in addition to not adhering to the policies listed in the COPHS Student Handbook.

Any student who is absent from clinical rotations for three months or more must perform an observed history and physical examination on a real or simulated patient. A history and physical examination is a combined assessment and is graded as such. The student must score a 70 percent or better on each of these assessments 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 each of these assessments. If unsuccessful, the student will be dismissed from the college.

## Physician Assistant Curriculum Master of Physician Assistant Studies

The program reserves the right to change the curriculum at the discretion of the faculty.

| First Year (Pre-Physician Assistant Curriculum): |  |
| :--- | ---: |
| Courses (Fall Semester) | Credit Hours |
| FYS101, Freshman Year Seminar | 3 |
| CH105, General Chemistry (with lab) | 5 |
| BI105, Introductory Cell Biology | 3 |
| Core (TI, PCA, SW or AR)* ** | 3 |
| PWB, Physical Well Being | 1 |
| Total semester hours | 15 |

Courses (Spring Semester) Credit Hours
FYS102, Freshman Year Seminar 3
CH106, General Chemistry (with lab) 5
Core (TI, PCA, SW or AR)*** 3
Core (TI, PCA, SW or AR)*** 3
Total semester hours 16

## Second Year (Pre-Physician Assistant <br> Curriculum): <br> Courses (Fall Semester) Credit Hours

GHS, Global and Historical Studies 3
CH351, Organic Chemistry I (with lab) 5
PH107, Physics I (with lab) 4
Core (TI, PCA, SW or AR)*** 3
PX311, Human Anatomy 3
Total semester hours 18

Courses (Spring Semester) Credit Hours
GHS, Global and Historical Studies 3
CH352, Organic Chemistry II (with lab) 5
BI325, Pathogenic Micro (with lab) 3
Elective Liberal Education Course 3
PX315, Human Physiology 4
Total semester hours
*TI $=$ Text and Ideas, PCA $=$ Perspectives in the Creative Arts., SW = The Social World, AR = Analytical Reasoning
**Students (except previously degreed) must take at least one core course in each of the divisions listed. In addition, students are required to complete the speaking across the curriculum, writing across the curriculum, Indianapolis Community Requirements, and cultural requirements for the core.

Third Year: (Physician Assistant Curriculum): Courses (Fall Semester) Credit hours
AP301, Physiology 5
AP307, Pathophysiology I 5
AP308, Pharmacology I
3
AP313, Social and Behavioral Medicine
3
AP350, Clinical Quality Improvement I 3
Total semester hours 19
Courses (Spring Semester) Credit Hours
AP302, Anatomy 4
AP309, Pathophysiology II 4
AP310, Pharmacology II 3
AP314, Issues in Professional Practice I 2
AP351, Clinical Quality Improvement II 3
Total semester hours 16
Fourth Year: (Physician Assistant Curriculum):
Courses (Fall Semester) Credit hours
AP402, Healthcare Communications I 1
AP404, Hist and Phys Assessment I 3
AP406, Diag and Ther Procedures I 3
AP408, Clinical Integration I 1
AP410, EKG Interpretation 1
AP413, Therapeutics I 4
AP421, Clinical Medicine I 6
Total semester hours 19
Courses (Spring Semester) Credit Hours
AP403, Healthcare Communications II 1
AP405, Hist and Phys Assessment II 3AP409,
Clinical Integration II
1
AP414, Therapeutics II 5
AP417, Diag and Ther Procedures II 3
AP422, Clinical Medicine II 6
Total semester hours 19

Fifth Year: (Physician Assistant Curriculum): Courses (Summer 1) Credit Hours
AP540, Family Practice Rotation 6
AP587, Core Content I 1
Total semester hours 7
Courses (Summer 2) Credit Hours
AP541, Internal Medicine Rotation 6
AP588, Core Content II 1
Total semester hours 7
Fifth Year: (Physician Assistant Curriculum):
Courses (Fall Semester) Credit Hours
AP524, OB/GYN Rotation 6
AP546, Surgery Rotation 6
AP5--, Elective Rotation 4
AP589, Core Content III 1
AP525, Issues in Professional Practice II 1
Total semester hours 18
Courses (Spring Semester) Credit Hours
AP542, Pediatrics Rotation 6
AP543, Comm Mental Health Rotation 6
AP590, Core Content IV 2
AP545, Emergency Medicine Rotation 6
Total semester hours 20

## Total Hours-192

The above clinical rotation schedule is just one of several possible sequences. The clinical coordinator will determine individual student rotation schedules. All rotations are assigned within a designated radius of Butler University. Students are responsible for providing their own transportation.

## 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.

PX210, 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-thecounter medications and supplements, personal safety, and chronic disease prevention. This class is designed for freshmen and sophomore students. (U)(3). Fall.

PX311, Human Anatomy: This course discusses human anatomical composition and organization from the level of the atom to the level of the organism. Those aspects of anatomy required for the clinical education and practice are emphasized. Prerequisite: BI105 or 122, or BI100 for non-COPHS students. (U)(3). Fall.

## PX315, Human Physiology for the Health

Sciences: A study of the functions of the human body emphasizing the actions and regulation of the specific organs and organ systems, and how their performance is integrated in achieving homeostasis. Prerequisites: Human anatomy and organic chemistry, both with passing grades. (U) (4). 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. Open to COPHS pre-pharmacy and pharmacy students only or by permission of the instructor. (U)(3). Fall and spring.

PX334, Human Anatomy and Physiology I:
A two semester lecture and laboratory course designed for preprofessional 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. Sophomore standing or permission. (U)(5). Fall.

## PX335, Human Anatomy and Physiology II:

A two-semester lecture and laboratory course designed for preprofessional 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. Sophomore standing or permission. (U)(5). Spring.

## PX340, Public Health: Law \& 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.

## Physician Assistant (PA) 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. Prerequisites: First professional year standing in the PA program. (U)(5). 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. Prerequisites: Grade of C or better in AP301. (U)(4). Spring.

AP307, Pathophysiology I: 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 II: 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.

AP309, Pathophysiology II: This course is a continuation of AP307, Pathophysiology I. Prerequisite: Grade of C or better in AP307. (U)(4). Spring.

AP310, Pharmacology II: This course is a continuation of AP308, Pharmacology I. Prerequisite: Grade of C or better in AP308. (U)(3). Spring.

## 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.
## AP314, Issues in Professional Practice I:

 A course designed to introduce PA students to past, current, and emerging health care delivery systems and methods of financing health care. Also explored are issues confronting practicing professionals such as ethics, quality/ risk management, end-of-life decisions, and professional liability. Prerequisite: Professional phase in the Physician Assistant Program. (U) (2). Spring.
## AP350, Clinical Quality Improvement I:

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.

## AP351, Clinical Quality Improvement II:

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, Healthcare Communication I: Prepares the physician assistant student to communicate within the healthcare setting. Prerequisite: Acceptance into the professional phase of the PA Program. (U)(1).

AP403, Healthcare Communications II: Prepares the physician assistant student to communicate within the healthcare setting, a continuation of AP402. Prerequisite: 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.

## 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)(4). Spring.

## 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 Physician Assistant Program. (U)(3). 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.

AP409, Clinical Integration II: A continuation of Clinical Integration I. (P/F). (U)(1). Spring.

AP410, EKG 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 Physician Assistant Program. (U)(1). Fall.

## AP413, Therapeutics for the Physician

Assistant I: This course prepares the physician assistant to manage drug therapy for patients in certain health care settings. Prerequisite: Fourth-year standing in the PA program and co-requisites of AP421 or permission of instructor. (U)(4). Fall.

## AP414, Therapeutics for the Physician

Assistant II: A continuation of AP413. This course prepares the physician assistant to manage drug therapy for patients in certain health care settings. Prerequisite: AP413 Therapeutics for PA1, AP421 Clinical Medicine for PA1, AP406 Diagnostic and Therapeutic Procedures. Co requisite: AP423 Clinical Medicine for PA2 or permission of instructor. (U)(5). Spring.

## AP417, Diagnostic and Therapeutic

Procedures II: 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 Physician Assistant Program. (U)(3). Spring.

## 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.
## 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.
AP501, Physician Assistant Project: Students will demonstrate core knowledge about one or more of the following: the physician assistant profession, established or evolving biomedical
or clinical sciences, or the application of this knowledge. Students will have an opportunity to conduct research or develop a clinicallyrelated project. Prerequisite: Enrollment in the Physician Assistant Program. (G)(1). Fall, spring, and summer.

## AP502, Physician Assistant Project

Presentation: Students will complete the research/clinical project begun in AP501 and display communication skills that result in effective information exchange with one or more of the following groups: patients, patients' families, physicians, professional associates, faculty, and/or the health care system. Prerequisites: Enrollment in the Physician Assistant Program. (G)(2). Fall, spring, and summer.

## AP525, Issues in Professional Practice II: A

 continuation of Issues in Professional Practice I. Prerequisite: Fifth-year standing in the Physician Assistant Program. (G)(1). Fall.AP533, General Elective Rotation (4): This is a one-month rotation where students have the opportunity to gain supervised experience in specialized areas of medical practice. Alternatively, the student may elect to gain additional experience in a primary care setting. Prerequisites: Fifth year standing. (G)(4). Annually, term varies.

AP540, Family Practice Rotation (6): This is a six-week rotation in a family practice setting where students provide supervised care for patients ranging in age from newborns to the elderly. Patient care activities include eliciting histories, performing physicals, ordering/ performing diagnostic tests, and formulating management plans. Prerequisite: Fifth year standing. (G)(6). Annually, term varies.

## AP541, Internal Medicine Rotation (6):

This is a six-week rotation designed to expose students to the indications, limitations, and methods of performing diagnostic and therapeutic measures used in the treatment of general medical disorders. Students will perform patient care activities in a supervised clinical setting. Prerequisite: Fifth year standing. (G)(6). Annually, term varies.

AP542, Pediatric Rotation (6): This is a six-week rotation in a pediatric setting where students provide supervised care for newborns,
infants, children, and adolescents. Patient care activities center around assessing normal growth and development, and diagnosing and formulating management plans for conditions commonly encountered in the pediatric population. Prerequisite: Fifth year standing. (G)(6). Annually, term varies.

## AP543, Community Mental Health

Rotation (6): This is a six-week rotation in a mental health setting where students provide supervised care of patients being treated for minor psychiatric diseases and mental stresses. Patient care activities center on proper data collection, problem recognition, counseling techniques, and use of referral mechanisms. Prerequisite: Fifth year standing. (G)(6). Annually, term varies.

## AP544, Obstetrics/Gynecology Rotation

(6): This is a six-week rotation in an obstetrics/gynecology practice, where students provide supervised care for women. Patient care activities center around assessing the reproductive system in pregnant and nonpregnant states, and formulating management plans for conditions commonly encountered in an obstetrics/gynecology practice. Prerequisites: Fifth year standing. (G)(6). Annually, term varies.

## AP545, Emergency Medicine Rotation

(6): This is a six-week rotation in a hospital emergency department where students provide care for patients with conditions ranging from non-urgent medical problems to major trauma and critical illness. Emphasis is on etiology, evaluation, and initial treatment of common medical and surgical conditions. Prerequisite: Fifth year standing. (G)(6). Annually, term varies.

AP546, General Surgery Rotation (6): This is a six-week rotation in a hospital setting where students provide supervised care of patients in all ages with general surgical problems. Emphasis is on principles and concepts of surgery and surgical care as they relate to problems encountered in primary care settings. Prerequisite: Fifth year standing. (G)(6). Annually, term varies.

AP587, Core Content I: This self-study course allows the student to practice and demonstrate the ability to perform independent learning regarding the principles of medical care within
the scope of physician assistant practice. This course is especially designed to: 1) help guide and encourage the student's systematic preparation for the Physician Assistant National Certification Examination (PANCE) by means of monthly examinations; and 2) develop and assess the student's competency in each of the stated "Terminal Outcomes" of the P.A. Program (linked to suitability for clinical practice) via a combination of case presentations and the summative evaluation. Prerequisites: Fifth year standing within the PA program. (G)(1). Summer.

AP588, Core Content II: This self-study course allows the student to practice and demonstrate the ability to perform independent learning regarding the principles of medical care within the scope of physician assistant practice. This course is especially designed to: 1) help guide and encourage the student's systematic preparation for the Physician Assistant National Certification Examination (PANCE) by means of monthly examinations; and 2) develop and assess the student's competency in each of the stated "Terminal Outcomes" of the P.A. Program (linked to suitability for clinical practice) via a combination of case presentations and the summative evaluation. Prerequisites: Fifth year standing. (G)(1). Summer.

AP589, Core Content III: This self-study course allows the student to practice and demonstrate the ability to perform independent learning regarding the principles of medical care within the scope of physician assistant practice. This course is especially designed to: 1) help guide and encourage the student's systematic preparation for the Physician Assistant National Certification Examination (PANCE) by means of monthly examinations; and 2) develop and assess the students competency in each of the stated "Terminal Outcomes" of the P.A. Program (linked to suitability for clinical practice) via a combination of case presentations and the summative evaluation. Prerequisites: Fifth year standing. (G)(1). Annually, term varies.

AP590, Core Content IV: This self-study course allows the student to practice and demonstrate the ability to perform independent learning regarding the principles of medical care within the scope of physician assistant practice.

This course is especially designed to: 1) help guide and encourage the student's systematic preparation for the Physician Assistant National Certification Examination (PANCE) by means of monthly examinations; and 2) develop and assess the student's competency in each of the stated "Terminal Outcomes" of the P.A. Program (linked to suitability for clinical practice) via a combination of case presentations and the summative evaluation. Prerequisites: Fifth year standing. (G)(2). Spring.

## 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.TI 262S, 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.

## Pharmacy Courses

RX301, Introductory Pharmacy Practice
Experience I: This is a seminar course which prepares pharmacy students for entrance into advanced rotations. Topics will vary according to section and may include professionalism, HIPPA, Indiana pharmacist intern registration, criminal background check, and ACPE graduation requirements. (U)(0). (P/F). Fall.

## 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: CH 351 and CH 352 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). Spring.

## RX350, Introduction to Pharmaceutical

Care 1: This course introduces the concept of pharmaceutical care and develops skills in drug information retrieval, descriptive statistics, and medical terminology. Prerequisites: P-1 standing in the professional pharmacy program, MA106, Calculus, and Analytical Geometry I. (U)(3). Fall.

## RX351, Introduction to Pharmaceutical

Care II: 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: Introduction to Pharmaceutical Care I. (U)(4). 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, HIPPA, Indiana pharmacist intern registration, criminal background check, and ACPE graduation requirements. Prerequisite: RX301, (U)(0). (P/F). 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 II Case Studies: This course uses a case-based approach to the development and monitoring of therapeutic plans for selected diseases. Corequisite: RX414. Prerequisite: RX413. Spring.

RX411, Principles of Drug Action I: 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) (1). Fall.

RX412, Principles of Drug Action II: 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 I: 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). Fall.

RX414, Therapeutics II: This is a continuation of Therapeutics I 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. Prerequisites: RX413 with a grade of C or higher; Pre- or co-requisite RX412, Corequisite RX404. (U) (3). Spring.

## RX415, Self-Care and Health Promotion I:

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, preventative screenings, vitamins, herbals, nonprescription medications, home monitoring techniques, nonpharmacological treatments, and adverse drug events (ADE) detection and reporting. Prerequisite: RX301. (U)(2). Fall.

## RX416, Self-Care and Health Promotion

II: A continuation of Self-Care and Health Promotion I. Prerequisites: Self-Care and Health Promotion I (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. Prerequisites: 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. Prerequisites: 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: P-1 standing in the professional pharmacy program. (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 part, 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 III: This is a seminar course which prepares pharmacy students for entrance into the advanced rotations. Topics will vary according to section and may include professionalism, HIPPA, Indiana pharmacist intern registration, criminal background check, and ACPE graduation requirements. Prerequisites: RX301, RX401. (U)(0). (P/F). Fall.RX503, Therapeutics III Case Studies: A case-based approach to the development and monitoring of therapeutic plans for selected diseases. Corequisite: RX513. Prerequisite: RX414. (U)(1). Fall.

## RX504, Therapeutics IV Case Studies: A

 case-studies approach to the development and monitoring of therapeutic plans for selected diseases. Co-requisite: RX 514. Prerequisite: RX 513. (U)(1). Spring.RX511, Principles of Drug Action III: 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 III: This course is a continuation of Therapeutics II 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. Prerequisite: RX414, RX404 with a grade of C or higher. Pre or Corequisite: RX503, RX511, RX522. (U) (3). Fall.

RX514, Therapeutics IV: This is a continuation of Therapeutics III with an emphasis placed on the selection of appropriate therapy, therapeutic monitoring, and identification of adverse drug reactions and interactions for selected diseases. Co-requisite: RX504. Prerequisite: RX513, RX503. Corequisite: RX504. (U)(3). Spring.

## RX522, Pharmacokinetics and

Biopharmaceutics: A consideration of the biological and physico-chemical factors that affect the delivery of drug to its site of action in the body and the basic principles of pharmacokinetics. Prerequisite: RX412 and RX422. (U)(3). Fall.

RX523, Clinical Pharmacokinetics: Clinical Pharmacokinetics integrates serum drug concentrations in patients with the principles of biopharmaceutics, pharmacokinetics, and pharmacodynamics to achieve therapeutic goals for individual patients. Prerequisite or Corequisite: RX503, RX511, RX513, and RX522. Co-requisite: RX504, RX514. (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. Prerequisite: RX 513, RX 527. (U)(2). Spring.

RX601, Independent Study: Pharmacy and Health Sciences: 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).

RX602, Independent Study: Pharmacy and Health Sciences: 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).

RX603, Independent Study: Pharmacy and Health Sciences: 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).

## RX607, Doctor of Pharmacy Senior Seminar

I: 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 (P/F) offerings. Prerequisite: P-4 standing in the pharmacy program. (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 (P/F) offerings. Prerequisite: P-4 standing in the pharmacy program. (P/F). (U)

## 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)(2). Spring.

## RX613, Clinical Research Methods: This

 course introduces students to clinical research: investigations 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, Health Economics: This course will provide a basic understanding of modern health economics concepts and methodologies, as well as a broader view of the value of disease state management and outcomes research. Prerequisite: RX713 Biostatistics and Research Design or permission of instructor. (U/G)(3). Annually, term varies.

## RX615, Introductory Medical Spanish:

A focus on health care to give the students the opportunity to become comfortable with conversational Spanish and medical terminology in various pharmaceutical contexts; learn intensive vocabulary and conversation exercises to improve their communication skills with patients-a guided learn-by-doing
approach. Prerequisites: SP204 or higher on placement test, completion of SP203 or equivalent, or 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 it relates 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. Completion of all PharmD P-2 courses or permission of instructor. (U)(3). Annually, term varies.

