

INDIANAPOLIS, INDIANA

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# 2009-2011 BULLETIN VOL. XCII



July 2009
Indianapolis, Indiana

### ACADEMIC CALENDAR

### Contents

S-T	Orientation for new students
W	First day of instruction
M	Labor Day holiday (no classes)
R-F	Fall Break (no classes)
M-F	Thanksgiving holiday (no classes)
F	Last meeting of classes
S	Reading day
M–S	Final examinations
T	Grades due in R&R by 10 a.m.
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R-F	Orientation for new students
	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
3	Commencement
S-T	Orientation for new students
	First day of instruction
	Labor Day holiday (no classes)
	Fall Break (no classes)
	Thanksgiving Holiday (no classes)
	Last meeting of classes
-	Reading Day
	Final examinations
	Grades due in R&R by 10 a.m.
1	Grades due in Recreby 10 a.m.
R-F	Orientation for new students
	Martin Luther King holiday (no classes)
	First day of instruction
	Spring Break (no classes)
	Last meeting of classes
	Reading Day
	reading Day
	Einal avaminations
W-T	Final examinations
W-T R	Grades due in R&R by 10 a.m.
W-T	
	W M R-F M-F F S M-S

About Butler University1
The goals of the University
Student learning
Butler's core curriculum1
Academic programs
Butler University today9
Campus9
Indianapolis11
History11
Study abroad
Washington Semester Program
Extended programs
The Consortium for Urban Education 15
Butler University's Center for Citizenship
and Community
The Center for Urban Ecology at Butler 16
The Butler Center for Faith and Vocation 16
Campus Services19
Student Affairs
Housing and Food Services
Recreation
Intercollegiate Athletics
Academic Programs
10
and Resources25
and Resources25 Learning Resource Center
Learning Resource Center
Learning Resource Center
Learning Resource Center25Student Disability Services25Tutoring25
Learning Resource Center25Student Disability Services25Tutoring25Academic success25
Learning Resource Center25Student Disability Services25Tutoring25
Learning Resource Center25Student Disability Services25Tutoring25Academic success25Internship and Career Services26
Learning Resource Center25Student Disability Services25Tutoring25Academic success25Internship and Career Services26Learning assistance
Learning Resource Center       25         Student Disability Services       25         Tutoring       25         Academic success       25         Internship and Career Services       26         Learning assistance       26         Math Lab       26
Learning Resource Center25Student Disability Services25Tutoring25Academic success25Internship and Career Services26Learning assistanceMath Lab26Writers' Studio26
Learning Resource Center       25         Student Disability Services       25         Tutoring       25         Academic success       25         Internship and Career Services       26         Learning assistance       26         Writers' Studio       26         Speakers Lab       26
Learning Resource Center       25         Student Disability Services       25         Tutoring       25         Academic success       25         Internship and Career Services       26         Learning assistance       26         Writers' Studio       26         Speakers Lab       26         Modern Language Center (MLC)       27
Learning Resource Center       25         Student Disability Services       25         Tutoring       25         Academic success       25         Internship and Career Services       26         Learning assistance       26         Writers' Studio       26         Speakers Lab       26         Modern Language Center (MLC)       27         Jordan College of Fine Arts       27         Student-athletes       27         Butler University Counseling and
Learning Resource Center       25         Student Disability Services       25         Tutoring       25         Academic success       25         Internship and Career Services       26         Learning assistance       26         Writers' Studio       26         Speakers Lab       26         Modern Language Center (MLC)       27         Jordan College of Fine Arts       27         Student-athletes       27
Learning Resource Center       25         Student Disability Services       25         Tutoring       25         Academic success       25         Internship and Career Services       26         Learning assistance       26         Writers' Studio       26         Speakers Lab       26         Modern Language Center (MLC)       27         Jordan College of Fine Arts       27         Student-athletes       27         Butler University Counseling and       Consultation Services       27
Learning Resource Center       25         Student Disability Services       25         Tutoring       25         Academic success       25         Internship and Career Services       26         Learning assistance       26         Writers' Studio       26         Speakers Lab       26         Modern Language Center (MLC)       27         Jordan College of Fine Arts       27         Student-athletes       27         Butler University Counseling and       Consultation Services       27         Honors programs       27         University Honors Program       27
Learning Resource Center       25         Student Disability Services       25         Tutoring       25         Academic success       25         Internship and Career Services       26         Learning assistance       26         Writers' Studio       26         Speakers Lab       26         Modern Language Center (MLC)       27         Jordan College of Fine Arts       27         Student-athletes       27         Butler University Counseling and       Consultation Services       27         Honors programs       27
Learning Resource Center       25         Student Disability Services       25         Tutoring       25         Academic success       25         Internship and Career Services       26         Learning assistance       26         Writers' Studio       26         Speakers Lab       26         Modern Language Center (MLC)       27         Jordan College of Fine Arts       27         Student-athletes       27         Butler University Counseling and       Consultation Services       27         Honors programs       27         University Honors Program       27
Learning Resource Center       25         Student Disability Services       25         Tutoring       25         Academic success       25         Internship and Career Services       26         Learning assistance       26         Math Lab       26         Speakers Lab       26         Modern Language Center (MLC)       27         Jordan College of Fine Arts       27         Student-athletes       27         Butler University Counseling and       27         Consultation Services       27         Honors programs       27         University Honors Program       27         Courses       28         University honors       29         Departmental honors       29
Learning Resource Center       25         Student Disability Services       25         Tutoring       25         Academic success       25         Internship and Career Services       26         Learning assistance       26         Math Lab       26         Speakers Lab       26         Modern Language Center (MLC)       27         Jordan College of Fine Arts       27         Student-athletes       27         Butler University Counseling and       27         Consultation Services       27         Honors programs       27         University Honors Program       27         Courses       28         University honors       29         Departmental honors       29         Office of Post-Graduate Studies       30
Learning Resource Center       25         Student Disability Services       25         Tutoring       25         Academic success       25         Internship and Career Services       26         Learning assistance       26         Math Lab       26         Speakers Lab       26         Modern Language Center (MLC)       27         Jordan College of Fine Arts       27         Student-athletes       27         Butler University Counseling and       27         Consultation Services       27         Honors programs       27         University Honors Program       27         Courses       28         University honors       29         Departmental honors       29         Office of Post-Graduate Studies       30         Pre-Health Professions advising
Learning Resource Center
Learning Resource Center25Student Disability Services25Tutoring25Academic success25Internship and Career Services26Learning assistance26Math Lab26Speakers Studio26Speakers Lab26Modern Language Center (MLC)27Jordan College of Fine Arts27Student-athletes27Butler University Counseling and27Consultation Services27Honors programs27University Honors Program27Courses28University honors29Departmental honors29Office of Post-Graduate Studies30Pre-Health Professions advising (medicine, dentistry, veterinary, optometry, physical therapy)30
Learning Resource Center