RX617, Advanced Medical Spanish: The development of Spanish communication skills around various health-related themes such as: anatomy of the human body, depression, drug abuse, emergency medicine, cardiovascular disease, respiratory disease, maternity, and diagnostic procedures. In addition, the student is required to complete a research paper in Spanish. Prerequisite: Completion of RX615 Intro to Medical Spanish or completion of the Spanish placement exam with placement at the 300 level or higher. (U)(3). Fall and spring.

RX618, Nutritional Support: This course will provide exposure to the fundamentals of specialized nutrition support with emphasis on management of complex patients with multiple disease processes and co-morbid medical conditions. Prerequisite: completion of all Pharm.D., P-2 courses or permission of instructor. (U)(3). Annually, term varies.

## RX619, Spanish Service Learning: This

 course will increase medical fluency in Spanish and encourage community cultural experiences. In addition to the two weekly sessions in class, each student will complete the community component of 20 hours of supervised volunteer work at a Spanish Speaking Clinic. Prerequisite: Medical Spanish at the 300-level. (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 Deliver 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: P-3 standing or permission of instructor. (U) (3). Spring.
## RX624, Substance Abuse and Drug

Addiction: The goal is to expose students to the prevalence of substance abuse and drug addition; understand the pharmacist's role in addiction prevention, treatment and recovery; and equip them to manage these circumstances in their professional careers. Focus includes non-prescription, prescription, and illicit drugs of abuse. (U)(3). Spring.

## RX625, Advanced Drug Delivery: Critical

 assessment of drug carrier systems, including transport of drug molecules across membranes. By permission only. (U)(3). Annually, term varies.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 mind-altering drugs like alcohol, nicotine, opioids, cocaine, and hallucinogens. Prerequisite: one semester of college-level biochemistry. (U/G)(3). 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. $(\mathrm{U})(1)$. Annually, term varies.

RX635, Internal Medicine Therapeutics: A capstone experience for students in their third 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. Prerequisite: RX414 and RX404. (U)(3). Annually, term varies.

RX637, 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. Co-requisite: RX513. (U)(3). Annually, term varies.

RX638, Diabetes Management: This elective provides concepts and clinical pearls of diabetes management. Students will learn to provide quality care education patients on self-management skills, providing therapeutic interventions, motivational interviewing, and counseling. Students will assist in the management of patients with diabetes while maintaining patient confidentiality and privacy. (U)(3). Annually, term varies.

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, RX 414. Pre- or Co-requisite: RX 513. (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 Pharm.D. 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/G)(3). Spring.

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 Diseases

Pharmacotherapy: This elective course is designed to enhance the students' 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/G)(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: P-4 standing. (U)(4). Annually, term varies.

## RX651, Administration and Management

Rotation: This rotation provides the student pharmacist the opportunity to develop skills in fiscal, organization, and personnel management. Prerequisite: P-4 standing. (U) (4). Annually, term varies.

## 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: P-4 standing. (U)(4). Annually, term varies.

## 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: P-4 standing. (U)(4). Annually, term varies.

## RX655, Prescription Compounding

Rotation: This rotation provides the student pharmacist experience in the extemporaneous compounding of medicinal products and will be used for the treatment and/or prevention of disease in humans. Prerequisite: P-4 standing. (U)(4). Annually, term varies.

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: P-4 standing. (U)(4).

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: P-4 standing. (U) (4). Annually, term varies.

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: P-4 standing. (U)(4). Annually, term varies.

## RX659, Clinical Community Pharmacy

Practice Rotation: This rotation focuses on detection and reporting of adverse drug reactions, monitoring compliance, detecting and evaluating drug interactions, interviewing and history taking, how to use knowledge of pharmacology and physiology to solve problems in therapeutics and how to effectively communicate. Prerequisite: P-4 standing. (U) (4). Annually, term varies.

RX660, Clinical Research Rotation: This rotation will focus on legal considerations in conducting clinical research, protocol design, budgetary considerations, informed consent, peer review process, and investigational drug control. Prerequisite: P-4 standing. (U/G)(4).

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 work flow in a community setting. (U)(4). Annually, term varies.

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: P-4 standing. (U)(4). Annually, term varies.

RX663, Disease State Mgmt Rotation: This rotation provides the student pharmacist with an understanding of the drug therapy and monitoring involved with common disease states and medical conditions. Prerequisite: P-4 standing. (U)(4). Annually, term varies.

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: P-4 standing. (U)(4). Annually, term varies.

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: P-4 standing. (U)(4). Annually, term varies.

## RX666, 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: P-4 standing. (U)(4). Annually, term varies.

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: P-4 standing. (U)(4). Annually, term varies.

RX668, GI/Liver Renal Rotation: This course is an acute care rotation that focuses on a specific specialty practice: GI, renal, or liver. This type of rotation will be with a practitioner with daily activities in the identified practice area. Prerequisite: Successful completion of a General Medicine Rotation. (U)(4). Annually, term varies.

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: P-4 standing. (U)(4). Annually, term varies.

## 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: P-4 standing. (U)(4). Annually, term varies.

## 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: P-4 standing. (U) (4). Annually, term varies.

RX673, Health Policy Rotation: The rotation introduces the student to the roles and authority of various governmental and regulatory agencies that establish and implement health care policy. Prerequisite: P-4 standing. (U)(4). Annually, term varies.

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: P-4 standing. (U)(4). Annually, term varies.

RX675, Managed Care Rotation: This rotation provides the student pharmacist experience with the medical treatment of patients in a managed care system. Prerequisite: P-4 standing. (U)(4). Annually, term varies.

RX676, Institutional Practice Rotation: This course is concentrated on the basic operational skills necessary for practice in an institutional pharmacy setting. The primary focus of activities will be on distribution and work flow in an institutional setting. (U)(4). Annually, term varies.

RX677, Neurology Rotation: This rotation develops the student pharmacist's knowledge and problem-solving skills in the application of the therapeutic principles to the care of patients who have neurological disorders. Prerequisite: P-4 standing. (U)(4). Annually, term varies.

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). Annually, term varies.

RX679, Oncology Rotation: This rotation develops the student pharmacist's knowledge and problem-solving skills in the application of the therapeutic principles to the care of patients who have a malignancy. Prerequisite: P-4 standing. (U)(4). Annually, term varies.

RX681, Neonatology Rotation: The rotation provides opportunities for the student pharmacist to participate in the care of neonates
in the acute care setting. Prerequisite: P-4 standing. (U)(4). Annually, term varies.

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: P-4 standing. (U)(4).
Annually, term varies.

## RX683, Pharm Marketing/Sales Rotation:

This rotation provides the student
pharmacist with an understanding of the pharmacist's role in industry by making use of pharmacoeconomic principles. Prerequisite: P-4 standing. (U)(4). Annually, term varies.

## RX684, Pharmacoeconomics and Outcomes

Research Rotation: This rotation provides the student pharmacist experience with the utilization of pharmacoeconomic parameters in assessing the health outcomes involved in the management of patients. Prerequisite: P-4 standing. (U)(4). Annually, term varies.

## RX685, Pharmcokinetics Rotation:

This rotation provides the student pharmacist experience in the monitoring of pharmacokinetically-administered medications. Prerequisite: P-4 standing. (U)(4). Annually, term varies.

## 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: P-4 standing. (U)(4). Annually, term varies.
## RX687, Poison Control/Toxin 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: P-4 standing. (U)(4). Annually, term varies.

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: P-4 standing. (U)(4). Annually, term varies.

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: P-4 standing. (U)(4). Annually, term varies.

## 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: P-4 standing. (U)(4). Annually, term varies.

## RX691, Radiopharmaceutical Rotation:

This rotation provides the student pharmacist experience with the use of radiopharmaceuticals in the diagnosis and treatment of medical conditions. Prerequisite: P-4 standing. (U)(4). Annually, term varies.

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: P-4 standing. (U)(4). Annually, term varies.

## 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: P-4 standing. (U)(4). Annually, term varies.

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: P-4 standing. (U)(4). Annually, term varies.

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: P-4 standing. (U) (4). Annually, term varies.

RX698, Washington, D.C. Rotation: The rotation experience provides an opportunity to participate in a three-month learning opportunity in the Washington, D.C. 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, one-credit hour Washington seminar course. Prerequisite: P-4 standing. (P/F). (U)(12). Annually, term varies.

## RX699, Spec Topics: Pharmacy Practice <br> Rotation: Elective Rotation in Pharmacy

 Practice: 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: P-4 standing. (U)(4). Annually, term varies.
## RX700, Regulatory Affairs and

Pharmacovigilence Rotation: This rotation provides the student pharmacist an opportunity to participate in and to better understand the various regulatory agencies and processes that assure the safety and efficacy of drug therapies available for human use. Prerequisite: P-4 standing. (U)(4). Annually, term varies.

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.

RX703, 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.

RX705, 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.

## RX735, Applied Statistics in Pharmaceutical

Research: The application of statistics to the main facets of pharmaceutical research, from research study design to data collection and analysis. Will include clinical trial design and analysis, drug utilization reviews, retrospective analyses, quality of life and cost effectiveness studies, evaluating research literature, and pharmaceutical manufacturing data. Prerequisite: Permission of instructor. (G)(3). Annually, term varies.

## 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. Annually, term varies.

## RX780, Current Topics in Pharmaceutical

Sciences: Discussion of current research topics in pharmaceutical sciences. (G)(1). Annually, term varies.

## RX781, Seminars in Pharmaceutical

Sciences: Presentation of research topics in pharmaceutical sciences by graduate students, faculty, and guest speakers. (G)(1). Annually, term varies.

RX782, 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, Experimental Design and Data

Analysis: Approaches in experimental design and statistical analysis of data. (G)(2). Annually, term varies.

RX785, Biopharmaceutical Analysis: Theory and practice of bioanalytical techniques in chemical and molecular biology based analyses. Prerequisite: B.S. level background in Analytical Chemistry. (G)(3). Annually, term varies.

RX786, 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.

## RX788, 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.



## Jordan College of the Arts

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.

Jordan College of the Arts is committed to the highest quality arts education by providing focused professional study and fostering an understanding of the interrelatedness of all the arts in a liberal arts environment. Through this integration we develop artist-citizens who are actively engaged in the community.

The five academic departments/programs-art, arts administration, dance, music and theatrefocus 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.

Our college arts core brings together students from all programs to explore the arts in the context of each other, examining mutual influences, parallel objectives, and similar expressions achieved by diverse means.

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.

## Administration

Ronald Caltabiano, D.M.A., dean; Michelle Jarvis, M.A., associate dean

## Professors

Timothy R. Brimmer, D.A.; James Robert

Briscoe, Ph.D.; Davis Brooks, D.M.A.; Lisa Brooks, D.M.A.; Ronald Caltabiano, D.M.A.; Marek Cholewa; Nikolai Rimsky-Korsakov Conservatory; Richard Clark, M.M.; Stanley E. DeRusha, M.M.; Penny Dimmick, D.A.; William Fisher, B.A.; Jeffrey Gillespie, Ph.D.; Robert Grechesky, Ph.D.; Michelle Jarvis, M.A.; Stephan Laurent, M.F.A.; James Mulholland, M.M.; David Murray, M.M.; Cynthia Pratt, M.F.A.; Owen W. Schaub, Ph.D.; Michael Schelle, Ph.D.; Laurence Shapiro, M.M.; Douglas E. Spaniol, D.M.A.; Eric Stark, D.M.A.; Diane Timmerman, M.F.A.

## Associate Professors

Larry Attaway, B.M.; Elaina Artemiev, Ph.D.; Daniel Bolin, Ed.D.; Kathleen Boyd, D.M.A.; Frank Felice, Ph.D.; William Grubb, D.M.A.; Melvin Jones, Ph.D.; Mary Katherine Kelton, D.M.A.; Robert Koharchik, M.F.A.; Gail Lewis, D.M.A.; Susan McGuire; Wendy Meaden, M.F.A.; Julianne Miranda, M.M.; Elizabeth Mix, Ph.D.; Gautam Rao, M.F.A.; Derek Reid, B.A.; Susan Zurbuchen, M.A.

## Assistant Professors

Patrick Hinson, B.A.; Rose Kleiman, M.A.R.; Steve Nyktas, M.F.A.; Matthew Pivec, D.M.A.; Thomas Studebaker, M.M.
Artist-in-Residence in Percussion
Jon Crabiel, M.A.

## Instructor

Mary Anne Scott, B.M.

## Staff Members

Amy Barnes (part-time), Catherine Bringerud, LaKisha Cooper, Kathleen Egan, Kristin Flodder, Judy Gonzalez, Rissa Guffey, Vonna Knapp, Daniel Peelor, Joy Rogers, Cathy Sipe, Glen Thoreson, Janice Thornburgh, Karen Thickstun, Maren Urness

## Undergraduate Degree Programs

- Bachelor of Arts (B.A.) in Art + Design
- Bachelor of Arts (B.A.) in DancePedagogy
- Bachelor of Arts (B.A.) in Music
- Bachelor of Arts (B.A.) in Theatre
- Bachelor of Fine Arts (B.F.A.) in DancePerformance
- Bachelor of Music (B.M.) in Music Education (choral-general, instrumentalgeneral, or area)
- Bachelor of Music (B.M.) in Performance (piano, voice, or orchestral instrument)
- Bachelor of Music (B.M.) in Composition
- Bachelor of Science (B.S.) in Arts

Administration (music, theatre or general)

- Bachelor of Science (B.S.) in Dance-Arts Administration


## Admission

All prospective students must submit a Jordan College of the Arts (JCA) program application in addition to the Application for Freshman Admission before an audition or interview will be scheduled. 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. A portfolio review and interview is required for Art + Design students.

Information on fall and spring audition dates and requirements are available online at www.butler.edu/jca.

Please note that all students who wish to be considered for JCA talent awards should complete the audition or interview process early in the year.

## General Academic Regulations

In addition to the general university academic regulations, the following are applicable to students registered in Jordan College of the Arts.

- All students in the college must fulfill core curriculum requirements of the University.
- Forty upper-division credit hours (300400) 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 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 (M.M.) in Composition
- Master of Music (M.M.) in Conducting (choral or instrumental)
- Master of Music (M.M.) in Music Education
- Master of Music (M.M.) in Music History
- Master of Music (M.M.) in Performance (piano, voice, or orchestral instrument)
- Master of Music (M.M.) in Piano Pedagogy


## 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. (P/F) credit. (Note: these courses will not count toward the limit of permitted $\mathrm{P} / \mathrm{F}$ 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.

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. (P/F) credit. (Note: these courses will not count toward the limit of permitted P/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. (P/F) credit. (Note: these courses will not count toward the limit of permitted P/F courses.) (U)(0). Fall and spring.

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. (P/F) credit. (Note: these courses will not count toward the limit of permitted $\mathrm{P} / \mathrm{F}$ courses.) (U)(0). Fall and spring.

## Art Program

Associate Professors
Elizabeth Mix, Ph.D.; Gautam Rao, M.F.A.
Assistant Professor
Steve Nyktas, M.F.A.

## Mission of the Program

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.

## Principles of the Program

1. 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.
2. Creativity-Creativity is nurtured through emphasis in idea generation; with focus 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.
3. 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.
4. 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.
5. 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.
6. 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 Program Student Learning Outcomes

- Demonstrate an understanding of the basic principles of Art + 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 + Design.
- Demonstrate an understanding of connectivity of a variety of Art + Design methods, materials, techniques, and technologies.
- Demonstrate an understanding of the intellectual underpinning of Art + Design in terms of history, process, and theory.
- Interpret, compare, and critique their own and others' work in terms of materials, processes, and concepts (demonstrating critical abilities with respect to innovation, craft, and sophistication).
- Value an ethic of professionalism as manifested in critiques, portfolio and thesis development, community involvement, and internships, becoming advocates for Art + Design.


## Degrees

- Bachelor of Art (B.A.) in Art + Design
- Art + Design minor


## General Requirements

Applicants are admitted to the program on the basis of academic acceptance by the University and a portfolio review and interview.

## Requirements for the Major

The B.A. 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, a minor or concentration in another discipline, as well as a wide variety of elective courses.

## Requirements for the Minor

The 18 -credit Art + Design minor consists of three required courses plus three additional courses chosen from approved electives.

## Core Curriculum Courses Offered by Art

PCA 200-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. (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.

ART107, Drawing: 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: major or minor and permission of instructor. (U)(3). Fall.

## ART210, Process: Art+Design Exploration:

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, ART107 or permission of instructor (U)(3). Spring.

ART303, Photography: An exploration of electronic still photography as an art form. Digital manipulation, historical photographic sources, and electronic still cameras are studied. Prerequisites: ART105, ART107, ART210 or mission of instructor. (U)(3). Occasionally.

ART304, Depiction: An exploration of sequential art and book illustration methods and practices. The course encompasses the study of techniques used in creating sequential art in genres such as: graphic novels, comic books, comic strips, children's books, and storyboards for animation. Prerequisites: ART105, ART107, ART210 or permission of instructor. (U)(3). Occasionally.

ART305, Time and Motion: This course explores art forms that have a temporal component, including animation (flash, Claymation, and stop-motion), digital imaging, video, and performance. Prerequisites: ART105, ART107, ART210 or permission of instructor. (U)(3). Occasionally.

ART306, Interactive: This course is an exploration of art that provokes interaction with audiences, including web and information design, net art, video game design, and relational art. Prerequisites: ART105, ART107, ART210 or permission of instructor. (U)(3).

> ART308, Structure: Graphic Design: This course provides an introduction to design concepts from an artistic and structural perspective. Students are introduced to a range of design problems and the work of several artists and designers. Emphasis is placed on the interplay of image, text, and creativity in creating meaning. Prerequisites: ART105, ART107, ART210, or permission of instructor. (U)(3). Fall and spring.

ART311, Function: This course is an exploration of product and packaging design. The class covers 2D, 3D, utilitarian, and whimsical objects. Prerequisites: ART105, ART107, ART210, or permission of instructor. (U)(3). Occasionally.

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. Prerequisites: ART105, junior or senior standing, or permission of instructor. (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. Prerequisites: ART105, junior or senior standing, or permission of instructor. (U)(3).

ART322, Painting: This course will cover the elements of painting, especially painting from observation, while introducing aesthetic issues that pertain to the visual arts. The class will expose the student to a broad range of ideas and approaches relating to painting and the visual arts. Prerequisites: ART105, ART107, ART210, or permission of instructor. (U)(3). Occasionally.

ART360, Space: The focus of this course is the creation of three-dimensional works utilizing traditional and nontraditional materials. Discussions, lectures, and critiques will explore and emphasize concept, materials, space, form, site presentation, craft, and context. Prerequisites: ART105, ART107, ART210 or permission of instructor. May be taken concurrently with ART 210. Prerequisites: ART105, ART107, ART210 or permission of instructor. May be taken concurrently with ART 210. (U)(3). Spring.

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)(3). 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.

ART 411C, Art+Design Senior Practicum: This course centers on the creation of a new and comprehensive body of work based in ART + Design. The specific nature and theme will be developed in consultation with the course instructor. The course requires substantial written work and public presentations, fulfilling speaking across the curriculum requirements. In addition, students will create or refine a professional portfolio. Prerequisites: Senior, major status. (U)(3). Spring.

ART 451S, Internship: Art + Design: On-thejob experience or apprenticeship related to the student's interests or degree objectives. (U)(1). Fall and spring.

ART 452S, Internship: Art + Design: On-the-job experience or apprenticeship related to the student's interests or degree objectives. Prerequisites: junior or senior standing, minimum 25 credits in ART courses, and approval of the program director. Majors only. $(\mathrm{U})(2)$. Fall and spring.

ART 453S, Internship: Art + Design: On-the-job experience or apprenticeship related to the student's interests or degree objectives. Prerequisites: junior or senior standing, minimum 25 credits in ART courses, and approval of the program director. Majors only. $(\mathrm{U})(3)$. Fall and spring.

## Department of Arts Administration

Administration
Susan Zurbuchen, M.A., department chair
Associate Professor
Susan Zurbuchen, M.A.
Assistant Professor
Rose Kleiman, M.A.R.
Staff
Amy Barnes

## 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.


## Department of 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 life-long 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.


## Degrees

- Bachelor of Science (B.S.) in Arts Administration
- Bachelor of Science (B.S.) in Arts Administration-Music
- Bachelor of Science (B.S.) in Arts Administration-Theatre
- Bachelor of Science (B.S.) in DanceArts Administration (See dance major requirements.)


## Requirements for all Arts Administration Degrees

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 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.

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. Prerequisites: Sophomore standing or permission of the instructor. (U) (3). Occasionally.

## AA371S, Experiential Learning: An

 opportunity for qualified students to undertake supervised field experience with an arts or related nonprofit organization. Prerequisites: arts administration major, sophomore standing, and permission of the instructor. (U)(1). Fall and spring.AA372S, Experiential Learning: An opportunity for qualified students to undertake supervised field experience with an arts or related nonprofit organization. Prerequisites: arts administration major, sophomore standing, and permission of the instructor. (U)(2). Fall and spring.

## AA373S, Experiential Learning: An

 opportunity for qualified students to undertake supervised field experience with an arts or related nonprofit organization. Prerequisites: arts administration major, 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. Prerequisites: 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. Prerequisites: 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. Prerequisites: 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 resume, cover letter, computer skills, literacy for the workplace, and approval of internship site. Prerequisites: permission of the department chair. $(\mathrm{U})(0)$. 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. $(\mathrm{U} / \mathrm{G})(3)$. Fall and spring.

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## 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, Arts Administration Seminar: 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
Larry Attaway, B.M., department chair
Professors
Marek Cholewa, Nikolai Rimsky-Korsakov
Conservatory; Michelle Jarvis, M.A.; Stephan
Laurent, M.F.A.; Cynthia Pratt, M.F.A.

## Associate Professors

Larry Attaway, B.M.; Susan McGuire; Derek Reid, B.A.
Assistant Professor
Patrick Hinson, B.A.
Staff Members
Kathleen Egan, Judy Gonzalez, Daniel Peelor, Cathy Sipe

## 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 (NASD).
- Strong technical training based on the central focus of classical ballet.
- Exposure to a wide range of techniques.
- Performance in a preprofessional company.
- Broad exposure to academic subjects in dance and in other arts.
- Opportunities to perform in major productions in a 2,200 -seat venue each year and also in a more intimate setting, the Howard L. Schrott Center for the Arts.
- Butler Ballet, which performs full-length classical ballets, commissioned and licensed masterworks, and contemporary repertoire from a variety of stylistic approaches.
- Butler Chamber Dance, which performs experimental non-proscenium choreographic work along with multidisciplinary contemporary repertoire.
- Opportunities for students to present their creativity through Student Choreographic Showcases and Senior Production.
- 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 in Europe and Asia.


## Department of Dance Student Learning Outcomes

The coursework of each of the three degree plans in the Department of Dance 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.


## Degrees

- Bachelor of Arts (B.A.) in DancePedagogy
- Bachelor of Fine Arts (B.F.A.) in DancePerformance
- Bachelor of Science (B.S.) in Dance-Arts Administration
- Dance minor


## 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 (B.F.A., B.A., and B.S.) 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 Black

Tradition: 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 non-dominant 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: 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 II (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.
## Courses in Dance for Non-Majors

Unless otherwise indicated, all oddnumbered courses are offered in the fall and all even-numbered courses are offered in the spring.

DA101, Beginning Ballet I: 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 II (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 meeting 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 (non-majors): Continuation of DA302. Intermediate/Advanced level of ballet technique for non-majors. Three meetings per week. (U) (2). Fall.

## DA402, Intermediate/Advanced Ballet

(Non-Majors): Continuation of DA 302. Intermediate/Advanced level of ballet technique for non-majors. Three meetings per week. (U) (2). Spring.

## Courses in Dance for Majors

Unless otherwise indicated, all oddnumbered courses are offered in the fall and all even-numbered 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: Freshman 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: Freshman status and DA109. (U)(0). Spring.

## Ballet Technique Courses for Majors

DA111, Ballet Technique I: 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 I Freshman:

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 II Freshman:

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 II: 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 III: 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 III: 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 Freshman:
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 Freshman: 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 precision of line. Includes barre and center exercises. Class meets five days a week for one and one half-hour. (U)(2). Spring.

## DA127, Men's Allegro Technique I: 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 I:

Continuation of DA127. Two meetings per week. Prerequisite: DA127. (U)(1). Spring.

DA211, Ballet Technique I: 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 I: 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 II: 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 II: 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 III: 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 III: 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 IV: Advanced level of ballet technique. (See description under DA117, 118.) Ladies will take the complete class on pointe during three of the five weekly meetings. (U)(3). Fall.

DA218, Ballet Technique IV: Advanced level of ballet technique. (See description under DA117, 118.) 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 toward 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-hour. (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 toward 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-hour. (U)(2). Spring.

DA227, Men's Allegro Technique II: 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 II:

Continuation of DA227. Two meetings per week. Prerequisite: DA 227. (U)(1). Spring.

DA313, Ballet Technique II: Intermediate level of ballet technique (see description under DA115, 116). By placement only. (U)(2). Spring.

DA314, Ballet Technique II: Intermediate level of ballet technique (see description under DA115, 116). By placement only. (U)(2). Spring.

DA315, Ballet Technique III: 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.

DA316, Ballet Technique III: 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.

DA317, Ballet Technique IV: Advanced level of ballet technique. (See description under DA115, 116.) 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,
116.) 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-hour. (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-hour. (U)(2). Spring.DA327, Men's Allegro Technique III: 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 III:

Continuation of DA327. Two meetings per week. Prerequisite: DA327. (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 III: Advanced level of ballet technique. (See description under DA115, 116.) By placement only. Meets five times per week. (U)(2). Fall.

DA416, Ballet Technique III: Advanced level of ballet technique. (See description under DA115, 116.) By placement only. Meets five times per week. (U)(2). Spring.

DA417, Ballet Technique IV: Advanced level of ballet technique. (See description under DA117, 118.) Ladies will take the complete class on pointe during three of the five weekly meetings. (U)(2). Fall.

DA418, Ballet Technique IV: Advanced level of ballet technique. (See description under DA117, 118.) 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-hour. (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-hour. (U)(2). Spring.

DA427, Men's Allegro Technique IV: 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 IV:

Continuation of DA427. Two meetings per week. Prerequisite: DA 427. (U)(1). Spring.

## Pointe, Pas de Deux and Variations Courses <br> DA121, Pointe I Freshmen: The specialized study of ballet technique as applied to pointe work. For dance majors only. Two meetings per week. (U)(1). Fall.

DA122, Pointe I Freshmen: The specialized study of ballet technique as applied to pointe work. For dance majors only. Two meetings per week. (U)(1). Spring.

DA123, Pointe II Freshmen: Intermediate/ advanced level of pointe technique for dance majors. By placement only. Two meetings per week. (U)(1). Fall.

DA124, Pointe II Freshmen: Intermediate/ advanced level of pointe technique for dance majors. By placement only. Two meetings per week. (U)(1). Spring.

DA125, Pas de Deux I: First-year partnering technique. Required of male dance majors, by invitation only for female dance majors. (U) (1). Fall.

DA126, Pas de Deux I: First-year partnering technique. Required of male dance majors, by invitation only for female dance majors. (U)
(1). Spring.

DA221, Pointe II Sophomores: Intermediate/ advanced level of pointe technique for Dance Majors. By placement only. Two meetings per week. (U)(1). Fall.

DA222, Pointe II Sophomores: Intermediate/ advanced level of pointe technique for Dance Majors. By placement only. Two meetings per week. (U)(1). Spring.

DA223, Pointe III Sophomores: Advanced level of pointe technique for dance majors. By placement only. Two meetings per week. (U) (1). Fall.

DA224, Pointe III Sophomores: Advanced level of pointe technique for dance majors. By placement only. Two meetings per week. (U) (1). Spring.

DA225, Pas de Deux II: Second-year partnering technique. Required of male B.F.A. dance majors, by invitation only for female dance majors. One meeting per week. (U)(1). Fall.

DA226, Pas de Deux II: Second-year partnering technique. Required of male B.F.A. dance majors, by invitation only for female dance majors. One meeting per week. (U)(1). Spring.

DA321, Pointe III Juniors: Advanced level of pointe technique for dance majors. By placement only. Two meetings per week. (U) (1). Fall.

DA322, Pointe III Juniors: Advanced level of pointe technique for dance majors. By placement only. Two meetings per week. (U) (1). Spring.

DA323, Pointe IV Juniors: Advanced professional level pointe technique for Dance Majors. By placement only. Two meetings per week. (U)(1). Fall.

DA324, Pointe IV Juniors: Advanced professional level pointe technique for dance majors. By placement only. Two meetings per week. (U)(1). Spring.

DA325, Pas de Deux III: Intermediate/ Advanced technique of supported adagio and advanced repertoire required of male B.F.A. dance majors. By invitation only for male
B.A. and B.S. dance majors and female dance majors. One meeting per week. (U)(1). Fall.

DA326, Pas de Deux III: Intermediate/ Advanced technique of supported adagio and advanced repertoire required of male B.F.A. dance majors. By invitation only for male B.A. and B.S. dance majors and female dance majors. One meeting per week. (U)(1). Spring.

DA421, Pointe III Seniors: Advanced level of pointe technique for dance majors. By placement only. Two meetings per week. (U) (1). Fall.

DA422, Pointe III Seniors: Advanced level of pointe technique for dance majors. By placement only. Two meetings per week. (U) (1). Spring.

DA423, Pointe IV Seniors: Advanced professional level Pointe technique for dance majors. By placement only. Two meetings per week. (U)(1). Fall.

DA424, Pointe IV Seniors: Advanced professional level pointe technique for dance majors. By placement only. Two meetings per week. (U)(1). Spring.

DA425, Pas de Deux IV: 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 IV: 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 oddnumbered courses are offered in the fall and all even-numbered courses are offered in the spring.

DA131, Modern Technique I: First year modern technique for dance majors. Three hours per week. No Prerequisite. (U)(1). Fall.

DA132, Modern Technique I: First year modern technique for dance majors. Three hours per week. Prerequisite: DA131. (U)(1). Spring.

DA231, Modern Technique II: Second-year modern technique for dance majors. Three hours per week. Prerequisites: DA131, DA132. (U)(1). Fall.

DA232, Modern Technique II: Second-year modern technique for dance majors. Three hours per week. Prerequisite: DA231. (U)(1). Spring.

DA233, Improvisation I: 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 III: Third-year technique for dance majors. Three meetings per week. Prerequisites: DA231, DA232. (U) (1). Fall.

DA332, Modern Technique III: Third-year technique for dance majors. Three meetings per week. Prerequisites: DA331. (U)(1). Spring.

DA431, Modern Technique IV: Fourth-year modern technique for dance majors. Three meetings per week. Prerequisites: DA331, 332. (U)(1). Fall.

DA432, Modern Technique IV: Fourth-year modern technique for dance majors. Three meetings per week. Prerequisites: DA431. (U) (1). Spring.

## Other Dance Techniques Courses

Unless otherwise indicated, all oddnumbered courses are offered in the fall and all even-numbered courses are offered in the spring.

DA141, Jazz I: Contemporary jazz for dance majors with emphasis on Symonson technique. Two meetings per week. (U)(1). Fall.

DA142, Jazz I: Contemporary jazz for dance majors with emphasis on Symonson technique. Two meetings per week. Prerequisite: DA 41 (U)(1). Spring.

DA241, Jazz II: Continuing study of jazz techniques at the Sophomore level. Three meetings per week. Prerequisite: DA142. (U) (1). Fall.

DA242, Jazz II: Second-year jazz technique for dance majors. Three meetings per week. Prerequisite: DA241. (U)(1). Spring.

DA247, Character Dance-Slavic: The study of Slavic dance techniques of the Polish, Russian, and Hungarian styles with emphasis on individual and group performance. Two meetings per week. Prerequisite: Sophomore dance major. (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 meeting per week. Prerequisite: DA247. (U) (1). Spring.

DA341, Jazz III: Third-year Jazz technique for dance majors. Three meetings per week. Prerequisites: DA241, DA242. (U)(1). Fall.

DA342, Jazz III: Third-year Jazz technique for dance majors. Three meetings per week. Prerequisites: 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 21 st century, including: balance, counterbalance, resistance, strength building, and weight distribution. Prerequisite: Completion of DA325 or DA326; enrollment in DA425/426 preferred, mandatory for male dancers. (U)(1). Fall.

## Performance Courses

Unless otherwise indicated, all oddnumbered courses are offered in the fall and all even-numbered courses are offered in the spring.

DA151, Butler Ballet-Freshman: 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-Freshman:<br>Continuation of DA151. Prerequisite: DA151. $(\mathrm{U})(1)$. 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. $(\mathrm{U})(1)$. 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.

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 DA 351. 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 oddnumbered courses are offered in the fall and all even-numbered 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. (P/F) 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. (P/F) 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. (P/F) 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. (P/F) credit. Prerequisite: DA390. (U)(0). Fall and spring.

## Dance Academics Courses

Unless otherwise indicated, all oddnumbered courses are offered in the fall and all even-numbered courses are offered in the spring.

DA161, Body Placement I: 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 II: 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: DA 161. (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.

## 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 I: 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 II: Investigation of the relationship between choreography and music. Prerequisite: DA361, DA264. (U)(2).

DA365, Dance History I: The evolution of dance from its earliest appearance to modern times; the relationship of dancing to religion, music, and drama. Three meetings per week (writing intensive). Prerequisite: junior dance major. (U)(3). Fall.

DA366C, Dance History II: The evolution of dance from its earliest appearance to modern times; the relationship of dancing to religion, music, and drama. Three meetings per week (writing intensive). Prerequisite: junior dance major. (U)(3). Spring.

DA453, Choreography III: 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).

## DA454, Senior Production Project:

Production, rehearsal, and public presentation of the choreographic project which began in DA453. Prerequisite: DA453. (U)(2). Spring.

## DA465, 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 judgments and criticism. 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).

## 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.

## Pedagogy, Special Studies Courses

Unless otherwise indicated, all oddnumbered courses are offered in the fall and all even-numbered courses are offered in the spring.

## DA471, 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 B.A. dance major or senior B.F.A., B.S. 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.

DA474, Teaching Analysis of 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: DA471, DA 331. (U)(2). Spring.

DA476, Teaching Analysis of Jazz Technique:
Pedagogy of Jazz techniques (theory and practice) utilizing the Symonson technique.
Prerequisites: DA241, DA242, DA471. (U)(2). Spring.

## DA477, 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

Daniel P. Bolin, Ed.D., chair; Lisa Brooks, D.M.A., assistant chair

## Professors

Timothy R. Brimmer, D.A.; James Robert
Briscoe, Ph.D.; Davis Brooks, D.M.A.; Lisa
Brooks, D.M.A.; Richard Clark, M.M.; Stanley
E. DeRusha, M.M.; Penny Dimmick, D.A.; Jeffrey Gillespie, Ph.D.; Robert Grechesky, Ph.D.; James Mulholland, M.M.; David Murray, M.M.; Michael Schelle, Ph.D.; Laurence Shapiro, M.M.; Douglas E. Spaniol, D.M.A.; Eric Stark, D.M.A.

## Associate Professors

Daniel Bolin, Ed.D.; Kathleen Boyd, D.M.A.; Frank Felice, Ph.D; William Grubb, D.M.A.; Melvin Jones, Ph.D.; Mary Katherine Kelton, D.M.A.; Gail Lewis, D.M.A.; Julianne Miranda, M.M.

## Assistant Professors

Matthew Pivec, D.M.A.; Thomas Studebaker, M.M.

Artist-in-Residence in Percussion Jon Crabiel, M.A.

## Instructor

Mary Anne Scott, B.M.

## Staff Members

Catherine Bringerud, Vonna Knapp, Kristin Flodder, Joy Rogers, Cathy Sipe

## Mission of the Program

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 nonmajors, 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 (NASM).

## School of 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 (B.A.) in Music
- Bachelor of Music (B.M.) in Music Education-choral/general and instrumental/general (four-year program)
- Bachelor of Music (B.M.) in Music Education-area (five-year program)
- Bachelor of Music (B.M.) in Performance (orchestral instrument, piano, and voice major)
- Bachelor of Music (B.M.) in Composition
- Bachelor of Science (B.S.) in Arts Administration-music


## Concentration in Jazz Studies

The Concentration in Jazz Studies may be earned concurrently with any music degree, although it is designed primarily for the B.A. degree. The concentration requires 24 credit hours, of which 21 are specified. The remaining credits are to be chosen from jazz electives.

## Areas of Emphasis

The following emphases may be added to any music degree, although they are designed primarily for the B.A. degree. At least 50 percent of the credits in any concentration or emphasis must be unique to that program and may not overlap with another concentration/ emphasis, major or minor (except as free electives).

- Applied Music
- Composition
- Music History
- Music Theory
- Piano Pedagogy


## Music Minor

A minor in music is available through the Jordan College of the Arts 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, or music theory.

Jazz Studies Minor

A minor in jazz studies is available through the Jordan College of the Arts to students who are not enrolled in a music major. It consists of 24 semester hours, of which 22 are specified. The remaining hours are unspecified and may be taken from jazz electives.