National Scholarships and
Fellowships advising
Butler University Libraries31
Irwin Library31
Lilly Science Library
Information Technology
Network infrastructure
Computing labs
Electronic resources
Technology in university housing
Computing purchases
Support
Institute for Research and Scholarship 33
Awards
ROTC programs
NOTE programs
A 1
Admission Information
and Requirements37
Contacting the Office of Admission37
Visiting campus
First-time students
Advanced course placement
Applying for freshman admission
Fine arts applicants
Home-schooled students
Freshman application dates
Early Action I
Early Action II
Regular Decision40
Enrolling in the university
Explanation of benefits
Transfer students
Applying for transfer admission
Scholarships41
College of Pharmacy and
Health Sciences Applicants —
special requirements
Pharmacy applicants
Physician Assistant applicants
Enrolling in the university
as a transfer student
Other admission options
Non-degree
Audit for Enrichment
rugit for Emilianient
Taking and East
Tuition and Fees45
Educational costs
Room and board rates
Payment terms
Tuition refund schedule47

Contents

College of Education awards   79	Credit balance accounts	Marketing 70
Quiside billing		
Unpaid items		
Delinquent bills.		
Business services		
Withdrawals		
Strudent affairs		
Theatre	Withdrawals48	
Student affairs	T0 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	
Freshman academic scholarships 51 JCFA audition awards 51 Athletic grant-in-aid 51 National merit and national achievement scholarship 51 Financial aid and study abroad 52 Leave of absence policy for merit aid 52 Grants 52 Indiana state grants 52 Indiana state grants 52 Butler Grant 52 Butler Grant 52 Butler Grant 53 Federal Pell Grant 53 Federal Perkins Loan 53 Federal Perkins Loan 53 Federal Parent Loans for Undergraduate Students (PLUS) 53 Private Loans 53 Special loan programs 53 Special loan programs 53 General 64 Chemistry 65 Communication studies 66 Engineering 67 English 67 English 67 English 67 English 67 English 67 Philosophy 70 Physics and astronomy 70 Political science 70 Political science 70 Political science 70 Pre-law 71 Pre-medicine 71 Religious tudies 72 Science 73 College of Business awards 73 General 74 College of Business awards 73 General 75 College of		
Athletic grant-in-aid National merit and national achievement scholarship Financial aid and study abroad Search of Secretal Pell Grant Secretal Pell Grant Secretal Perkins Loan Secretal Perkins Loan Secretal Stafford Loan Special loan programs Student Social Security number. Ion Graduation with major in two colleges Indivation with major in two colleges Indivation with major in t		•
Arthletic grant-in-aid. National merit and national achievement scholarship	Freshman academic scholarships51	
National merit and national achievement scholarship	JCFA audition awards51	Athletic Awards
Scholarship   51	Athletic grant-in-aid51	
Scholarship   51	National merit and national achievement	Academic Regulations
Financial aid and study abroad   52   Leave of absence policy for merit aid   52   Grants   52   Indiana state grants   52   Ederal Pell Grant   52   Ederal Pell Grant   52   Loans   53   Federal Perkins Loan   53   Federal Parent Loans for   Undergraduate Students (PLUS)   53   Private Loans   53   Special loan programs   53   Special loan programs   53   Special loan programs   53   Special loan programs   54   General scholarships   34   General scholarships   54   General scholarships   55   Gommunication studies   56   Economics   56   Economics   56   Economics   56   Engineering   57   English   57   Physics and astronomy   70   Physics and astronomy   70   Physics and astronomy   70   Pre-law   71   Pre-medicine   71   Psychology   71   Religious studies   72   Sociology and criminology   73   General   73   College of Business awards   73   General   73   Pre-deficine   70   General   70   General   70   General   70   Pre-law   71   College of Business awards   73   General   73   Proceedings   75   College of Business awards   73   General   73   College of Business awards   73   General   73   College of Business awards   73   College of Business awards   73   General   73   College of Business awards   73   College of Busines	scholarship51	
Leave of absence policy for merit aid	Financial aid and study abroad 52	
Section   Sect		
Indiana state grants		
Federal Pell Grant		
Butler Grant		
Coans	Butler Grant52	
Federal Perkins Loan		
Federal Stafford Loan 53 Federal Parent Loans for Undergraduate Students (PLUS) 53 Private Loans 53 Special loan programs 53 Named scholarships, awards and prizes 54 General scholarships 64 College of Liberal Arts and Sciences awards 63 General 63 Biological Sciences 64 Chemistry 65 Communication studies 66 Economics 66 Engineering 67 History 68 Journalism 68 Mathematics and actuarial sciences 69 Modern foreign languages 70 Philosophy 70 Physics and astronomy 70 Political science 70 Pre-law 71 Pre-medicine 71 Prey-medicine 71 Prey-medicine 72 Sociology and criminology 73 College of Business awards 73 General 73 General 73 General 100 Grade reports and transcripts 100 Grada reports and transcripts 101 Graduation with major in two colleges 101 Graduation with major in two colle		
Federal Parent Loans for Undergraduate Students (PLUS) 53 Private Loans 53 Special loan programs 53 Named scholarships 54 General scholarships 54 College of Liberal Arts and Sciences awards 63 General 63 Biological Sciences 64 Chemistry 65 Communication studies 66 Economics 66 Engineering 67 History 68 Mathematics and actuarial sciences 69 Modern foreign languages 70 Phyliscs and astronomy 70 Political science 70 Pre-law 71 Pre-medicine 71 Pre-medicine 71 Pre-medicine 71 Religious studies 72 Science 72 Sociology and criminology 73 College of Business awards 73 General 73 General 73 General 75  Grada troports and transcripts 100 Student Social Security number 101 Student Social Security number 101 Graduation with major in two colleges 101 Graduation with miors 20 Graduation with major in two colleges 101 Graduation with miors 20 Graduation with miors 20 Graduation with miors 20 Graduation with miors 20 Frequitation with miors 20 Graduation with miors 20 Graduation with miors 20 Graduation with miors 20 Graduation with miors		Pass/fail option
Undergraduate Students (PLUS) 53 Private Loans 53 Special loan programs 53 Named scholarships, awards and prizes 54 General scholarships 54 College of Liberal Arts and Sciences awards 63 General 63 Biological Sciences 64 Chemistry 65 Communication studies 66 Economics 66 Engineering 67 English 67 History 68 Journalism 68 Mathematics and actuarial sciences 69 Modern foreign languages 70 Philosophy 70 Physics and astronomy 70 Political science 70 Pre-law 71 Pre-medicine 71 Psychology 72 Science 72 Science 72 Science 72 Sociology and criminology 73 College of Business awards 73 General 100 Student Social Security number 1101 Final year of academic residence 1101 Graduation with major in two colleges 101 Graduation with major in two colle		