## Music 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 Exam: An upper-divisional examination is 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 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 degree-required recital. Details of the contents of this exam are available from each area of applied study.
- Music education students are required to pass an upper-divisional exam in music education at the end of the sophomore year. Specific requirements are on file in the music office.
- Music composition students are required to pass an upper-divisional exam in composition. This is normally done at the completion of the fourth semester of compositional study. Specific requirements are on file in the music office.
- Students must pass a recital hearing before presenting an instrumental or vocal degree recital. Details are available from the music office.


## Graduate Degree Programs

- Master of Music (M.M.) in Composition
- Master of Music (M.M.) in Conducting (choral or instrumental)
- Master of Music (M.M.) in Music Education
- Master of Music (M.M.) in Music History
- Master of Music (M.M.) in Performance (piano, voice, or orchestral instrument)
- Master of Music (M.M.) in Piano Pedagogy


## Master of Music Degrees with a Double Major

Students may also earn a Master of Music (M.M.) 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. For complete details, download the M.M. degrees with a double major description from the School of Music website or see the School of Music office.

The specific admission and degree requirements for each graduate degree program are available online at www.butler.edu/music or from the School of Music office.

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 liveperformances; participate in written exercises and class activities relating music to the sociocultural 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.

## Applied Music Courses

Instruction is offered in the following for either undergraduate or graduate credit for music majors: bassoon, cello, clarinet, contrabass, euphonium, flute, guitar, harp, harpsichord, horn, organ, percussion, piano, 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 from the School of Music office.

AM11, Keyboard Skills I: Basic piano techniques, sight-reading, transposition, improvisation, theory, ear training, and repertoire analysis. For dance majors only. (U) (1). Fall.

AM12, Keyboard Skills II: Continuation of AM011. For dance majors only. Prerequisite: AM011 or consent of the instructor. (U)(1). Spring.

AM13, Keyboard Skills III: 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 I: 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 II: 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 III: Continuation of AM022 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 IV: Continuation of AM023. This course counts toward piano requirements on degree programs. Prerequisite: AM023 or consent of the instructor. (U)(1). Spring.

## AM31, Piano Major: Keyboard Skills I:

 Keyboard skills for piano majors. Studies at the keyboard focusing on transposition, chord progressions, melody harmonization, sight reading, improvisation, and score reading. (U) (1). Fall.
## AM32, Piano Major: Keyboard Skills

II: Continuation of AM31. Studies at the keyboard focusing on transposition, chord progressions, melody harmonization, sight reading, improvisation, and score reading. (U) (1).

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.

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 I: 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, sight-reading music, and the study of a wide range of music. (U)(1). Fall.

AM126, Guitar Class II: A continuation of AM125, with emphasis on more advanced techniques. (U)(1). Spring.

AM127, Voice Class I: 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 II: 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.

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.

AM131, Beginning Piano Class: Introductory course for beginning pianists taught in a group setting. (U)(1). Fall.

AM134, Jazz Keyboard Skills: An introduction to chord theory and harmony, including basic techniques of jazz piano chord voicings for the solo pianist. Previous keyboard experience required. $(U)(1)$. Fall and spring.

AM150, Bassoon Principal: Private instruction for students admitted to the B.S. arts administration degree. (U)(1). Fall and spring.

AM151, Bassoon Reed Making I: 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 B.S. arts administration degree. (U)(1). Fall and spring.

AM153, Euphonium Principal: Private instruction for students admitted to the B.S. arts administration degree. (U)(1). Fall and spring.

AM154, Flute Principal: Private instruction for students admitted to the B.S. arts administration degree. (U)(1). Fall and spring.

AM155, Guitar Principal: Private instruction for students admitted to the B.S. arts administration degree. (U)(1). Fall and spring.

AM156, Harp Principal: Private instruction for students admitted to the B.S. arts administration degree. (U)(1). Fall and spring.

AM157, Piccolo Principal: Private instruction for students admitted to the B.S. arts administration degree. Fall and spring.

AM158, Horn Principal: Private instruction for students admitted to the B.S. arts administration degree. (U)(1). Fall and spring.

AM161, Percussion Principal: Private instruction for students admitted to the B.S. arts administration degree. (U)(1). Fall and spring.

AM162, Piano Principal: Private instruction for students admitted to the B.S. arts administration degree. (U)(1). Fall and spring.

AM163, Saxophone Principal: Private instruction for students admitted to the B.S. arts administration degree. (U)(1). Fall and spring.

AM164, String Bass Principal: Private instruction for students admitted to the B.S. arts administration degree. (U)(1). Fall and spring.

AM165, Trombone Principal: Private instruction for students admitted to the B.S. arts administration degree. (U)(1). Fall and spring.

## AM166, Trumpet Principal: Private

 instruction for students admitted to the B.S. arts administration degree. (U)(1). Fall and spring.AM167, Tuba Principal: Private instruction for students admitted to the B.S. arts administration degree. (U)(1). Fall and spring.

AM168, Viola Principal: Private instruction for students admitted to the B.S. arts administration degree. (U)(1). Fall and spring.

AM169, Violin Principal: Private instruction for students admitted to the B.S. arts administration degree. (U)(1). Fall and spring.

AM170, Violoncello Principal: Private instruction for students admitted to the B.S. arts administration degree. (U)(1). Fall and spring.

AM171, Voice Principal: Private instruction for students admitted to the B.S. arts administration degree. (U)(1). Fall and spring.

AM179, Oboe Principal: Private instruction for students admitted to the B.S. arts administration degree. (U)(1). Fall and spring.

AM193, Secondary Applied Jazz Studies: Private instruction related to the jazz idiom. Meets 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. AM207, Piccolo Major: (U)(2). Fall and spring.

AM208, Horn Major: (U)(2). Fall and spring. AM209, Oboe Major: (U)(2). Fall and spring.

AM210, Organ 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 Major Lab: For music and arts administration (music) majors for whom voice is the principal instrument. The lab 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 or secondary voice is required. $(\mathrm{U})(0)$. Fall and spring.

AM224, Harpsichord Major: (U)(2). Fall and spring.

AM226, Piano Studio Class: Piano Studio Class is a 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. (U/G)(0).

## AM251, Bassoon Reed Making II: 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 of the 18th 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.

## 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 P/F by a faculty committee. $(U)(0)$. 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.

AM324, Harpsichord Secondary: (U)(1). Fall and spring.

AM350, Bassoon Principal: Private instruction for students admitted to the B.S. arts administration degree. (U)(1). Fall and spring.

## AM351, Bassoon Reed Making III:

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 B.S. arts administration degree. (U)(1). Fall and spring.

AM353, Euphonium Principal: Private instruction for students admitted to the B.S. arts administration degree. (U)(1). Fall and spring.

AM354, Flute Principal: Private instruction for students admitted to the B.S. arts administration degree. (U)(1). Fall and spring.

AM355, Guitar Principal: Private instruction for students admitted to the B.S. arts administration degree. (U)(1). Fall and spring.

AM356, Harp Principal: Private instruction for students admitted to the B.S. arts administration degree. (U)(1). Fall and spring.

AM357, Piccolo Principal: Private instruction for students admitted to the B.S. arts administration degree. (U)(1). Fall and spring.

AM358, Horn Principal: Private instruction for students admitted to the B.S. arts administration degree. (U)(1). Fall and spring.

AM361, Percussion Principal: Private instruction for students admitted to the B.S. arts administration degree. (U)(1). Fall and spring.

AM362, Piano Principal: Private instruction for students admitted to the B.S. arts administration degree. (U)(1). Fall and spring.

AM363, Saxophone Principal: Private instruction for students admitted to the B.S. arts administration degree. (U)(1). Fall and spring.

AM364, String Bass Principal: Private instruction for students admitted to the B.S. arts administration degree. (U)(1). Fall and spring.

## AM365, Trombone Principal: Private

 instruction for students admitted to the B.S. arts administration degree. (U)(1). Fall and spring.
## AM366, Trumpet Principal: Private

 instruction for students admitted to the B.S. arts administration degree. (U)(1). Fall and spring.AM367, Tuba Principal: Private instruction for students admitted to the B.S. arts administration degree. (U)(1). Fall and spring.

AM368, Viola Principal: Private instruction for students admitted to the B.S. arts administration degree. (U)(1). Fall and spring.

AM369, Violin Principal: Private instruction for students admitted to the B.S. arts administration degree. $(\mathrm{U})(1)$. Fall and spring.

AM370, Violoncello Principal: Private instruction for students admitted to the B.S. arts administration degree. (U)(1). Fall and spring.

AM371, Voice Principal: Private instruction for students admitted to the B.S. arts administration degree. (U)(1). Fall and spring.

AM379, Oboe Principal: Private instruction for students admitted to the B.S. arts administration degree. $(\mathrm{U})(1)$. Fall and spring.

AM393, Secondary Applied Jazz Studies: Private instruction related to the jazz idiom. Meets 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 P/F by a faculty committee. (U)(0). Fall and spring.

AM401, Bassoon Major: (U)(2). Fall and spring.

AM402, Clarinet Major: (U)(2). Fall and spring.

AM403, Euphonium Major: (U)(2). Fall and spring.

AM404, Flute Major: (U)(2). Fall and spring.
AM405, Guitar Major: (U)(2). Fall and spring.

AM406, Harp Major: (U)(2). Fall and spring.
AM407, Piccolo Major: (U)(2). Fall and spring.

AM408, Horn Major: (U)(2). Fall and spring.
AM409, Oboe Major: (U)(2). Fall and spring.
AM410, Organ Major: (U)(2). Fall and spring.

AM411, Percussion Major: (U)(2). Fall and spring.

AM412, Piano Major: (U)(2). Fall and spring.
AM413, Saxophone Major: (U)(2). Fall and spring.

AM414, String Bass Major: (U)(2). Fall and spring.

AM415, Trombone Major: (U)(2). Fall and spring.

AM416, Trumpet Major: (U)(2). Fall and spring.

AM417, Tuba Major: (U)(2). Fall and spring.
AM418, Viola Major: (U)(2). Fall and spring.
AM419, Violin Major: (U)(2). Fall and spring.
AM420, Violoncello Major: (U)(2). Fall and spring.

AM421, Voice Major: (U)(2). Fall and spring.
AM422, Voice Major Lab: For music and arts administration (music) majors for whom voice is the principal instrument. The lab 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 or secondary voice is required. $(\mathrm{U})(0)$. Fall and spring.

AM424, Harpsichord Major: (U)(2). Fall and spring.

AM426, Piano Studio Class: Piano Studio Class is a 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. (U)(0).

AM430, Piano Teaching Internship: Piano teaching, under supervision, in a variety of settings and levels. Meets one hour per week. Prerequisite: permission of the instructor. (U/G)(1). Fall and spring.

AM450, Advanced Conducting: Advanced conducting techniques, with emphasis on style, analysis, and programming. Prerequisites: MT311 and MT321, or MT322 and permission of department chair. (U)(2). Fall and spring.

AM480, Composition: Exercises in the larger musical forms of 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. Prerequisite: MT440 and MT441. (U)(3). Fall.

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. $(U)(0)$. Fall and spring.

## AM497, Advanced Performance Study:

Advanced study of performance techniques. 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.

AM501, Bassoon Secondary: (U)(1). Fall and spring.

AM502, Clarinet Secondary: (U)(1). Fall and spring.

AM503, Euphonium Secondary: (U)(1). Fall and spring.

AM504, Flute Secondary: (U)(1). Fall and spring.

AM505, Guitar Secondary: (U)(1). Fall and spring.

AM506, Harp Secondary: (U)(1). Fall and spring.

AM507, Piccolo Secondary: (U)(1). Fall and spring.

AM508, Horn Secondary: (U)(1). Fall and spring.

AM509, Oboe Secondary: (U)(1). Fall and spring.

AM510, Organ Secondary: (U)(1). Fall and spring.

AM511, Percussion Secondary: (U)(1). Fall and spring.

AM512, Piano Secondary: (U)(1). Fall and spring.

AM513, Saxophone Secondary: (U)(1). Fall and spring.

AM514, String Bass Secondary: (U)(1). Fall and spring.

AM515, Trombone Secondary: (U)(1). Fall and spring.

AM516, Trumpet Secondary: (U)(1). Fall and spring.

AM517, Tuba Secondary: (U)(1). Fall and spring.

AM518, Viola Secondary: (U)(1). Fall and spring.

AM519, Violin Secondary: (U)(1). Fall and spring.

AM520, Violoncello Secondary: (U)(1). Fall and spring.

AM521, Voice Secondary: (U)(1). Fall and spring.

AM523, Jazz Piano Secondary: (U)(1). Fall and spring.

AM524, Harpsichord Secondary: (U)(1). Fall and spring.

AM551, Bassoon Reed Making IV: 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 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: (U)(2). Fall and spring.

AM602, Clarinet Major: (U)(2). Fall and spring.

AM603, Euphonium Major: (U)(2). Fall and spring.

AM604, Flute Major: (U)(2). Fall and spring.
AM605, Guitar Major: (U)(2). Fall and spring.

AM606, Harp Major: (U)(2). Fall and spring.
AM607, Piccolo Major: (U)(2). Fall and spring.

AM608, Horn Major: (U)(2). Fall and spring.
AM609, Oboe Major: (U)(2). Fall and spring.

AM610, Organ Major: (U)(2). Fall and spring.
AM611, Percussion Major: (U)(2). Fall and spring.

AM612, Piano Major: (U)(2). Fall and spring.
AM613, Saxophone Major: (U)(2). Fall and spring.

AM614, String Bass Major: (U)(2). Fall and spring.

AM615, Trombone Major: (U)(2). Fall and spring.

AM616, Trumpet Major: (U)(2). Fall and spring.

AM617, Tuba Major: (U)(2). Fall and spring.
AM618, Viola Major: (U)(2). Fall and spring.
AM619, Violin Major: (U)(2). Fall and spring.
AM620, Violoncello Major: (U)(2). Fall and spring.

AM621, Voice Major: (U)(2). Fall and spring.
AM622, Voice Major Lab: For music and arts administration (music) majors for whom voice is the principal instrument. The lab 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 or secondary voice is required. (G)(0). Fall and spring.

AM624, Harpsichord Major: (U)(2). Fall and spring.

AM626, Piano Studio Class: Piano Studio Class is a 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 $\mathrm{P} / \mathrm{F} .(\mathrm{G})(0)$.

## AM634, Advanced Keyboard Harmony:

 Studies at the keyboard in the realization of figured bass, melody harmonization, transposition, clefs, and advanced score reading. Meets one hour per week. Prerequisite:Graduate status and permission of the instructor. (G)(1).

## 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. Prerequisite: MT440 and MT441 or consent of the instructor. (G)(3). 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.

AM709, 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.
$(G)(0)$. Fall and spring.
AM710, 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. $(\mathrm{P} / \mathrm{F})(\mathrm{G})(0)$. Fall and spring.

## AM799, 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. (G)(0). Fall and spring.

## Ensemble Courses

Ensembles are open to all students of the University. Contact the individual directors as listed in the semester class schedule for entrance requirements. Participation in school
concerts and other scheduled events is required of students registered for all types of vocal and instrumental organizations. Registration levels are as follows:
100 numbers-freshmen and sophomores
300 numbers-juniors and seniors
500 numbers-graduates

## ES100, Fundamentals of Chamber Music: A

preliminary course which prepares a student for his/her remaining chamber music requirements. Topics covered include developing rehearsal strategies, how to communicate without a conductor, ensemble etiquette, using technology in the rehearsal process, etc. (U)(1). Fall and spring.

ES101, Chamber Music: (U)(1). Fall and spring.

ES102, Chamber Music: Guitar: (U)(1). Fall and spring.

## ES103, Chamber Music: Arthur Jordan <br> 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. $(\mathrm{U})(1)$. 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, freshman or sophomore status. (U) (1). Fall and spring.

ES113, 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. $(\mathrm{U})(1)$. 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 flexible instrumentation 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). Fall.

## 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.

ES127, 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. $(\mathrm{U})(1)$. 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.

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. $(\mathrm{U})(1)$. 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. $(\mathrm{U})(1)$. 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 flexible instrumentation 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. $(\mathrm{G})(1)$. 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.

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. $(\mathrm{G})(1)$. 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 and spring.

ES520, University Wind Ensemble: The premiere wind and percussion organization on campus, the Wind Ensemble is a flexible instrumentation 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). Fall and 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. $(\mathrm{G})(1)$. Fall and spring.

ES524, Jazz Ensemble: A large jazz band of flexible instrumentation specializing in the performance of jazz, popular, and commercial music. Performance include concerts, shows, dances, ballets. and musicals. Repertoire varies from big band to small combo work. (G)(1). Fall and spring.

ES527, 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

Note: Student teaching with the guidance of the cooperating teacher and University supervisors. Students register through the College of Education for ED425 and 426.

## ME70, Instrumental Proficiency Exam: Brass:

A music education major in the instrumental emphasis or in the area degree may be exempt from the instrumental proficiency examination (performance and written) by earning a $B$ average in the instrumental techniques classes and by successfully passing the proficiencies in each area: brass, woodwinds, strings, and percussion. The examination is graded $P / F$. (U)(0). Fall and spring.

## ME71, Instrumental Proficiency Exam:

Woodwind: A music education major in the instrumental emphasis or in the area degree may be exempt from the instrumental proficiency examination (performance and written) by earning a $B$ average in the instrumental techniques classes and by successfully passing the proficiencies in each area: brass, woodwinds, strings, and percussion. The examination is graded P/F. (U) (0). Fall and spring.

ME72, Instrumental Proficiency Exam: String:
A music education major in the instrumental emphasis or in the area degree may be exempt from the instrumental proficiency examination (performance and written) by earning a $B$ average in the instrumental techniques classes and by successfully passing the proficiencies in each area: brass, woodwinds, strings, and percussion. The examination is graded $P / F$. (U)(0). Fall and spring.

## ME73, Instrumental Proficiency Exam:

Percussion: A music education major in the instrumental emphasis or in the area degree may be exempt from the instrumental proficiency examination (performance and written) by earning a B average in the instrumental techniques classes and by successfully passing the proficiencies in each area: brass, woodwinds, strings, and
percussion. The examination is graded $\mathrm{P} / \mathrm{F}$. (U) (0). Fall and spring.

ME101, Foundations in Music Education I: 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 K - 12 students is required. Additionally, students will experience basic musicianship through Dalcroze and Laban activities. (U)(2). Fall.

## ME102, Foundations in Music Education

 II: 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 I: 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 II: Continuation of String Techniques I 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.