Private Loans		
Special loan programs		
Named scholarships, awards and prizes		
General scholarships         54           College of Liberal Arts and Sciences awards         63           General         63           Biological Sciences         64           Chemistry         65           Communication studies         66           Economics         66           Engineering         67           English         67           History         68           Mathematics and actuarial sciences         69           Modern foreign languages         70           Philosophy         70           Pre-law         70           Pre-medicine         71           Psychology         71           Religious studies         72           Science         72           Sociology and criminology         73           College of Business awards         73           General         73           General         73           International studies         109           Presentic         107           International studies         109           Bequirements for graduation         101           Writing intensive requirement         101           Macademic success <t< td=""><td></td><td></td></t<>		
College of Liberal Arts and Sciences awards.         63         Requirements for graduation.         101           General         63         Computer literacy requirement.         101           Biological Sciences         64         Writing intensive requirement.         101           Communication studies         65         Communication studies.         66           Economics         66         Academic success.         103           English         67         Tutoring         103           History         68         Enrollment         104           Mathematics and actuarial sciences         69         Advising Program         104           Modern foreign languages         70         Advanced placement         105           Physics and astronomy         70         Advanceded placement         105           Pre-law         71         Advancement to degree status         105           Preparation for teacher certification         105           Associate's degree         107           International studies         107		
General		
Biological Sciences.		
Chemistry         65           Communication studies         66           Economics         66           Engineering         67           English         67           History         68           Journalism         68           Mathematics and actuarial sciences         69           Modern foreign languages         70           Philosophy         70           Physics and astronomy         70           Pre-law         71           Pre-medicine         71           Psychology         71           Religious studies         72           Science         72           Sociology and criminology         73           College of Business awards         73           General         73           International studies         109           The Learning Resource Center103           Academic success         103           Tutoring         103           Courses         104           Advaising Program         104           Advanced placement         105           Advanced placement to degree status         105           Associate's degree         105		
Communication studies         66           Economics         66           Engineering         67           English         67           History         68           Journalism         68           Mathematics and actuarial sciences         69           Modern foreign languages         70           Philosophy         70           Physics and astronomy         70           Pre-law         71           Pre-medicine         71           Psychology         71           Religious studies         72           Science         72           Sociology and criminology         73           College of Business awards         73           General         73           The Learning Resource Center. 103           Academic success         103           Tutoring         103           Courses         104           Advancement         104           Advanced placement         105           Advancement to degree status         105           Associate's degree         105           Associate's degree         105           Associate's degree         107 <t< td=""><td></td><td>Writing intensive requirement 101</td></t<>		Writing intensive requirement 101
Economics         66           Engineering         67           English         67           History         68           Journalism         68           Mathematics and actuarial sciences         69           Modern foreign languages         70           Philosophy         70           Physics and astronomy         70           Pre-law         71           Pre-medicine         71           Psychology         71           Religious studies         72           Science         72           Sociology and criminology         73           College of Business awards         73           General         73           International studies         109           International studies         109           Presental         107		
Engineering         67         Academic success         103           English         67         Tutoring         103           History         68         Courses         104           Journalism         68         Enrollment         104           Mathematics and actuarial sciences         69         Advising Program         104           Modern foreign languages         70         Exploratory Studies Program         104           Philosophy         70         Transfer of credit         105           Physics and astronomy         70         Advanced placement         105           Pre-law         71         Advancement to degree status         105           Pre-medicine         71         Preparation for teacher certification         105           Preparation for teacher certification         105           Associate's degree         105           Associate's degree         105           Interdisciplinary Programs         107           General         107           Gender studies         107           International studies         109           Presentation         109		The Learning Resource Center103