## ME232, Music for Special Education:

Introduction to the assessment of learning abilities, remedial music strategies, the role of music education in prescriptive programming, and interdisciplinary planning. (U)(2). Occasionally.

ME291, Brass Techniques I: 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 II: Continuation of Brass Techniques I 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. (U)(0). Spring.

## ME 325-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. Prerequisite: successful completion of AM299 and ME 299. (U)(3). Fall.

ME 326I, 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. Prerequisite: successful completion of AM299 and ME299. (U)(2). Spring.

## ME335, Vocal Jazz Pedagogy and Literature:

This course is offered to students seeking knowledge in vocal jazz pedagogy and literature and will focus upon all aspects of teaching vocal jazz in the classroom. An extensive vocal jazz
reading session will occur through the course of the semester. (U)(2). Occasionally.

## ME345, Exploring the Digital Arts: Music:

An exploration into digital technologies as they impact music professions. Students complete music projects (modules) using the World Wide Web, audio and video media, and MIDI technologies. Graduate students complete more rigorous parallel modules and portfolios. (U)(2). Fall and spring.

## ME346, Advanced Digital Arts for Music

Education: An advanced survey of digital technologies as they impact music and music education. Students complete projects and teach using the World Wide Web, audio and video media, and MIDI technologies. Graduate students complete more rigorous parallel modules and portfolios. Prerequisite: ME345 or consent of the instructor. (U)(3). Occasionally.

ME351, Methods and Materials of Music: For the elementary classroom teacher, methods and materials of music through listening, singing, music creativity, and the playing of classroom instruments (not applicable to a music major). (U)(3). Occasionally.

## 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.

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 I: 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 II: 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.

ME407, 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)(2). 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. (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, graduate standing, or consent of the instructor. (U/G)(2). Occasionally.

ME414, Jazz Pedagogy: Preparation for successful teaching experiences in jazz at the middle, high school, and beginning college levels. Students will gain insight into performance and rehearsal techniques for jazz ensembles and into approaches for teaching jazz theory, history, and improvisation. An additional project is required for graduate credit. (U/G)(2). Occasionally.

ME417, Piano Pedagogy I: 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 II: 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.

## ME419, Piano Pedagogy-Psychology of

 Teaching: A discussion of learning, teaching, and motivation theories applied specifically to piano instruction. An extra project is required for graduate credit. Prerequisite: junior, senior, or graduate status, or permission of the instructor. (U/G)(3). Occasionally.
## ME420, Piano Pedagogy: Style and

Interpretation: A study of keyboard performance practices in the different style eras. Consideration of interpretation in a wide cross-section of piano literature. An extra project is required for graduate credit. Prerequisite: junior, senior, or graduate status, or permission of the instructor. (U/G)(3). Occasionally.

ME421, Current Trends in Piano Pedagogy:
Consideration of the latest trends and advances in research and electronic/computer technology related to piano teaching. (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. Prerequisite: 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. Prerequisite: 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. Prerequisite: successful completion of AM299 and ME299. $(\mathrm{U})(2)$. 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)(1). Occasionally.

## ME480, Music Teacher Education 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.

## ME520, Piano Pedagogy-Style and

 Interpretation: A study of keyboard performance practices in the different style eras. Consideration of interpretation in a wide cross-section of piano literature. Requirements include a graduate level final paper or research project. (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. Graded 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 World Wide Web, audio and video media, and MIDI technologies. Graduate students complete more rigorous parallel modules and portfolios. (G)(2). Fall and spring.

## ME546, Advanced Digital Arts for Music

Education: An advanced survey of digital technologies as they impact music and music education. Students complete projects and teach using the World Wide Web, audio and video media, and MIDI technologies. Graduate
students complete more rigorous parallel modules and portfolios. Prerequisite: ME545 or consent of the instructor. $(\mathrm{G})(3)$. Occasionally.

ME552, Psychology of Music Learning: An interdisciplinary study of music learning and effect. Perception, learning theory, affective and physiological responses to music will be addressed. (G)(3). Occasionally.

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.

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.

ME799, 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.

## ML400, 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. The class also may be taken as an elective by an undergraduate upper classman majoring in music with a vocal emphasis (excluding vocal performance majors) who would like some background in foreign language diction for singers. (U/G)(2). Fall.

## 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 avant-garde music of the west also will be included. Prerequisite: dance major status (U)(3). Fall and spring.

## MH305, Music History and Literature I:

A study of the evolution of music from its primitive origins through the Middle Ages and Renaissance. (U)(2). Spring.
MH 306W, Music History and Literature II: A study of evolution of music from the Baroque era through the Classical Period. (U)(3). Fall.

MH307, Music History and Literature III: A study of the language of music and its social meanings from the 19 th 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: MT 102 $(\mathrm{U})(2)$. Fall and spring.

## 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).

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 17th century to the present. Course limited to music majors. Prerequisite: MH306 or concurrent registration. (U/G)(3). Occasionally.

## MH406, Graduate Music History Review:

This survey intends to assure a master's level proficiency in central ideas and representative compositions from Classical Antiquity through contemporary concert and popular music, including jazz. (U/G)(3). Spring.

## 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)(2). 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.

MH416, Piano Literature 2: A continuation of MH415. A survey of Romantic and 20th century piano literature, beginning with

Schubert and continuing through Bartok, Schoenberg, and post-1950 compositions. Prerequisite: senior status or permission of the 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 Literature:

Cantata and Oratorio: Course designed to introduce students to the standard cantata and oratorio solo repertoire drawn from masterworks from the 17 th -20 th 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: MH306. Offered alternate years. (U/G)(3). Occasionally.

## MH452, Survey of Chamber Music:

Chamber music from Haydin to the present with particular consideration of the piano trio and the string quartet. Prerequisite: MH306. Offered alternate years. (U/G)(3). Occasionally.

MH453, History of Film Music: Survey of film music from the early 20th century "silent"
to the Golden Age (1933-1949), the Silver Age (1950-1980), 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). Summer.

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 Renaissance: 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 18 th 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.

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.

MH729, 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. (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 I: 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 II: 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 I: 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 II: Continuation of MT111. Prerequisites: MT111 and concurrent enrollment in or successful completion of MT102. (U)(1).

MT119, Introduction to Composition: A basic introduction to composition through 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 III: Advanced theory including counterpoint and chromatic harmony and 20th century analysis. Prerequisites: completion or currently enrolled in MT102 and MT111. (U)(3). Fall.

MT202, Theory VI: Advanced theory including counterpoint, chromatic harmony, and 20th century analysis. Prerequisites: Completion or currently enrolled in MT112 and MT201. (U)(3). Spring.

MT211, Aural Skills III: Signing, writing, and auditory recognition of more complex melodic, harmonic, and rhythmic materials. Prerequisites: Completion or currently enrolled in MT112 plus concurrent enrollment in or successful completion of MT201. (U)(1). Fall.

MT212, Aural Skills IV: Continuation of MT211. Prerequisites: Completion or currently enrolled in MT211 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).

## 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-composition related music or non-music degree. Examination is graded P/F by a faculty committee. (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). Fall.
## 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 instructor. (U)(3).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.

MT335, Jazz Keyboard: This course is a practical study of jazz piano technique and the study of jazz piano players and styles in an historical context. This will include voicings for the ii-V progression, recognition of form, the blues progression, and chord substitutions. (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.

## MT406, 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. (U/G)(3). Fall.

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. (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). Spring.

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).

## 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 ina 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.

MT444, Jazz Improvisation I: A practical course in the development of improvisational skills, as well as the concepts necessary in the jazz tradition. Prerequisite: MT202. (U/G)(2). Occasionally.

## MT445, Jazz Improvisation II: A

 continuation of Jazz Improvisation I. Transcription, song memorization, and CD reviews become the focus. Prerequisite: MT444 (U/G)(2). Occasionally.MT499, Honors Thesis: (U)(3). Fall and spring.

## MT509, Analysis of Music Since 1900:

Discussion of fundamental trends in musical structure and new tonality, such as those of Debussy, Schoenberg, Bartok, Copland, Avante-garde, 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). Fall.

MT517, Advanced Counterpoint: Melodic, harmonic, and rhythmic contrapuntal practices from the isorhythmic motet to aleatoric music; examination of representative literature and writing in selected styles. Prerequisite: MT317 or equivalent. (G)(3). Occasionally.

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). Occasionally.

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, Graduate Conducting Seminar:
This seminar course is designed to give choral graduate students the knowledge and capability to investigate and articulate various aspects of choral music including a discussion of major works, genres, historical trends, composers, contrasting styles, harmonic language, and instrumentation. The course also explores writings by various leading choral scholars. (G) (1). Fall.

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).

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. (G)(0). Fall and spring.

MT709, Thesis: Composition: An original composition in on of the larger forms. Graded 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 of 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. (G)(0). Fall and spring.

## Department of Theatre <br> Administration

Diane Timmerman, M.F.A., department chair Professors
William Fisher, M.F.A. equivalent; Owen Schaub, Ph.D.; Diane Timmerman, M.F.A.

## Associate Professors

Elaina Artemiev, Ph.D.; Robert Koharchik, M.F.A.; Wendy Meaden, M.F.A.

## Staff Members

LaKisha Cooper; Angie Malone, M.F.A.; Cathy Sipe, master electrician; Glen Thoreson, B.F.A.

## Why Study Theatre?

- The Department of Theatre is fully accredited by NAST (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.


## Department of 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 ability to assess quality in works of theatre.


## Degrees

- B.A. in Theatre
- B.S. in Arts Administration-Theatre
- 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 B.A. 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 B.S. in arts administration-theatre requires completion of a total 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.

## Theatre Courses

TH100, Professional Theatre Practices:
Development of professional rehearsal, performance, and production techniques and discipline. Enrollment in this course is required
of freshmen and sophomores in the theatre program. This is a (P/F) course and must be successfully completed four times to meet graduation requirements in the theatre major. Open to theatre majors only. (U)(1). (P/F). Fall and spring.

TH105, Theatre as a Visual Art: Introductory foundation course exploring the principles of design in stage productions. In addition to regular class sessions, students will be required to attend theatre productions in the region and exhibitions at local art galleries. Open to theatre majors and non-majors. (U)(3). Spring.

TH110, Introduction to Acting: Scene study including basic techniques of performance with experience in preparation and presentation. (U). Fall and spring.

TH111, Acting I: 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 II: 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.

TH113S, Idea of Theatre I: Introductory foundation course exploring the theory and practice of performance with a particular focus on the Indianapolis community. Required of all freshmen theatre majors. Open to Theatre majors and minors only. (U)(3). ICR 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. (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 I: TH201, Stage Movement I is a foundation course addressing 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 I: 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 II: Vocal production techniques for theatrical performance with an emphasis on the speaking voice. Prerequisite: TH202. (U)(2). Spring.

## TH204, Vocal Music for Theatre Majors:

Vocal music skills for theatre majors in preparation for stage audition. Course will address repertoire of Broadway musical and arts songs appropriate for musical theatre auditions. For theatre majors only. (U)(2). Occasionally.

## TH205, Vocal Music for Theatre Majors II:

 Course will address music skills and repertoire appropriate for musical theatre auditions. Prerequisite: TH204 or permission of the instructor. (U)(2). Occasionally.TH208, Text Analysis: TH 208, Text Analysis is a 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. (U)(3). Spring.

TH210, Stage Movement II: TH210, Stage Movement II is focused on the study of physical practices and techniques for the stage actor, including the continuation of studies from TH201 Stage Movement I in physical articulation, locomotion, coordination, and character and text integration for actors. The course will include skill-based etudes, movement improvisation, and movement composition. Limited to theatre majors
or permission of instructor. One semester.
Prerequisite: TH201. (U)(2). Spring.

TH212, Stage Movement III: Advanced Stage Movement techniques and skills. Prerequisite: TH201 and TH210. (U)(1). Spring.

TH213, Acting III: Analysis of the verse structure of Shakespeare and his contemporaries with application in language usage through performance. Prerequisites: TH111, 112. (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). Spring.

## TH232, Stage Lighting I: Study and

 application of the principles of lighting for the stage: properties of light, control of light, and effect of light upon the play. (U)(3). Fall.TH233, Costume Technologies I: 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 (P/F) 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 III: Advanced vocal production technique, with an emphasis on a variety of topics including the International Phonetic Alphabet, speech, and dialects. (U/G)(3). Fall.

TH 314C, Acting IV: Development of preparation and performance skills in acting, with an emphasis on character study and ensemble acting for the modern theatre. Prerequisites: TH111, 112, 213. (U) Spring.

TH 320S, Service Learning in Schools: Provides the student with experience in teaching theatre activities to middle school age children. Develops skills in planning, organization, and implementation of group activities. (U). Fall.

TH322, History of Theatre I: Development of early European theatre and drama from antiquity to Moliere. (U). Fall.

TH323, History of Theatre II: Development of American theatre and drama from the colonial period to 1917 and the rise of the art theatre. (U) Spring.

TH324, Survey of Historical Costume: An historical survey of dress and how it relates to theatrical costuming. Alternate years. 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. Prerequisite: TH105. $(U)(3)$. 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. Prerequisite: TH200, 231, 232. (U)(3). Spring.

TH331, Scenography: Advanced problems in theatre technology, new materials, production planning, and introduction to scenography. Prerequisite: TH105, TH231. (U)(3). Fall and spring.

TH333, Play Analysis: This course provides the advanced theatre student experience in applying techniques of play analysis to specific areas of theatre production. (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 I: 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.

TH403, Senior Project: A capstone course to provide students with the opportunity to
extend their skills in a particular area of theatre discipline. Required of all seniors who are not engaged in honors thesis, senior internship, double major, or who completed BSI in the summer before senior year. (U)(1). Fall and spring.

TH404, Senior Project: A capstone course to provide students with the opportunity to extend their skills in a particular area of theatre discipline. Required of all seniors who are not engaged in honors yhesis, senior internship, double major, or who completed BSI in the summer before senior year. (U)(2). Fall and spring.

TH405, Senior Project: A capstone course to provide students with the opportunity to extend their skills in a particular area of theatre discipline. Required of all seniors who are not engaged in honors thesis, senior internship, double major, or who completed BSI in the summer before senior year. (U)(3). Fall and spring.

TH410, Acting Seminar I: Advanced study in one acting technique. Prerequisite: junior or senior status. Open to theatre majors only. (U) (3). Fall and spring.

TH411, Stage Directing I: 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, 112, 231, 232, and 333. (U)(3). Fall.

TH412, Stage Directing II: 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 II: 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.

## TH419, Acting for the Camera: Acting

 technique and scene work for the television camera. Explores differences in performance technique required by the stage and the television camera. Prerequisite: junior standing in the theater program or permission of instructor. (U)(3). Occasionally.TH420, Audition and Portfolio: Performance: Development of audition and portfolio presentation techniques with emphasis on performance track. Requires a public presentation of auditions or portfolios developed in class. Prerequisite: junior or senior standing in the theatre program and permission of the department. May be taken for senior project credit if taken in the senior year. (U)(3). Fall and spring.

TH421, Audition and Portfolio: Production: Development of audition and portfolio presentation techniques with an emphasis on production track. Requires a public presentation of auditions or portfolios developed in class. Prerequisite: junior or senior standing in the theatre program and permission of department. May be taken for senior project credit if taken in the senior year. $(U)(3)$. Fall and spring.

TH422, History of Theatre III: Development of European theatre and drama from the English Restoration to World War I. (U)(3). Occasionally.

TH423, History of Theatre IV: Development of American theatre and drama from the immediate post World War 1 era to the new millennium. (U)(3). Occasionally.

TH424, History of Theatre V: Development of European theatre and drama in the 20th century. (U)(3). Occasionally.

## TH 426W, Playwriting and Screenwriting:

 Writing for theater 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 weeks. 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

The College of Communication began operation on June 1, 2010, drawing together three departments from two Butler colleges: the Department of Communication Studies and the Eugene S. Pulliam School of Journalism, both from Liberal Arts and Sciences, and the Department of Media Arts, from the Jordan College of the Arts. The college offers undergraduate degrees with long histories at the University which at the same time are at the cutting edge of the disciplines and industries. All of the majors provide a blending of theory and application with active internship opportunities as well as clinical experience where appropriate. The curricula also emphasize opportunities for active involvement in production in a wide range of media platforms and outlets.

## Our Mission

The Butler University College of Communication will prepare students for success in our digital and global society. Students will develop the ability to critically analyze and synthesize human and mediated communication, and learn to speak, write, and create responsible messages across dynamic communication contexts and media platforms. Outstanding faculty who are active scholars and leading professionals will deliver programs. The curriculum will reflect the centrality of communication as a basic human right. Our innovative, experiential approach to discipline-based education will empower graduates to excel in their chosen profession and postgraduate studies. The strong grounding in liberal and creative arts will prepare our graduates to be socially responsible and civically engaged leaders in their careers and communities.

For additional information, visit www.butler.edu/ccom.

## Administration

Gary Edgerton, Ph.D., dean; Suzanne Reading, Ph.D., associate dean

## Professors

Kwadwo Anokwa, Ph.D.; Kenneth Creech, Ph.D.; Ann M. Savage, Ph.D.

## Associate Professors

Rose Campbell, Ph.D.; Margaretha Geertsema Sligh, Ph.D.; Allison Harthcock, Ph.D.;

Kristen Hoerl, Ph.D., Suzanne Reading, Ph.D. CCC-SLP; Carolyn Richie, Ph.D.; Kristin Swenson, Ph.D.; Christine Taylor, M.A.; Nancy Whitmore, Ph.D.

## Assistant Professors

Ian Z. Anderson, M.F.A.; Casey Kelly, Ph.D,; Srikanta Mishra, Ph.D., CCC-A; Jessica Moore, Ph.D.; Erin Ortiz, Ph.D.; Mark Rademacher, Ph.D.; Kevin Wang, Ph.D.
Senior Clinical Faculty
Mary Gospel, Ph.D., CCC-SLP

## Clinical Faculty

Ann Bilodeau, M.S., CCC-SLP, director of the Butler Speech-Language Clinic
Professional Practice Faculty
Loni McKown, M.S.; Carrie Rector, M.S.

## Instructors

Cutler Armstrong, M.S.; Scott Bridge, M.S.; Janis Crawford, M.A.; Armando Pellerano, M.S.;

Staff
Melissa Friedman, administrative secretary; Mark Harris, technical services coordinator; Eric Esterline, M.A., multimedia coordinator; Annette Lee, assistant to the dean; Maggie McGlynn, administrative secretary

## 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 minor or 12 -hour concentration outside of the major, and maintain a minimum cumulative GPA of 2.0.

- College of Communication Core Requirements COM101 Rhetoric and the American Democratic Tradition: 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). Every semester.