English         67         Intoring         105           History         68         Courses         104           Journalism         68         Enrollment         104           Mathematics and actuarial sciences         69         Advising Program         104           Modern foreign languages         70         Exploratory Studies Program         104           Philosophy         70         Advanced placement         105           Physics and astronomy         70         Advancement to degree status         105           Political science         70         College requirements         105           Pre-law         71         Preparation for teacher certification         105           Preparation for teacher certification         105           Associate's degree         105           Associate's degree         105           Interdisciplinary Programs         107           General         107           College of Business awards         73           Gender studies         109           Presentational studies         109           Program         107           Program         107           Associate's degree         107           Gender studies		
History		Tutoring
Journalism		Courses
Mathematics and actuarial sciences. 69 Modern foreign languages 70 Philosophy 70 Physics and astronomy 70 Political science 70 Pre-law 71 Pre-medicine 71 Psychology 71 Religious studies 72 Science 72 Sociology and criminology 73 College of Business awards 73 General 73 General 70 Advanced placement 104 Advanced placement 105 Advancement to degree status 105 College requirements 105 Associate's degree 105 Interdisciplinary Programs 107 General 107 General 107  International studies 109  Pre-medicine 72 General 107 General 107  International studies 109		Enrollment
Modern foreign languages 70 Philosophy 70 Physics and astronomy 70 Political science 70 Pre-law 71 Pre-medicine 71 Psychology 71 Religious studies 72 Science 72 Sociology and criminology 73 College of Business awards 73 General 73 General 104 Advanced placement 105 Transfer of credit 105 Advancement to degree status 105 College requirements 105 Preparation for teacher certification 105 Associate's degree 105 General 107 General 107 General 108 Advanced placement 105 Transfer of credit 105 Advancement to degree status 105 College requirements 105 Associate's degree 105 Interdisciplinary Programs 107 General 107 General 107 General 107		Advising Program 104
Philosophy 70 Physics and astronomy 70 Political science 70 Pre-law 71 Pre-medicine 71 Psychology 71 Religious studies 72 Science 72 Sociology and criminology 73 College of Business awards 73 General 73 Rdvanteed placement 105 Transfer of credit 105 Advancement to degree status 105 College requirements 105 Preparation for teacher certification 105 Associate's degree 105  Interdisciplinary Programs 107 General 107 General 107 General 107 General 107  International studies 109 Transfer of credit 107 Advancement to degree status 105 College requirements 105 Advancement to degree status 105 College requirements 105 Advancement to degree status 105 College requirements 105 Advancement to degree status 105 Advancement to degree status 105 Freparation for teacher certification 105 Associate's degree 105 Advancement to degree status 105 Freparation for teacher certification 105 Associate's degree 105 Advancement to degree status 105 College requirements 105 Advancement to degree status 105 Freparation for teacher certification 105 Associate's degree 105 Advancement to degree status 105 Freparation for teacher certification 105 Associate's degree 105 Advancement to degree status 105 College requirements 105 Advancement to degree status 105 Freparation for teacher certification 105 Associate's degree 105 Advancement to degree status 105 Freparation for teacher certification 105 Associate's degree 105		Exploratory Studies Program 104
Physics and astronomy 70 Physics and astronomy 70 Political science 70 Pre-law 71 Pre-medicine 71 Psychology 71 Religious studies 72 Science 72 Sociology and criminology 73 College of Business awards 73 General 73  Transfer of credit 105 Advancement to degree status 105 College requirements 105 Preparation for teacher certification 105 Associate's degree 105  Interdisciplinary Programs 107 General 107 General 107 General 107  International studies 109		Advanced placement105
Political science 70 Pre-law 71 Pre-medicine 71 Psychology 71 Religious studies 72 Science 72 Sociology and criminology 73 College of Business awards 73 General 73 General 70 College requirements 105 Preparation for teacher certification 105 Associate's degree 105  Interdisciplinary Programs 107 General 107 General 107 General 107 General 107  Preparation for teacher certification 105 Associate's degree 105  Interdisciplinary Programs 107 General 107 General 107 General 107 General 107 General 107 General 107		Transfer of credit
Pre-law 71 Pre-medicine 71 Psychology 71 Religious studies 72 Science 72 Sociology and criminology 73 College of Business awards 73 General 73 College requirements 105 Preparation for teacher certification 105 Associate's degree 105  Interdisciplinary Programs 107 General 107 General 107 General 107 International studies 109		Advancement to degree status105
Pre-nedicine 71 Psychology 71 Religious studies 72 Science 72 Sociology and criminology 73 College of Business awards 73 General 73 Preparation for teacher certification 105 Associate's degree 105  Interdisciplinary Programs 107 General 107 General 107 General 107 International studies 109		
Psychology 71 Religious studies 72 Science 72 Sociology and criminology 73 College of Business awards 73 General 73 General 74 Associate's degree 105  Interdisciplinary Programs 107 General 107 General 107 General 107 International studies 109  Proceedings of the programs 107 International studies 109  Proceedings of the programs 107 International studies 109		
Religious studies 72 Science 72 Sociology and criminology 73 College of Business awards 73 General 73 General 74 Interdisciplinary Programs 107 General 107 General 107 International studies 109		
Science 72 Sociology and criminology 73 College of Business awards 73 General 73 General 74 General 75 Interdisciplinary Programs 10/ General 107 General 107 International studies 109 International studies 119		
Sociology and criminology 73 General 107 College of Business awards 73 General 107 General 107  General 107  General 107  General 107  Representational studies 109	Keligious studies	Interdisciplinary Programs 107
College of Business awards 73 General 107 General 73 International studies 109  Description 107  Research 107  Research 107  Research 107		
General		
D		
Accounting 78 Teact studies		
Cooper technology and cocrety 113	Accounting	
Economics		colors, technology and society