SW266 Media Literacy: This course is an exploration of the cultural implications of electronic 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 electronic media, i.e., how mediated messages influence our lifestyles, attitudes, and values, and reflect who we are. $(\mathrm{U})(3)$. Every semester.

One course designated Communication and Culture from the list below.
CSD338 Language and Culture JR417 International Communication JR418 Global Views: Gender and Media MRC354 Gender and Communication MRC365W Media and Cultural Criticism
MRC376 Film, Culture, and Criticism
MRC481 Technologies of the Body
MRC468 Women and Rock
MRC470 Sports, Media and Culture
MRC330 Representations of Race and
Difference
MRC420 Queering Film
MRC482 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, and 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 Majors and Minors

- Communication Sciences and Disorders
- Digital Media Production
- Journalism
- Media, Rhetoric, and Culture
- Organizational Communication and Leadership
- Recording Industry Studies
- Strategic Communication: Public Relations and Advertising

Communication Sciences and Disorders (CSD) Program Administration<br>Mary Gospel, Ph.D., CCC-SLP

## Why Study Communication Sciences and Disorders?

CSD 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 CSD at Butler?

There are excellent reasons to obtain the CSD degree 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 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, and work with other professionals in the Indianapolis community through internships.

Finally, the CSD degree at Butler leads to highdemand careers in speech-language pathology, audiology, and speech science.

For additional information, visit www.butler.edu/communication-disorders.

## CSD Program Student Learning Outcomes

- Demonstrate foundational knowledge of biological, physical, 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

- Major in Communication Sciences and Disorders (CSD)


## Requirements for the CSD Major (36 credit hours)

## Required CSD Courses: 27 credit hours

(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
Elective CSD Courses: 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, 398, 399, Directed Research in Communication Disorders
- CSD401, 402, 403, Independent Study
- CSD404, 5, Internship
- CSD433, Aural Rehab
- CSD436, Neurogenic Communication Disorders
- CSD437, Language Disorders in Children
- CSD460S, Butler Aphasia Community
- CSD475, Teaching Practicum in CSD
- CSD480, 481, Topics in CSD (fluency disorders, voice disorders, medical SLP, advanced study in aphasia)
*Elective credit only if not taken to fulfill LAS language requirement


## Courses

CSD138, American Sign Language I: 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 II: 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

Sciences and Disorders: Introduction to the field of communication sciences and disorders which includes phonetics, speech science, speech-pathology, and audiology. Common speech and language disorders, their causes, treatment, and general clinical procedures will be covered. (U)(3). Fall and spring.

## CSD238S, American Sign Language III:

Emphasis on competency in signing, both receptive and expressive. Use of videos to gain insight into deaf culture. Prerequisite: CSD138, 139 or equivalent. (U)(3). Fall.

CSD239S, American Sign Language IV: 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 course work 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. $(\mathrm{U})(3)$. 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.

## CSD 360S, Communication Science

Practicum: Laboratory practice in the diagnosis and treatment of speech and language disorders. Prerequisites: Cum 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, Community Screening Practicum:

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 program director. (U)(3). Fall and spring.

CSD399, Directed Research in
Communication 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. Pre-requisite: permission of instructor. (U)(3). 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.

CSD404, 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)(3). 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: CSD 336. (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.

CSD437, Language Disorders in Children:
Description and diagnosis of various language disorders in children and procedures for therapeutic management. Prerequisite: CSD332. (U)(3). Spring.

## CSD460S, Butler Aphasia Community:

Students gain classroom knowledge and clinical experience with adults who have aphasia. Prerequisites: CSD337 and CSD436 and senior standing. (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. Prerequisite: Senior Standing. (U)(3). Fall.

CSD499, Honors Thesis: (U)(3). Fall and spring.

## Creative Media and Entertainment Program Administration

Kenneth Creech, Ph.D., Fairbanks Chair in Communications and program director

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.

## 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 in the major 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 Recording Industry Studies (RIS) 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 in Recording Industry Studies 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 in RIS

- 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

## 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 industry standard 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 Digital Media Production 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 in Digital Media Production 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 in Digital Media Production

- 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
Butler University Core Requirements
College of Communication Requirements
Total Hours Required for Graduation: 126
Requirements for the Minor in Digital Media Production
- 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 Required for the Minor: 21


## Courses

## 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.

CME107, 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: Techniques of producing audio for broadcasting and related fields. Editing, microphone placement, and sound recording will be studied. Non-majors must have permission of program director. (U) (3). Fall and spring.

## CME202, Multi-Camera Studio Production:

An introduction to the in-studio video production process. Basic camera operation, directing, and editing procedures will be covered. Prerequisites: digital media production majors and minors or permission of instructor. (U)(3). Fall and spring.

CME215, Video Editing: This course introduces the student to the world of video editing. Editing concepts and practice will be combined with discussion of editing aesthetics. Prerequisite: CME106 or permission of the instructor. (U)(3). Fall.

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. Student's 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. (U)(0). Fall and spring.

CME302, Video Production II: Advanced studio production techniques including graphics, lighting, and production of program material. Prerequisite: CME 202. (U)(3). Spring.

CME305, Electronic Field Production: The focus of this course is on cinematic techniques and aesthetics. Students will learn how to properly use camera, microphones, and lights on location. The techniques and aesthetics involved in post-production will also be covered. Prerequisites: CME202 and CME215. (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: MDA106, MDA201, MDA202, MDA205, MDA215, MDA219 and junior standing. (U) (3). Fall.

CME310, 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 CME202 and CME305 in the production of a substantial final project. Prerequisites: CME202 and CME305. (U)(3). Spring.

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.

## 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 MDA 331. (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 live miking techniques; music editing and sound design. Prerequisite: MDA201, 252, and 352. (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 non-profit 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, 352. (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. $(\mathrm{U})(1)$. 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)(2). Fall and spring.

CME415, Advanced Video Editing: This continues to develop concepts, techniques, and principles introduced in CME215. Prerequisite: CME215. (U)(3). Spring.

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. Non-majors 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: In-training: On-thejob experience in a facility directly related to the student's degree objective. Prerequisite: senior status. Majors only, with approval and 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, 201, 202, 215, 219, 305, 306 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, 360. (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, 360. (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.
## Eugene S. Pulliam School of Journalism

Administration
Nancy Whitmore, Ph.D., director

## Why Study Journalism?

A journalism degree prepares you for a variety of challenging careers in the ever-changing and expanding world of mass communications.

The job market for journalism graduates is vast because today virtually every successful organization-from the media to corporations, nonprofits and government entities-needs smart content producers with multimedia journalism skills. With a journalism degree, you will acquire professional skills that allow you to tell stories and present information and entertainment in a variety of ways and across a variety of media. And with its emphasis on source development, public records research, and investigation, journalism is an excellent major for students who plan to attend law school. In short, your journalism degree will apply no matter where your career path leads.

## Why Study Journalism at Butler?

From their first year to their last, journalism students at Butler actively engage in a multimedia, learning environment that is rich in hands-on experiences. Through these experiences, students develop sound critical reasoning skills and learn to investigate, gather information, and create content that can be disseminated across media platforms and technologies.

Butler journalism students spend three semesters working in the field, covering actual news beats, and pursuing long-form, in-depth stories in the Indianapolis metro area. All student-produced work is published on the program's website-IndianapolisNewsBeat. com-and is often picked up by news outlets across the state via a collaboration with the Hoosier State Press Association. In addition, extensive opportunities exist, regardless of class year, to work for and participate in studentoperated media organizations. All of these opportunities foster leadership, entrepreneurial skills, independent judgment, and professional standards. They also allow students to apply their creativity to media products and explore all forms of media-broadcast, print, online, visual, social, etc.-to broaden employment opportunities.

Internship opportunities in Indianapolisthe nation's 26th largest media market-and Washington, D.C.-the nation's 8th largest media market-are also a large part of the program, as well as an extensive alumni network of successful professionals in

Indianapolis and throughout the country. Instructors with academic and professional experience who know students' first names will help them realize their goals.

## Journalism Program 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.
- Writing, visual communication and design, audio and video communication, on-camera delivery, and online/interactive communication.
- Multimedia 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 U.S. and around the globe.


## Degrees

- Major in Journalism
- 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 9 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.

## Courses

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, spring, and summer.

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. $(\mathrm{U})(3)$. Fall and spring.

JR212, Multimedia Journalism I: The application of beat reporting assignments in a converged media environment. Prerequisite: Cor above in JR112, JR113, and CME106. (U) (3). Fall and spring.

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)(3). Fall and spring.

JR309, Feature Writing: Writing the feature story, interviewing, personality profiles, and the human interest story. Prerequisite: C- or above in JR112. (U)(3). Spring.

## JR310, Producing Television News:

Techniques of producing, shooting, and editing news for television. Prerequisite: JR213. (U) (3). Spring.

## JR311, Visual Storytelling and Design:

Focuses on the art of telling a story through a variety of digital techniques, media, and design principles. Prerequisites: C- or above in JR212 or JR213. (U)(3). Spring.

JR312, Multimedia Journalism II: Coverage of city, state, and federal government, school board meetings, and courts in a converged media 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. Prerequisites: 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 II: Advanced work in news photography. Prerequisite: C- or above in JR315 or the permission of the instructor. (U)(3). Occasionally.

JR317, Editorial Writing: The nature and purpose of newsprint and electronic editorials. Prerequisite: C- or above in JR112. (U)(3). Spring.

JR333, Performance Lab: Students engage in hands-on experiential learning using departmental facilities and equipment. (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: Journalism: 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. (P/F). $(U)(1)$. 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: Journalism: JR212 and 213. (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: C- or above in JR112. (U)(3). Fall.

JR357, Web Design: The introductory course in Web Design focuses on website development techniques and skills. Students will learn Web-based 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). 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. Prerequisites: JR313 (U) (3). Fall.

## 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 onthose factors that direct and constrain the media. Prerequisites: 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. Prerequisites: junior or senior standing. (U/G)(3). Occasionally.

## JR417, International Communication:

Study of critical issues in international communication in an era of globalization. Prerequisite: senior standing or permission of the director. (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. (U)(3). Occasionally.

## 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. Student develop skills in analyzing ethical issues and making ethical decisions. (U)(3). Spring.

## JR427, 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.

JR499, Honors Thesis: (U)(3). Fall and spring.

## Media, Rhetoric and Culture Program

## Why study Media, Rhetoric and Culture?

Media, Rhetoric, and Culture is a dynamic program that focuses on the analytical study of human and mediated communication. Studies in MRC will prepare students for careers as analysts and evaluators of rhetoric and media messages, skills that are useful in a variety of professions, including in government, at nonprofits, and in private industry. This program will also prepare students for a graduate education in the social sciences, humanities, and law. No matter what career path, MRC will enable students to be competitive contributors in a challenging marketplace and educate them on diversity to become thoughtful and responsible citizens in an increasingly mediated, globalized world. The major and minor are valuable complements to other majors in the College of Communication and to several program across campus.

## Why study Media, Rhetoric and Culture at Butler?

The MRC 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 MRC 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 teacherscholars who are active in research and scholarship and who frequently present their work at national and international conferences. MRC students will have the opportunity to work closely with these faculty members on teaching or research.

## Media, Rhetoric and Culture Program 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.


## Degrees

- Major in Media, Rhetoric, and Culture
- Minor in Media, Rhetoric, and Culture


## Requirements for the Major <br> The following courses are required:

- SW266-COM, Media Literacy
- MRC310, Media and Cultural Theory or MRC315, Rhetorical Theory
- MRC398, Argumentation and Advocacy
- MRC465W, Communication and Cultural Criticism

Four courses from the following electives:

- MRC308, History of Film
- MRC330, Representations of Race and Difference
- MRC354, Gender and Communication
- MRC368, Media and Politics
- MRC376, Film, Culture, and Criticism
- MRC420, Queering Film
- MRC462, Influence in Public Culture
- MRC463, Freedom of Speech and Democracy
- MRC468, Women and Rock
- MRC470, Sports, Media and Culture
- MRC481, Technologies of the Body
- MRC482, Voices of Dissent and Social Change


## Requirements for the Minor

 The MRC minor consists of 18 hours. The following four courses are required:- COM265, Media Literacy
- MRC310, Media and Cultural Theory or MRC315, Rhetorical Theory
- MRC398, Argumentation and Advocacy
- MRC465W, Communication and Cultural Criticism


## Two courses from any 300/400-level courses listed as part of the major.

## Courses

MRC308, 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). Fall.

## MRC310, 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). Fall.

## MRC311, American Motion Pictures (1929-

present): The American motion picture from the early talkies to the present with emphasis primarily on the ' 30 s, ' 40 s, and ' 50 s. Films and people responsible for major advances in theory and techniques. Required readings, viewing, and analysis of films, lectures, and discussion. (U)(3).

MRC315, 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 the 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). Spring.

## MRC330, 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). Spring.

MRC352, Rhetorical Criticism: Introduction to critical and interpretive research methods in rhetorical analysis and criticism. (U)(3).

## MRC354, 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). Spring.

MRC368, Media and Politics: This course investigates the connections between politics and the mass media. With the rapid expansion of news outlets and the increasing amount of money involved, the increasing interdependency between politics and the media has become a source of fascination and concern. Prerequisite: Junior or senior standing. (U)(3). Fall.

## MRC376, 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. Prerequisites: Sophomore or above or permission of instructor. (U)(3). Spring.

MRC390, 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). Fall and spring.

## MRC398, 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. Prerequisites: Sophomore or above or permission of instructor. (U)(3).MRC412, Advocacy: Designed to acquaint students with key authors and issues involved in the study of argumentative discourse in the public arena. Projects in analysis and synthesis of arguments, research, and refutation. (U)(3).

MRC420, 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). Spring.

MRC462, Influence in Public Culture: This course examines the roll of communication and rhetoric in public and political life. It explores the concept of "public culture" as something constituted in discourse yet shaped by material forces: speeches, advertisements, television, music, art, literature, and those communicative forces that actively constitute our concept of the "public sphere." (U)(3). Fall.

## MRC463, 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. Prerequisites: Junior or senior standing or permission of instructor. (U)(3). Fall.

MRC 465W, Communication and Cultural
Criticism: Students will analyze mediated and popular culture texts from a criticalcultural 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).

## MRC466, 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). Fall.

MRC468, 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). Spring.

MRC470, 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). Spring.

MRC481, 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). Fall.

## MRC482, 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). Fall.

MRC490, 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). Fall and spring.

MRC491, Internship: Offers students the opportunity for a supervised educational work experience in a setting pertinent to media, rhetoric, and culture. Prerequisite: Majors only $(U)(1)$. Fall and spring.

MRC493, Internship: Offers students the opportunity for a supervised educational work experience in a setting pertinent to media, rhetoric, and culture. Prerequisite: Majors only $(U)(3)$. Fall and spring.

MRC496, 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). Fall and spring.

## Organizational Communication and Leadership <br> Administration

Jessica Moore, Ph.D., program director

## Why Study Organizational

 Communication and Leadership?Organizational Communication and Leadership is a major for the 21st century. Successful organizations are often the result of people who understand the importance of building and maintaining relationships, effectively communicating with organizational stakeholders, leveraging innovation wisely and ethically, and leading with excellence. In short, successful organizations are the result of leaders who communicate effectively.

## Why Study Organizational Communication and Leadership at Butler?

In addition to Butler's reputation for excellence, faculty talents, location, and cocurricular activities make the Organizational Communication and Leadership Program at Butler an excellent place to jumpstart students' education and professional careers. The Organizational Communication and Leadership Program is built upon the expertise of faculty with academic backgrounds and professional expertise that match the program's innovative
course offerings. The Indianapolis location 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, health, technology, or legal programs, among others. In addition, students in the Organizational Communication and Leadership Program may take advantage of the many co-curricular activities offered in the College of Communication, including Lambda Pi Eta communication honor society, Butler's nationally recognized Speaker's Lab, the Butler Speech and Debate team, The Collegian newspaper, and many other activities designed to enhance social, academic, and professional development.

The Organizational Communication and Leadership Program encourages students to think synergistically by requiring courses designed to build global expertise in communication theory, critical thinking, analytical reasoning, and professional practice. The program also offers students the opportunity to develop specific expertise in organizational communication, interpersonal and professional relationship management, social networks, and new technologies, ethics, and leadership. Whether students are considering local, national, or international positions and whether they are interested in nonprofit or Fortune 500 careers, the Organizational Communication and Leadership Program offers a wide range of opportunities for students hoping to become the leaders of the future.

## Organizational Communication and Leadership Learning Outcomes

- Demonstrate the ability to communicate appropriately and effectively in a variety of interpersonal, group, organizational, and public settings.
- Apply the research methods appropriate for studying human communication and leadership.
- Demonstrate how and explain why to engage in socially responsible communication and leadership.
- Analyze major theoretical approaches to the study of interpersonal, group, organizational, public and leadership communication.
- Demonstrate the ability to create and implement appropriate and effective organizational communication in professional contexts.


## Requirements for the Organizational Communication and Leadership

 Major- ORG 301 Advanced Public Speaking or
- ORG 315 Business \& Professional Comm
- STR327 Research Methods
- ORG350 Communication Theory
- ORG351 Small Group Communication
- MRC352 Rhetorical Criticism
- ORG354 Interpersonal Communication
- ORG358 Communication Ethics
- ORG362 Leadership and Communication
- MRC398 Argumentation and Advocacy
- ORG470 Organizational Communication
- ORG485 Senior Seminar (Rotating Topic)
- ORG404 Internship or

COM404 Internship
In addition to major course requirements, students may need additional courses to meet the college diversity requirement as well as earn the minimum number of upper-level courses needed to graduate at Butler.

To meet the college diversity requirement, students must take:

- MRC 354 Gender and Communication or
- ORG359 Intercultural Communication or
- MRC482 Voices of Dissent or
- course designated by program director.


## 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).

ORG270, Introduction to Organizational Communication: The course introduces students to the subfield of organizational communication in communication studies, with emphasis on the study of institutionalized patterns of interaction, which are typically planned, sequential, and systematic within complex organizations. No prerequisites. (U) (3).

ORG315, Business and Professional Communication: Instruction and training in the preparation and delivery of professional presentations, including multimedia techniques, management of meetings, interviewing, small group communication, and interpersonal and organizational communication. (U)(3).

ORG350, Communication Theory: An introduction to contemporary models of communication and to experimental and field research dealing with human communication. (U)(3).

ORG351, Small Group Communication:
Theory and practice in group discussion, leadership, decision making, and interpersonal communication in small groups. (U)(3).

ORG353, Interpersonal Communication:
The study of recent theory and practice governing dyadic interactions in conversations and relationships. Writing intensive. (U)(3).

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).

## ORG357, Health Communication:

This course introduces the student to communication issues involved in health care delivery systems, public health information dissemination, and care-giver/recipient interpersonal interactions. (U)(3).