Marketing79
College of Education awards79
General
Counseling
Jordan College of Fine Arts awards 83
Dance
Media Arts
Music
Theatre
College of Pharmacy and
Health Sciences awards
Athletic Awards
Academic Regulations
_
and Definitions99
Unit of instruction
Grading system
Repeat policy
Independent study policy
Dean's list
Classification of students
Registration
Pass/fail option
Special non-credit
Grade reports and transcripts
Student Social Security number
Final year of academic residence 101
Graduation101
Graduation with major in two colleges 101
Graduation with minors
Requirements for graduation101
Computer literacy requirement 101
Writing intensive requirement 101
The Learning Resource Center103
Academic success
Tutoring
Courses
Enrollment104
Advising Program
Exploratory Studies Program 104
Advanced placement 105
Transfer of credit
Advancement to degree status 105
College requirements
Preparation for teacher certification 105
Associate's degree
Interdisciplinary Programs 107
General
Gender studies
International studies
Peace studies

College of Liberal Arts
and Sciences117
Admission
College graduation requirements 118
Foreign language and computer
competency requirements119
Majors
Minors
Requirements for the bachelor
of science degree119
Degree after completing one year
of professional study119
Preparation for teacher licensure
Graduate programs
Departments of instruction 120
African Studies
Anthropology120
Biological sciences
Chemistry
Classical studies
Communication studies
Computer science and software engineering 139
Economics
Engineering dual-degree program 142
English language and literature 143
History
History courses
Geography courses
Individualized majors program 152
Irwin Library
Journalism
Mathematics and actuarial science 155
Modern languages, literatures
and cultures
Courses in English
Chinese courses
French courses
German courses
Italian courses
Spanish courses
Philosophy and religion
Philosophy courses
Religion courses
Physics and astronomy
Dual-degree engineering program 173
Physics course
Astronomy courses
Political science
Psychology
Sociology
Urban affairs
Core courses
Additional courses

College of Education	93
Graduation requirements	193
Admission to the College of Education	
Educational Placement	193
Core I and II	193
Early Childhood and middle	
childhood education	
Middle/secondary education	195
Physical education (K-12)	
Health education (6-12)	195
Exercise science (non-licensure)	
Education courses	
Physical/Health Education courses	
College of Education graduate programs	
Educational Administration (EPPSP)	204
Effective Teaching and	
Leadership (METL)	
School Counseling	
Courses	204
College of Business2	213
Undergraduate program	214
Requirements for graduation	214
Curriculum	
Majors	
Minors	
Graduate program	
Courses	
Accounting	216
College of Business	
Economics	
Finance	
International business	
Management	
Management science	
Marketing	
MBA courses	
MPA courses	228
Callege of Dharmage	
College of Pharmacy	
and Health Sciences2	
Mission and goals	231
History	
Accreditation	
Licensure and experience requirements	
Degree programs	232
Doctor of pharmacy	232
Admission requirements	
Curriculum	235
Master of science in	221
pharmaceutical sciences	236
Master of physician assistant studies	
Degree requirements	
Curriculum	238

Pre-professional health science courses 240
Physician assistant (PA) courses
Pharmacy courses
- 4 - 44 - 4
Jordan College of Fine Arts257
Undergraduate degree programs
Admission
General academic regulations
Graduate degree programs
Majors and minors
Art
Art administration
Dance
Media arts
Music
Music lyric theatre
Music theory
Theatre
1 Heatre
Graduate Studies291
General information
Renewed enrollment
Transfer credit
Time limitations
Degree requirements
Student status
Financial assistance
Curriculum
Transfer of credits
Academic progress
Research
College of Liberal Arts and Sciences 295
College of Education
Educational Administration (MS) 295
School Counseling (MS)295
Effective Teaching and
Leadership (MS)
College of Business
Master of business administration
(MBA)
Master of professional accounting
(MPA)
College of Pharmacy and Health Sciences 296 Master of science in pharmaceutical
sciences
Jordan College of Fine Arts
Master of music
MM degrees with a double major 297
Time degrees with a double major
Trustees, Faculty
and Administration303
Board of trustees

Teaching faculty 2009-2011 Adjunct faculty	
Professional librarians	
Emeriti faculty	
Emeriti administration	
University administration	323
,	
Subject Abbreviation Index	.327

### Index......329

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 is accredited by the Higher Learning Commission and is a member 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)
- Indiana Professional Standards Board (IPSB)
   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 Fine Arts are accredited by these associations:

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

Some Programs in the Department of Chemistry are accredited by the ACS, the American Chemical Society.





### ABOUT BUTLER UNIVERSITY

#### The goals of the University

Butler University is an independent University composed of a college of liberal arts and sciences and four 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 faculty, staff and students.

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, quantitative and analytic reasoning and creative arts.
- 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.

Through a combination of courses, both in the major and in the core curriculum and co-curricular experiences, students are afforded ample opportunities to achieve these learning outcomes.

#### The Butler Core Curriculum

At the heart of Butler's education is the University's core curriculum. A core curriculum is a set of academic requirements embodying a college or university's definition of an educated person.

At Butler, a liberally educated person is a humane and cultured individual committed to the advancement of citizenship, science and self-knowledge in a free global society. A cultured individual is someone who speaks and writes gracefully, enjoys reading sophisticated texts, appreciates the fine arts and understands basic mathematics. The point of these proficiencies, besides personal enjoyment, is service to the common good. Liberally educated people promote good citizenship by getting involved in

in the issues facing their society. They contribute to the process of scientific discovery by recognizing and helping others recognize the difference between real science and pseudo-science. They promote self knowledge through exploration of the human condition by such avenues as religious faith, philosophy, literature, history and the arts.

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.

Not all colleges and universities have a core curriculum, and only a few have a core as old or as extensive as Butler's. At Butler every student completes the same core: English majors, dancers, business majors, pre-meds and all other majors in the University participate in the same core classes. Students and indeed the faculty are all in it together. In this way the core curriculum serves as a powerful community-builder at Butler as well as demonstrating the University's commitment to liberal education.

The core curriculum offers a broad general education that encourages the pursuit of knowledge, fosters growth and creativity and equips students to become active, responsible citizens. The curriculum is designed to strengthen reading, writing, speaking, critical thinking and quantitative skills. Completion of the core curriculum of the University is required for all baccalaureate and associate degrees. Students are expected to consult with their academic advisors prior to registration each semester to plan ways of fulfilling the core curricular requirements pertaining to them. For more information on the core curriculum, contact the associate Provost of faculty affairs and interdisciplinary programs.

Butler is in the process of implementing a new core curriculum. The next section concerning the new core describes the pilot courses that count toward the current core.

The core curriculum consists of two parts: general requirements and distribution requirements.

#### 1. General requirements First-Year Seminar Program

Students may fulfill the former Freshman English requirement (EN 102 Freshman Writing Seminar and ID 103 Humanities Colloquium) with the new First-Year Seminar requirement

by completing FYS 101 (3 hours) and FYS 102 (3 hours).

The First-Year Seminar is a topics-based, two-semester sequenced course that serves as an introduction to the vitality of the liberal arts. 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 EN 101 Writing Tutorial must enroll in EN 101 during their first semester at Butler, taking EN 101 and FYS 101 concurrently. Some students also may be required to take EN 101 concurrently with FYS 102, contingent upon student performance in EN 101 and/or FYS 101.

Transfer students who have completed twosemesters 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.

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

#### Speech

Students who substitute AP, transfer or other credit for one or both of FYS 101 and FYS 102 are required to pass COM 102, Public Speaking (2 hours), during the freshman year. A student may be exempted by demonstrating a degree of proficiency in public speaking and rhetorical analysis determined by the Department of Communication Studies or by approved participation on the forensics team.

#### Global and Historical Studies/ Formerly Change and Tradition

Students may fulfill the former Change and Tradition (ID 201-202) requirements with two Global and Historical Studies courses from the new core. Global and Historical Studies (GHS 201-209) is an array of interdisciplinary courses that allow students to engage in 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 Seminars.

All students are required to complete two semesters of GHS 201-209 (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 coordinator of Global and Historical Studies.

#### Physical Well Being/Formerly **Physical Education**

Students may fulfill the former Physical Education requirement (PE 101 Lifetime Fitness, PE 102 Physical Activity) with the new Physical Well Being requirement by completing CC1P. Physical Well Being (CC1P) is a one-credit, two contact-hour course. Students can select from a menu of courses devoted to physical and health education. Students who have already completed either a PE 101 or a PE 102 can fulfill the requirement by completing CC1P. Students may fulfill this requirement at any time and can receive up to two CC1P credits.

#### 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 exempted 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 freshman year.

#### **Division I Humanities**

CC 211P Text and Ideas (3)

CLA 211 Greek Civilization (3)

CLA 222 Roman Civilization (3)

CLA 233 Classical Mythology (3)

EN 221 Themes in Literature (3)

EN 241 The American Dream (3)

EN 245 Inquiries in American Literary and Cultural History I (3)

EN 246 Inquiries in American Literary and Cultural History 2 (3)

EN 263 The Worlds of Shakespeare (3)

EN 265 Inquiries in British Literary and Cultural History I (3)

EN 266 Inquiries in British Literary and Cultural History II (3)

FL 320 Chinese Civilization (3)

FL 480 Topics: Chinese Studies (3)

GE 310 Historical Geography of U.S. (3)

GE 330 Peoples & Faiths of Russia & Its Neighbors (3)

HS 223 Major Themes in European History (3)

HS 226 American Visions (3)

HS 304 Europe in the Middle Ages (3)

HS 305 Europe in Renaissance, 1300-1600 (3)

HS 307 Early Modern Britain (3)

HS 311 Early Modern Europe (3)

HS 312 19th Century Europe (3)

HS 314 French Revolution & Napoleon (3)

HS 318 Modern Germany (3)

HS 319 Contemporary Germany (3)

HS 324 Individual and Society in Europe 1600-1850 (3)