ORG358, Communication Ethics: Study of ethical standards for communication. Topics include standards for informative and persuasive communication, problems of advocacy, and plagiarism. (U)(3).

ORG359, Intercultural Communication:
The purpose of this course is to lead students to acquire the concepts and skills needed to effectively manage communicative encounters in which intercultural factors make a difference. (U)(3).

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).

ORG470, Organizational Communication: Study and application of concepts from communication and organizational theory to functions and processes of communication in business and professional organizations; emphasis on speech communication in interview, conference, network, and organizational contexts. (U)(3).

ORG481, Topics in 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.

## Strategic Communication Program: Public Relations and Advertising

Administration
Rose Campbell, Ph.D., program director

## 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 Communication at Butler?

While numerous programs offer courses in advertising and public relations, few have successfully merged their curriculum to reflect the increasing blurring of the lines
between these disciplines. The Strategic Communication Program, however, recognizes that it is necessary for majors to understand the synergistic nature of advertising and public relations to succeed in the strategic communication field. But success in strategic communication relies on more than this, of course. Program 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. Courses are also small, typically less than 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 chapter and its student-run PR firm, advertising club, and an internship program that connects students with a diverse array of Indianapolis businesses, advertising and public relations agencies, and nonprofit organizations, students gain the real-world knowledge necessary for a successful career.

## Strategic Communication Program 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 Program emphasizes the production of socially responsible messages, students learn to appreciate and respect the professional, ethical, and legal standards that govern our field.


## Degrees

- Major in Strategic Communication with specializations in Public Relations or Advertising
- 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
- STR424S, Public Communication Campaigns
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
- STR356, Sports Promotion
- STR357, Hospitality and Tourism Promotion
- STR426, Special Topics in Strategic Communication
One course 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 course in international communication:

- JR417, International Communication
- JR418, Gender and Media: Global Views
- COM359, Intercultural Communication
- or current equivalents

One course in communication theory:

- COM350, Contemporary Communication Theory
- MRC310, Media and Cultural Theory
- MRC315, Rhetorical Theory
- MRC462, Influence in Public Culture
- or current equivalents


## Requirements for Public <br> Relations Specialization

- All STR major requirements plus
- STR328W Public Relations Writing

Two courses in public relations and related areas:

- STR341, Bateman Case Study Competition
- STR342, Strategic Communication for Nonprofits Practicum
- STR356, Sports Promotion
- STR357, Hospitality and Tourism Promotion
- AA301, Principles and Practices of Arts Administration
- COM315, Business and Professional Speaking
- COM318, Workshop in Presentational Speaking
- MRC398, Argumentation and Advocacy or
- Other courses selected with permission of program director


## Requirements for

Advertising Specialization

- All STR major requirements plus:
- STR321, Advertising Practices

Two courses in advertising and related areas:

- STR322, Advertising Copywriting
- STR332, Advertising Campaigns (Spring)
- STR356, Sports Promotion
- STR357, Hospitality and Tourism Promotion
- STR426, Special Topics in Strategic Communication
- COM315, Business and Professional Speaking
- MK280, Principles of Marketing
- MRC398, Argumentation and Advocacy
- Other courses selected with permission of program director


## Requirements for the Minor in Strategic Communication

- 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 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
- STR331, Advertising Campaigns (Fall)
- STR332, Advertising Campaigns (Spring)
- STR341, Bateman Case Study Competition
- STR342, Strategic Communication for Nonprofits Practicum
- STR356, Sports Promotion
- STR357, Hospitality and Tourism Promotion
- STR426, Special Topics in 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 and spring.

## 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 and spring.

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.

## STR 324W, 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.

## STR327, 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. Prerequisite: C- or above in STR222 and STR228 (U)(3). Fall and spring.

STR 328W, 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. Prerequisite: 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. Prerequisite: C- or above in STR222 and STR228. (U)(3). Fall and spring.

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 plansbook for a corporate sponsor. Prerequisites: Permission of instructor. (U)(3). Spring.

## STR341, Bateman Case Study Competition:

Student teams develop and implement a communication 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 professionalquality 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. Prerequisite: C- or above in STR222, STR228, STR251 and STR327. (U) (3). Occasionally.

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. This course also is used for the DC program internship credit. Prerequisites: C- or above in STR222, STR228, STR251, and STR327. (U)(6) Fall, spring, and summer.

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 team, media, corporate, and civic communities will be explored. Prerequisite: C- or above in STR222 and STR228. (U)(3). Spring.

## STR357, 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.
Prerequisite: C- or above in STR222 and STR228. (U)(3). Fall.

STR401, Independent Study: Provides opportunity for qualified students to pursue a topic of individual interest. Open to juniors and seniors. $(\mathrm{U})(1)$. 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.

## STR 424CS, 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 both the ICR and Speaking Across the Curriculum requirements. Prerequisite: C- or better in STR222, STR228, STR251, STR324W, 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.

To earn upper-level credits, students may select guided electives in STR or in courses across the college and University.


## Graduate Studies

Graduate education has been an integral part of Butler University since 1932. Over the years, our programs have evolved to meet the growing needs of an increasingly educated and diverse society. Graduate level courses are offered in a number of departments for personal enrichment, and may lead to advanced degrees or new professional credentials.

## Contact Information

Office of Graduate Admission
Butler University
4600 Sunset Ave.
Indianapolis, IN 46208-3485
Local: (317) 940-8100
Toll free: (888) 940-8100
Fax: (317) 940-8150
Email: admission@butler.edu Web: www.butler.edu/admission
CEEB code: 1073

## Contact the Office of Admission in

 Robertson Hall at (317) 940-8100 for application forms for graduate study. A list of available programs and detailed program information may be found in the Graduate Programs section at the end of this chapter, on Butler's website, or you may contact any of the colleges or departments listed below:College of Liberal Arts and Sciences www.butler.edu/academics/graduate-las Master of Arts in English
(Contact: Lee Garver, Jordan Hall, Room 308, 940-9859)
Master of Fine Arts in Creative Writing (Contact: Andrew Levy, Jordan Hall, Room 308, 940-9859)
Master of Arts in History
(Contact: Paul Hanson, Jordan Hall, Room 349, 940-9680)

## College of Education

(Graduate Studies Office, Jordan Hall, Room 246, 940-9501)
www.butler.edu/coe/graduate/programs Accelerated Alternative Program: Initial Licensure in Mild Intervention (P-12) (Contact: Theresa Meyer)

Experiential Program for Preparing School Principals (EPPSP)
Master of Science in Education
(Contact: Marilyn Sudsbury)
Effective Teaching and Leadership Program
(METL): Master of Science in Education (Contact: Brooke Kandal-Cisco)
School Counseling: Master of Science in School Counseling
(Contact: Brandie Oliver)

## College of Business

www.butler.edu/business-mba
(Holcomb Building, Room 120, 940-9221)
Master of Business Administration
Master of Professional Accounting

## Jordan College of the Arts

(Contact: Lisa Brooks, Lilly Hall, Room 221, 940-9064)
www.butler.edu/academics/graduate-jca
Master of Music in:
Composition
Conducting (choral or instrumental)
Music Education
Music History
Music Theory
Performance (piano, voice or orchestral instrument)
Piano Pedagogy
M.M. degree with a double major

College of Pharmacy and Health Sciences
(Contact: Sudip Das, Pharmacy and Health
Sciences Building, Room 353, 940-9134)
www.butler.edu/academics/graduate-cophs Master of Science in Pharmaceutical Sciences Concentrations: pharmaceutics, pharmacology, medicinal chemistry, pharmacy administration, and clinical sciences
Master of Science in Pharmaceutical Sciences/ Doctor of Pharmacy degrees
Doctor of Pharmacy/Masters of Business
Administration (in collaboration with the
College of Business)
Master of Physician Assistant Studies

## General Information

## 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 self-enrichment), 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 nondegree student may be applied toward the selected degree program. Prospective students should check with the individual college regarding their policy to non-degree candidacy.

## Graduate Degree-Seeking Admission

The following information generally is applicable to all graduate programs. For exceptions and special requirements, refer to the Graduate Programs section for additional 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 (i.e. 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 MPA 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.

## Applying for Graduate Admission

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

- The Application for Graduate Admission, accompanied by the non-refundable 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.
- An official transcript from each college or university previously attended must be 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 (paperbased test),
- Students not applying for the masters 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

Any student whose attendance is interrupted by one academic year or more who wishes to return to the same academic program must file an Application for Renewed Enrollment with the Office of Registration and Records.

Students enrolled in a graduate program at Butler University 10 or more years ago must submit a new degree-seeking application (see Applying for Graduate Admission) and meet current admission requirements.

Students seeking enrollment into a new degree program or degree level must submit a new degree-seeking 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 grade point average undertaken at Butler University.

An official transcript for any college work taken since a student's last enrollment at Butler must be mailed directly from the issuing institution to the Office of Registration and Records.

## 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 an 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 degree requirements.

## Degree Requirements

Thesis/project: Some graduate programs may require a thesis. 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 examination is allotted for the thesis defense. Students may contact their respective graduate program to see if their specific program requires a thesis.

Grade point average: 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 grade point average. In no case may a student take more than 12 credit hours in excess of the degree requirements in order to satisfy the foregoing grade point requirement. Any graduate student, whether degree-seeking or non-degree-seeking, who fails to make satisfactory progress in the coursework may be declared academically ineligible for additional enrollment.

## Student Status

Full time: An individual must take a minimum of nine and a maximum of 12 credits of graduate-eligible courses per semester in order to be considered a full-time student. A petition could 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 would be 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 the thesis for the M.S. 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 M.S. in pharmacy and health sciences program must be a full-time COPHS faculty member.


## 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 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/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 M.S. 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.

## Conduct Code

All graduate students are expected to comply with the "Rights and Responsibilities" section of the Butler University Student Handbook. Graduate students enrolled in the programs of the College of Pharmacy and Health Sciences will also be expected to comply with the Professional Conduct Code outlined in the College of Pharmacy and Health Sciences Student Handbook.

## College of Liberal Arts and Sciences

## Master of Arts; Master of Fine Arts (M.A., M.F.A.) English <br> (M.A.) History

The graduate program of the College of Liberal Arts and Sciences consists of a 30 -hour program, including a thesis, or a non-thesis option of 36 hours, depending upon departmental requirements. The departments offering graduate programs in the College of Liberal Arts and Sciences should be consulted for specific requirements.

Admission: In addition to the general requirements of all candidates for graduate admission (see Applying for Graduate Admission), students should refer to the application for admission for additional materials needed for specific programs.

## College of Education

## Master of Science (M.S.)

Admission: In addition to the general requirements of all candidates for graduate admission (see Applying for Graduate Admission), students should submit the following materials to the Office of Admission:

- GRE score of 291 or higher or MATscaled score of 396 or higher. Exceptions: 1) Students who have already completed a master's degree; 2) students whose undergraduate cumulative GPA is 3.0 or higher; or 3) students who have 15 hours graduate work with a 3.5 GPA or higher.
- Additional materials required as indicated on the Application for Graduate Admission.


## College of Business

## Master of Business Administration (MBA)

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 show how integrated business knowledge can be used to solve business problems. Identify the dynamics affecting business in the international economy. Display the ability to work effectively in teams. Practice high ethical standards in their decision-making. Accept and support that organizational change is a natural business process.

Admission: The MBA admission committee takes a holistic approach to the admission process. Factors that are considered include undergraduate record, GMAT score, career experience and letters of reference. However, we do require applicants to achieve an acceptable GMAT score to be admitted to the program. In addition to the general requirements of all candidates for graduate admission (see Applying for Graduate Admission), students should submit the following materials to the Office of Admission:

- two letters of reference
- a Graduate Management Admission Test (GMAT) score sent directly by the Education Testing Service
- a current résumé

Applications are accepted throughout the year. Students will be admitted to begin during the fall, spring, or summer terms.

Completed applications (including all required materials) should be on file in the Office of Admission by the deadline date printed on the application and listed below:

- July 1 for fall term
- Nov. 15 for spring term
- March 15 for summer term

Degree Requirements: The program requires 33 graduate credit hours. Students may also be required to complete up to 10 credit hours of foundation courses, depending upon grades and the currency of business-related courses in their undergraduate curriculum. Students must accumulate a minimum of two $G$ 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 the following concentrations: finance, international business, leadership, marketing.

Curriculum: Three components comprise the MBA curriculum: Foundation Core (10 credit hours): provide the necessary background and competency in functional areas to prepare for the graduate core courses. Graduate Core ( 25 required credit hours): offer an integrated framework on contemporary leadership perspectives and management practices. Analytical tools and ethical aspects of decision making are incorporated. International business considerations are an important part of the coursework. The objective is to provide an integrated management educational experience appropriate for leaders in a dynamic business environment and a growing international economy. Concentration courses ( 8 credit hours): allow students to develop expertise in finance, international business, leadership, or marketing.

## Master of Professional Accounting (MPA)

The Butler University College of Business offers the Master of Professional Accounting (MPA) 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. Non-accounting majors are eligible to apply only if they have completed all of the prerequisite courses. The MPA degree, when combined with an undergraduate business degree, will enable students to meet the CPA certification requirement of 150 hours of postsecondary education, mandated by most states.

Admission: Students are admitted to the MPA program in Fall. There are two options regarding admission requirements for the MPA program. Option 1: Degree-seeking application, cumulative GPA of 3.0, and GPA of 3.0 in AC301, AC302, AC325, and one upper-level accounting elective. Option 2: Degree-seeking application, GMAT, and two letters of recommendation. The application deadline is July 1, but Butler students are encouraged to apply in January before the start of their full-time internship.

Degree Requirements: The program requires 30 graduate credit hours. These credit hours are divided into three categories: core (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.

Curriculum: Three components comprise the MPA curriculum. MPA core ( 17 credit hours): provide the necessary foundation in financial accounting and reporting, managerial applications, auditing, and taxation. Concentration (nine credit hours): allow students to develop fluency and expertise in financial reporting or taxation. Elective (four credit hours): give students an opportunity to explore areas beyond their concentration, such as law, nonprofit and government, or international accounting.

## College of Pharmacy and Health Sciences

Master of Science in Pharmaceutical Sciences Degree

The College of Pharmacy and Health Sciences (COPHS) offers the Master of Science (M.S.) in pharmaceutical sciences in five areas of emphasis: pharmaceutics, pharmacology, medicinal chemistry, pharmacy administration, and clinical sciences. The mission of the master's 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'slevel background in chemical or biological sciences will be required to take courses in the respective areas in addition to the M.S. 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, New Jersey).
- Test of English as Foreign Language (TOEFL) (not required of anyone with a U.S. bachelor's degree).
- A TOEFL score of 550 (paper-based test), 213 (computer-based test) or 79 (Internet-based test) meets Butler University's English language proficiency requirements. Butler's TOEFL school code is 1073.
- Graduate Record Examination (GRE). Each applicant is required to submit a GRE score. The minimum GRE cutoff score for admission for each year will be determined by the Research and Graduate 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 will follow two steps, 1) preliminary inquiry, 2) formal application with required non-refundable fees. The response to the preliminary inquiry will be issued by either the admission office or the Department of Pharmaceutical Sciences; however, the formal application can ONLY be made to the admission office of Butler University. After initial screening, the admissions office will forward the eligible applications to the Department of Pharmaceutical Sciences for the decision. The director of the graduate program at COPHS, in discussion with the interested research faculty, will send the recommendations for admission to the admission office.

## Student Status

Full time: A full-time student must be taking 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 (RX701706) 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 (RCL) authorization form must be submitted by the respective F-1 student under any circumstance when a graduate student is 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 M.S. in pharmaceutical sciences on a part-time basis. The conditions are:

- The 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 in the program.
- Research towards the M.S. 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.
- As mentioned before, 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 M.S. 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, full-time 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 fulltime student must maintain a minimum cumulative GPA of 3.0 and show satisfactory progress in his/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 M.S. 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 M.S. 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) <br> RX780, Current Topics in Pharmaceutical

Sciences: Discussion of current research topics in pharmaceutical sciences $(G)(1)$. Variable.

## RX781, Seminars in Pharmaceutical

Sciences: Graduate students, faculty, and guest speakers present research topics in pharmaceutical sciences. (G)(1). Variable.

Each student will be enrolled in one credit hour of Current Topics in Pharmaceutical Sciences or Seminar in Pharmaceutical Sciences per semester, for a minimum of four total credits in the program. Each student is required to present at least two seminars as part of his/ 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 RX780 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.

RX782, Ethics in Research: Discussion and case-based approaches in the ethics of research, publication, and reviewing of manuscripts and grants. Included are core instructional areas recommended by the NIH Office of Research Integrity. (G)(1). Variable.

## RX783, Introduction to Pharmaceutical

Research: An introduction to basic principles of pharmaceutical research including formation of hypothesis, literature search, scientific writing, and regulatory affairs. (G)(2). Variable.

## RX784, Experimental Design and Data

Analysis: Approaches in experimental design and statistical analysis of data. (G)(2). Variable.

RX785, Biopharmaceutical Analysis: Theory and practice of bioanalytical techniques in chemical and molecular biology-based analyses. Prerequisite: B.S. level background in Analytical Chemistry. (G)(3). Variable.

Elective Courses (minimum of 6 credits)<br>RX 630, Advanced Toxicology: The principles of toxicological mechanisms or drugs and environmental chemicals in the biological systems. Prerequisite: Clinical Biochemistry or equivalent, or permission of instructor. (U/G) (3). Variable.

## RX632, Drug Abuse-Pharmacology,

 Chemistry, and Social Aspects: This course will examine from a multidisciplinary perspective the phenomenon of the recreational use of mind-altering drugs like alcohol, nicotine, opioids, cocaine, and hallucinogens. Prerequisite: one semester of college-level biochemistry. (U/G) (3). Spring.RX786, Advanced Drug Delivery: Critical assessment of drug carrier systems, including transport of drug molecules across membranes. Prerequisite: instructor's permission. (G)(3). Variable.

RX787, Industrial Pharmacy: Preformulation and Product Development: Study of physicochemical principles of drugs and excipients for optimization of bioavailability. Case studies in formulation, production, and evaluation of pharmaceutical products. Prerequisite: instructor's permission. (G)(3). Variable.

RX788, Molecular 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).

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 M.S. degree will be determined by the thesis committee.

## Academic Progress

The Research and Graduate Review Committee will evaluate the academic progress of M.S. 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 by the Research and Graduate Review Committee 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 (RX701-706) 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 a timeline of the research project must be submitted within one year of admission of the student. The proposal must be approved by the thesis committee and the director of the graduate program.