HS 330 Twentieth Century Europe (3)

HS 331 History of Children and Youth (3)

HS 333 The American Revolution (3)

HS 334 Indiana and the Midwest (3)

HS 335 Colonial America (3)

HS 338 The Early American Republic (3)

HS 342 US Diplomacy in 20th Century (3) HS 358 Modern Middle Eastern History (3)

HS 366 Modern China (3)

HS 383 American Military History (3)

HS 390 Topics in History (3)

PL 201 Introduction to Philosophy (3)

PL 203 Contemporary Moral Issues (3)

PL 245 Classics of Social and Political Philosophy (3)

PL 340 Philosophy of Art (3)

PL 342 Philosophy of Religion (3)

PL 344 Philosophy of Law (3)

PL 348 Philosophy and Feminism (3)

PL 363 Biomedical Ethics (3)

PO 210 Basic Political Thought (3)

RL 201 Introduction to Asian Religions (3)

RL 202 The Bible (3)

RL 302 The Prophets (3)

RL 303 The Person and Book of Job

in the Bible and Beyond (3)

RL 304 Book of Psalms (3)

RL 347 History of Christianity (3)

RL 348 Religion in the U.S.A. (3)

RL 350 Topics in Judaism (3)

RL 351 Religions of Japan (3)

RL 352 Religions of China, Japan and Korea (3)

RL 353 Buddhism: Past and Present (3)

RL 354 Islam: Religion, Culture & Society (3)

RL 355 Jesus, Moses and Muhammad (3)

RL 356 African and Afro-Caribbean Religion (3)

RL 357 Native American Religions (3)

RL 360 Religious Movements of 20th

Century World (3)

RL 362 War, Peace & Religion (3)

RL 364 Peoples & Faiths of Russia and its Neighbors (3)

RL 370 Modern Religious Thought (3)

RL 372 Mysticism (3)

RL 374 Faith & Doubt: The Brothers

Karamazov (3)

RL 377 Religion, Gender and the Goddess in Asia (3)

#### **Division 2 Fine Arts**

CC 212P Perspectives in the Creative Arts (3) ART 110 Art: Visual Dialogue (3) ART 202 Introduction to the History of Art (3) ID 111 The Arts in Performance (3) MH 110 Music - A Living Language (3) TH 101 Plays in Performance (3)

#### **Division 3 Social Sciences**

CC 213P The Social World (3) AN 102 Introductory Anthropology (3) EC 101 Economics and the Modern World (3)

GE 109 Cultural Geography (3)

IS 101 Introduction to International Studies (3)

JR 107 Introduction to Mass

Communication (3)

PO 101 Introduction to Politics (3)

PS 101 Introduction to Psychology (3)

RL 101 Religions of the World (3)

SO 101 Introductory Sociology (3)

#### **Division 4 Natural Sciences**

CC 214P The Natural World (5)

AS 102 Modern Astronomy with Lab (5)

BI 100 Introductory Biology (5)

BI 101 General Botany (5)

BI 103 Genetics and Evolution (5)

BI 106 Environmental Biology (5)

CH 101 Chemistry and Society (5)

PH 105 Concepts of Physical Science (5)

PH 201 Introduction to Analytical Physics (5)

PS 201 Experimental Psychology I (5)

# Division 5 Quantitative and Formal Reasoning

After demonstrating proficiency in algebra or pre-calculus, all students shall pass a course in quantitative or formal reasoning, selected from the list below. These courses are introductory in nature and have no prerequisites other than algebra or pre-calculus.

CC 215P Analytic Reasoning (3)

CS 142 Introduction to Computer Science

& Programming (3)

CS 151 Foundations of Computing I (4)

MA 104 Introduction to Contemporary

Mathematics (3)

MA 106 Calculus and Analytic Geometry I (5)

MA 125 Business Calculus (3)

MA 162 Statistical Methods (4)

PL 210 Logic (3)

Butler University is in the process of implementing a new core or general education curriculum. One of the guiding principles of the new core is that it is structured by learning objectives rather than academic disciplines. The new core includes a First Year Seminar, Global and Historical Studies courses, and Capstone courses. In addition the new core has courses in six areas of inquiry (Texts and Ideas, Perspectives in Creative Arts, The Social World, The Natural World, Analytic Reasoning, and Physical Well Being).

Finally, the new core contains requirements in Writing Across the Curriculum, Speaking

Across the Curriculum, an Indianapolis Community Requirement, and a Butler Cultural Community Requirement. During the core implementation period, pilot courses for the new core will be taught, and students are encouraged to enroll in these courses. The pilot courses do meet requirements in the current core curriculum:

First Year Seminar (FYS 101 and FYS 102) for EN 102, ID 103, and COM 102; Global and Historical Studies (GHS 201-209) for ID 201 or ID 202;

Texts and Ideas (CC 211P) for Division I; Perspectives in Creative Arts (CC 212P) for Division II;

The Social World (CC 213P) for Division III; The Natural World (CC 214P) for Division IV; Analytic Reasoning (CC 215P) for Division V, and

Physical Well Being (CC 1P) for PE 101 and PE 102.