## Classified or Proprietary Study

Each M.S. student is required to submit a thesis and present an open seminar on his/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/her in any classified or proprietary research.

## M.S. 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 you determine when the University has certain rights in a work or invention you have 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 spelled out 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. As another example, if a student creates copyrightable subject matter in collaboration with a faculty member for a project produced at the direction of the University, the work is considered to be a "work made for hire" under the U.S. Copyright Act, and ownership 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, please do not hesitate to ask a faculty member for guidance, or refer to the Butler University Intellectual Property Manual, available at www.butler.edu/birs/websnap/ documents/IPPmanual.pdf, for the 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 (See the College of Pharmacy and Health Sciences chapter for more information.)

Pharm.D./M.S. in Pharmaceutical Sciences (See the College of Pharmacy and Health Sciences chapter for more information.)

## Jordan College of the Arts Master of Music

- Composition
- Conducting (choral or instrumental track)
- Music Education (thesis or non-thesis track)
- Music History
- Performance (piano, voice, or orchestral instrument)
- Piano Pedagogy (thesis or non-thesis track)


## M.M. Degrees with a Double Major

Students may also earn an M.M. 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. For complete details, see M.M. Degrees with a Double Major on the JCA website.

## A. Admission Requirements

Applications for graduate admission in music must be completed by Feb. 15. Students applying after Feb. 15 may be considered if space is available. Standard admission requirements (included for every degree plan):

1. The School of Music Graduate Application is available through the University Graduate Admission Office. The application should be mailed directly to the director of graduate music studies.
2. The application for graduate admission. This is available online or from the University Graduate Admissions Office. There is a $\$ 35$ application fee; this fee is waived if the application is filed online. Former Butler students are also not required to submit the application fee.
3. An official transcript from each college or university previously attended. These must be mailed directly from the issuing institution to the University Graduate Admissions Office. An undergraduate degree must be completed before graduate study can begin. If the undergraduate degree is other than music, the requirements of Butler's bachelor of arts degree will be used by the director of graduate music studies, together with the appropriate faculty, to create an individualized plan of study, including any remedial work. Remedial work may also be required in other instances depending upon the undergraduate degree and the graduate degree program.
4. The Graduate Record Examination (GRE) General Test. Admission decisions are based on a number of factors including undergraduate GPA, audition/interview results, letters of recommendation, and GRE scores. Typical GRE scores (middle 50 percent) for Butler master of music students are 970-1270 (verbal plus quantitative) and 4.5-5.0 (analytical writing).

- This requirement is waived for applicants who have an earned master's degree in any field.
- To take the GRE, students may visit GRE. org or take the exam at a Sylvan Learning Center. One location in Indianapolis is 2727 E. 86th St.; (317) 257-7546. Butler's GRE code is 1073 .

5. Three letters of recommendation. The letters must be on letterhead that reflects the place of employment of the person providing the recommendation; the recommender should comment on the applicant's musical and academic abilities. The letters should be sent to:
Office of Graduate Admissions, Butler University, 4600 Sunset Ave., Indianapolis, IN 46208-3485
6. For international students, a TOEFL score of 550 (paper-based test), 213 (computerbased test), or 79 (Internet-based test) is
required. In addition, the applicant must demonstrate financial resources sufficient to meet all education and living expenses prior to visa issuance. Additional details are available from the admission office at (317) $940-8100$ or toll-free at (888) 940-8100.

- If the undergraduate degree is from an American university, or from a country where English is the official language, there is no TOEFL requirement. This requirement is also waived for students who successfully complete the highest level of English instruction at the American Language Academy (ALA). Also acceptable is an IELTS (International English Language Training System) score of 6.0.
- To clarify, the U.S. Bureau of Citizenship and Immigration Services and the U.S. Department of State require nonimmigrant students to demonstrate financial resources sufficient to meet all education and living expenses for at least one year of study prior to visa issuance.


## Specific Additional Admission Requirements, by Degree:

Composition: The candidate must submit scores and recordings of his/her original music. In addition, the applicant must arrange for a personal interview with the composition faculty of the School of Music.

Conducting-Choral: An audition, including both conducting and a solo performance on either piano or in voice, is required; a videotape of the applicant conducting a rehearsal or performance (front view) may be substituted for the live audition. In addition, the applicant must arrange for a personal interview with the choral conducting faculty of the School of Music.

Conducting-Instrumental: An audition or videotape of a recent performance is required to be approved by the instrumental conducting faculty of the School of Music.

Music Education (both tracks): The applicant must arrange for a personal interview with the music education faculty of the School of Music.

Music History: A document representing undergraduate music history work is required and should be submitted to the director of graduate music studies along with the School of Music application. In addition, the applicant must arrange for a personal interview with the
musicology faculty of the School of Music.
Performance: An audition is required; an audition tape, preferably a video recording, may be sent in lieu of a live audition. A list of audition requirements is available from the School of Music admissions office and listed below.

Piano Pedagogy (both tracks): A live audition/interview is required. Applicants should plan to play from memory selections from at least three of the following areas: J. S. Bach: prelude and Fugue or larger work; classical sonata by Haydn, Mozart, or Beethoven; significant work from the Romantic period; Standard 20th-century work. You will also be asked to sight-read as part of this audition. Each audition/interview is scheduled for 30 minutes.

- A 45-60 minute DVD demonstrating teaching abilities must be sent to the director of graduate music studies, postmarked no later than one week before the audition date.


## B. M.M. Performance Audition Requirements

Each audition includes a short interview.
Voice: Prepare 30 minutes of memorized repertoire from which the audition committee will choose. The audition will last approximately 20 minutes. Repertoire must include at least one selection in French, Italian, and German, as well as one aria from opera or oratorio. Repertoire should represent various periods and styles. Auditioners should bring a copy of undergraduate transcripts (unofficial) and a résumé detailing his/her performance history and repertoire. Auditioners may bring their own accompanist or, with sufficient notice, one will be provided.

Strings: Be prepared to play for 20-30 minutes, with repertoire representing at least three different periods (Baroque, Classic, Romantic, 20th century). No accompanist will be provided or required, however you may bring your own accompanist if you choose. At least one piece must be memorized. Sightreading may also be included in your audition. The audition will include a short interview.

Brass and Woodwinds: Students should be prepared to play entire work(s) from the standard repertoire. Selected works should be musically and technically advanced, i.e., suitable as major works on a senior recital. An
accompanist is strongly recommended. Etudes, scales, arpeggios, and orchestral excerpts may also be included. Students should confer with the faculty member with whom they wish to study about specific requirements and appropriate repertoire.

Piano Performance: Applicants should plan to play from memory selections from at least three of the following areas: J. S. Bach: Prelude and Fugue or larger work; Classical sonata by Haydn, Mozart, or Beethoven; significant work from the Romantic period; standard 20th-century work. You will also be asked to sight-read as part of this audition.

## C. Acceptance

- The Graduate Office of Admission will notify each applicant by mail as to whether admission has been granted. Any qualifying conditions will be indicated in the acceptance letter.
- Upon admission, a student is assigned to an academic advisor.
- To change from one music degree program to another, a student must submit a new graduate application to the Office of Graduate Admission and be admitted into that program.
- Students who do not enter with a bachelor's degree in music will be required to complete the coursework required for Butler's Bachelor of Arts degree in music in addition to the graduate coursework prescribed for their degree program.


## D. Diagnostic Exams

- The Graduate Music Diagnostic Exams are administered prior to the start of classes, and are required for placement purposes.
The following exams are administered:
- music theory-required of all degree plans
- music history-required of all degree plans
- diction-required of vocal performance and choral conducting majors
- translation-required of music history majors. The student may choose either French or German; a dictionary may be used.
- A student who does not pass one or all of these exams will be required to take the required remedial course in their area of deficiency within the first 12 credit hours of coursework. These remedial courses
count as elective credit in the student's degree plan, but will not fulfill specific course area requirements.
- All incoming graduate students, including Butler University graduates, are required to take the appropriate exams. More information concerning these exams is sent to all incoming students.


## Non-degree Graduate Students

- A person holding a baccalaureate degree from a regionally accredited college or university who wishes to take graduate work for purposes other than obtaining an advanced degree (e.g., for teacher licensure to transfer to another institution, or for self-enrichment) may file a non-degree application. Application forms may be obtained from and submitted to the Office of Graduate Admission, and are also available online.
- An official transcript with a baccalaureate degree posted must be mailed directly from the issuing institution to the Office of Graduate Admission. Applications must be received one week prior to the first day of class.
- If a non-degree student chooses to enter a graduate degree program, the student must complete a graduate degree-seeking application and follow the applicable admission procedures for the appropriate major.
- All non-degree students are urged to become degree-seeking by the time they have completed 9-12 semester hours of graduate credit. A student can petition the director of graduate music studies to have up to 12 hours of non-degree work applied toward the degree program.

Complete details of the Graduate Program in Music, including the specific requirements for each degree and major, are available online or from the School of Music office.

Note: The College of Business MBA and MPA graduate programs do not permit non-degree-status graduate students to enroll in graduate-level courses.



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Karen Thickstun, M.M., adjunct instructor in music
Glen Thoreson, B.F.A., adjunct instructor in theatre
Jerry Toomer, Ph.D., executive in residence
Jessica Trinosky, adjunct librarian
Scott Troyer, M.S., executive in residence
Karen Valencic, B.S., executive in residence
Lorraine Vavul, MBA, executive in residence
Brandt Voight, JD, adjunct instructor in business law
Jim Walker, M.A., adjunct instructor in English
Mark A. Walpole, M.S.A., adjunct instructor in strategic communication
Gary Walters, B.S., adjunct instructor in jazz
Whitten Watson, Ph.D., adjunct instructor in philosophy
Cheryl West, M.M., J.D., adjunct instructor in music education
Virgil G. Whitmeyer II, Ph.D., adjuncy instructor in philosophy
Charles Williams, B.S., executive in residence
Melissa Williams, M.M., adjunct instructor in low brass
Roberta Wong, B.S., adjunct instructor in dance
David J. Woods, B.S. adjunct instructor in communication
Xinjian Xue, Ph.D., adjunct instructor in statistics
Timothy Zimmer, Ph.D., adjunct in economics

## Emeriti Faculty

Andre Aerne, professor of music
Peter Alexander, professor of music and former dean of the Jordan College of Fine Arts
Victor E. Amend, professor of English
Howard G. Baetzhold, professor of English
Bernard F. Barcio, adjunct instructor in Latin
Sally Bell Beck, professor of psychology
James E. Berger, professor of pharmacology

James W. Berry, professor of biological sciences
John W. Best, professor of education
John Beversluis, professor of philosophy
John Bloom, professor of education
Roger W. Boop, professor of education.
Larry P. Bradley, professor of English
Merle W. Carlson, professor of chemistry
Louis Chenette, professor of music and former dean of the Jordan College of Fine Arts
Malcolm Clark, professor of religion
John K. Colbert, professor of music education
Paul Coleman, professor of education
David L. Daniell, professor of biological sciences
William Dawn, associate professor of marketing
Glenna DeBrota, associate professor of education
H. Marshall Dixon, professor of physics

Jack Eaton, professor of music and former dean of the Jordan College of Fine Arts
Jack L. Engledow, professor of marketing
Jack Fadely, professor of education
Milton L. Farber Jr., professor of history
Grace Farrell, "Rebecca Clifton Reape" professor of English
Jeremiah P. Farrell, assistant professor of mathematics
Irving Fine, associate professor of Spanish
Royce Flood, professor of communication studies
Bobby Fong, professor of English
Gwen Fountain, professor of economics
Stephen Glover, associate professor of music
Ronald W. Goodman, professor of education
Barbara Ann Greenburg, associate professor of physical education
Mariellen Griffith, professor of education
Sam Guerriero, professor of education
Xandra Lou Hamilton, professor of physical education
Ann C. Harper, professor of radio and television
James S. Hauss, associate professor of physical education
Peter B. Henderson, professor of computer science and software engineering
J. William Hepler, professor of psychology

Robert F. Hessong, professor of education
Harry E. Hicks, distinguished professor of accounting and business law
George Hoffmann, professor of political science
Janos Horvath, professor of economics

Monique Hyde, associate professor of French
Florence Redding Jessup, professor of Spanish
Henriette J. Kaplan, professor of education
Robert C. Karn, professor of biological sciences
Susan M. Kenyon, professor of anthropology
Harry Kerwin, associate professor of dance
Sidney Kilsheimer, professor of chemistry
Thomas E. Kooremann, professor of Spanish
Margriet Lacy, professor of French
Joseph Lamberti, professor of education
Henry Leck, associate professor of music
Art Levin, professor of journalism
Cindy Loser, associate professor of communication studies
Michael Maloney, associate professor of biological sciences
Joseph Marcheggiani, associate professor of accounting
David S. Mason, professor of political science
Thomas F. Malone, director, Holcomb Research Institute
Martha Jane Meyer, professor of education
Richard W. Miller, professor of biological sciences
Donald P. Minassian, professor of mathematics and actuarial science
William W. Neher, interim dean, College of
Communication, distinguished professor of communication studies
William Ney, M.A., founder and director of the speech-language pathology program (now communication sciences and disorders)
Joseph M. Nygaard, dean, graduate studies and research and professor of education
J. Deane Orris, professor of management

Richard Osborne, professor of music
Stephen A. Perrill, professor of biological sciences
Florence M. Phariss, associate professor of French
Constantine Poulimas, associate professor of music
Daniel W. Pugh, associate professor of theatre

Paula Saffire, associate professor of classics
O. LeRoy Salerni, professor of medicinal chemistry
Beverly Sandmann, professor of pharmacy
Robert A. Sandmann, professor of pharmacy
Philip St. John, professor of zoology
Willi Schwoebel, associate professor of German
Eugenia Scott, professor of education
Sharon Searles, professor of music
Michael Sells, professor of music and former dean of the Jordan College of Fine Arts
Margaret A. Shaw, professor of pharmacy
Stuart L. Silvers, professor of education
Robert K. Stalcup, instructor, journalism
Albert Steiner, professor of classical languages
Roland G. Usher, professor of history and political science
David H. Waite, professor of communication
Martha S. Waller, professor of English
James T. Watt, Allegra Stewart Professor of English.
Thomas Harold Weeks, professor of education
Wayne Wentzel, professor of music
Jackson B. Wiley, director, University Orchestra and professor of music
George Willeford, associate professor of theatre
Lucinda M. Wilson, associate professor of education
Robert G. Wirthlin, assistant professor of business administration
Burrton G. Woodruff, professor of psychology
Bernard Wurger, assistant professor of theatre
Willard F. Yates, professor of biological sciences
Rochelle Zide-Booth, associate professor of dance

## Emeriti Administration

Sondrea Ozolins, Registrar
William H. Templeman, vice president and treasurer of business affairs
Rich Tirman, director of Counseling Center

## University Administration

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President
Chief of Staff and Director of Public Safety, Chief of Police
Director, Conferences and Special Events
General Counsel
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Benjamin Hunter
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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, Global Education
Executive Director, Center for High Achievement and Scholarly Engagement (CHASE)
Director, Butler Institute for Research and Scholarship
Director, Center for Citizenship and Community
Director, Center for Faith and Vocation
Director, eLearning and Senior Director, Center for Academic Technology
Director, Internship and Career Services
Director, Institutional Research and Assessment
Director, Learning Resource Center
Director, Student Disability Services
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Judith Harper Morrel
Theresa Bailey
Donald Braid
Judith Cebula
Julianne Miranda
Gary Beaulieu
Nandini Ramaswamy
Jennifer Griggs
Michele Atterson
Michele Neary
Athletics
Vice President and Director, Athletics
Barry Collier

## Clowes Memorial Hall*

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Director, Operations
Director, Marketing
Enrollment Management
Vice President, Enrollment Management
Dean of Admission
Director, Admission
Director, Financial Aid
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Karen Steele
Joshua Lingenfelter

Thomas Weede
Scott Ham
Aimee Scheuermann
Melissa Smurdon

## Finance and Administration

Vice President, Finance and Administration
Controller
Executive Director, Financial Planning and Budgeting
Director, Budget
Director, Copy, Print and Mail Services

Bruce Arick
Susan Westermeyer
Robert Marcus
Kathy Hankins
Chris Davis

## Human Resources*

Executive Director, Human Resources and Title IX Coordinator Director, Compensation and Organizational Development Director, Employment, Training and Development Director, Benefits and HIRS

## Information Technology*

Chief Information Officer
Senior Director, Support Services
Senior Director, Technology Development
Senior Director, IT Partnership
Director, Network and Infrastructure

## Operations*

Executive Director, Operations
Director, Maintenance Services
Director, Building Services
Director, Planning, Design \& Construction
Campus Engineer
Manager, Environmental Programs \& Safety

## Student Affairs

Vice President, Student Affairs
Dean, Student Services
Director, Athletic Bands and Spirit Programs
Director, Counseling and Consultation Services
Director, Diversity Programs
Director, Greek Life
Director, Programs for Leadership and Service Education (PuLSE)
Director, Recreation
Director, Residence Life

## University Advancement

Vice President, Advancement
Executive Director, Alumni and Engagement Programs
Executive Director, Constituent Services
Executive Director, Development and Capital Campaigns
Senior Director, Annual Giving
Senior Director, Corporate and Foundation Relations
Director, Alumni and Parent Programs
Director, Development and Alumni Services
Director, Donor Relations

## Marketing and Communications

Vice President, Marketing and Communications
Director, Public Relations
Director, Print Marketing and Communications
Director, Web Marketing Communications

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Elaine Johnson
Lisa Walton
Dawn Pruim

Scott Kincaid
Joe Ader
Randy DelPrince
Joe Indiano
Chad Miller

Rich Michal
Jerry Carlson
Dick Hamm
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Shari Alexander Richey
Rachael Burt
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Brieanna Quinn
Lori Norris
Nicole Mazelin
Vari Arceo
Megan Madia

Matt Mindrum
Courtney Tuell
Sally Cutler
Michael Kaltenmark

[^1]Course descriptions for the subjects below start on the noted page.

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| 126 | CN | Chinese | 315 | MRC | Media, Rhetoric and |
| 200 | COB | Business |  |  | Culture |
| 301 | COM | Communication Studies | 207 | MS | Management Science |
| 82 | CS | Computer Science | 290 | MT | Music Theory |
| 303 | CSD | Communication Sciences and Disorders |  | NW <br> ORG | The Natural World Organizational |
| 260 | DA | Dance |  |  | Communication and |
| 18 | DC | Washington DC Semester |  |  | Leadership |
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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]:    AA425, Arts, Education, and Community Engagement: This course is designed to provide students with an understanding of 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. Prerequisites: AA301 or permission of the instructor. (U)(3). Fall.

[^1]:    *Inclusive to Finance and Administration Division