#### The Pilot Core Principles:

A Core Structured by Learning Objectives rather than Disciplines

A Core that Belongs to and is Taught by the Whole University Community

A Core to Build Teaching and Learning in Communities

#### **Overview of Core Structure**

The common core elements:

The First Year Seminar: Self, Community and World (6 hrs)

The Sophomore requirement: Global and Historical Studies (6 hrs)

#### The general core elements are as follows:

Texts and Ideas (3 hrs)
The Social World (3 hrs)
The Natural World (5 hrs)
Perspectives in the Creative Arts (3 hrs)
Analytic Reasoning (3 hrs)
Physical Well Being (1 hr)

### In addition to the common and general core elements:

The Writing Across the Curriculum Requirement The Speaking Across the Curriculum Requirement

The Butler Cultural Community Requirement The Indianapolis Community Requirement

### Structure of Core Elements and Student Learning Objectives

#### First Year Seminar

**Course Structure:** A two-semester sequence taken in the first year.

#### Learning Objectives:

- To reflect on big questions about themselves, their community and their world.
- To develop the capacity to read and think critically.
- To develop the capacity to write clear and persuasive expository and argumentative essays, with an emphasis on thesis formation and development.
- To develop the capacity for effective oral communication and gain an understanding of basic principles of oral communication as they apply to discussion.
- To understand the liberal arts as a vital and evolving tradition and to see themselves as agents within that tradition.
- To develop capacities for careful and open reflection on questions of values and norms.
- To develop the ability to carry out research for the purpose of inquiry and to support claims.

#### Global and Historical Studies

Course Structure: Two courses taken in the second year, chosen from a limited selection of three-hour courses. (Note: Students may not take both GHS 203 and GHS 209 to complete their Global and Historical Studies requirement. Any other combination of courses is allowed.)

#### 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**

Text and Ideas
Perspectives in the
Creative Arts
Analytic Reasoning

The Social World The Natural World Physical Well Being In order to ensure that courses are designed to serve the needs of the general education student, we recommend that courses offered for core credit meet two important criteria:

- 1) they should carry no prerequisites, and
- 2) their primary purpose should not be to prepare students for more advanced work in a particular discipline.

In addition, courses offered under the "Areas of Inquiry" requirement should be appropriate to freshmen and sophomores (i.e., they should be **100 and 200 level courses).** 

#### Texts and Ideas

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

#### **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.

#### Perspectives in the Creative Arts

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

#### **Analytic Reasoning**

Course Structure: A menu of three-hour courses to be taken in the first or second year. 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 Social World

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

#### The Natural World

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

#### **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.

#### **Physical Well Being**

Course Structure: A one-credit, two contacthour, pass/fail course selected from a menu of courses devoted to physical and health education and activities taken any time in the first to fourth years.

#### **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.

#### **Additional Core Requirements:**

The Writing Across the Curriculum Requirement

The Speaking Across the Curriculum Requirement

The Butler Cultural Community Requirement

The Indianapolis Community Requirement

### Writing Across the Curriculum Requirement

Requirement Structure: Students must take one 300 or 400 level course of at least 3 hours in any part of the University that provides opportunities for formal and informal writing, with opportunities for revision. The course must be taken in the junior year or after. Courses meeting Writing across the Curriculum requirements will be designated with a 'W' suffix.

#### 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.

### The Speaking Across the Curriculum Requirement

Requirement Structure: Students must take one 300 or 400 level course of at least 3 hours in any part of the University that provides opportunities for formal oral communications assignments. Courses meeting the Speaking across the Curriculum requirement will be designated with a 'S' suffix.

#### **Learning Objectives:**

- To develop oral communications skills in the context of course and discipline specific materials.
- To use oral communications assignments to aid students in mastery of course and discipline specific content.

### The Indianapolis Community Requirement

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

#### 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 understanding of the nature of community and the relation to self.
- To assist the University in furthering its commitment expressed in its mission statement of "providing intellectual, cultural and artistic opportunities and leadership to Indianapolis and the surrounding areas."

#### The Butler Cultural Requirement

**Requirement Structure:** Students must attend a total of eight cultural events in the Butler Community. Ideally these will be spread out over their time at Butler, but this is not required.

#### Learning Objectives:

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

Academic programs
Today, students discover Butler's challenging

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 five colleges: Colleges of Liberal Arts and Science, Business, Pharmacy and Health Sciences, Education and the Jordan College of Fine Arts. Graduate programs are also available within these colleges.

New innovations include an 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, engineering, 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 State Department of Education in Indiana. University colleges and departments are accredited by their respective professional associations.

#### Majors, degrees, concentrations

	College
Accounting, B.S.	COB
Actuarial Science, B.A.	LAS
Anthropology, B.A.	LAS
Arts Administration, B.S.	JCFA
General	
Biology, B.A., B.S.	LAS
Business Administration, M.B.A.	COB
Chemistry, B.A., B.S.	LAS
Classical Studies, B.A.	LAS

Comm	unication Disorders, B.A.	LAS	Applied	
Comm	unication Sciences and		Composition	
Diso	rders, B.A.	LAS	Music History	
Comm	unication Studies, B.A.	LAS	Music Theory	
Leaders	ship and Organizational		Piano Pedagogy	
	nmunication		B.M. in Music	
	ocacy, Rhetoric,		Composition	
	Public Culture		Music Education (choral/general;	
	iter Science, B.A., B.S.	LAS	instrumental/general; or area/	
Dance		JCFA	combined — five year program	)
	A. in Dance — Performance	, 0111	Performance (orchestral instrume	
	in Dance — Pedagogy		piano or voice)	,
	in Dance — Arts Administrati	on	Piano Pedagogy	
	nics, B.A., B.S.E.	LAS,	B.S. in Music	
Leonor	ines, <i>B.</i> 1., <i>B</i> .5. <i>B</i> .	COB	Arts Administration	
Educat	ion, M.S.	COE	Concentrations in Jazz Studies	
	ional Administration,	COL	Areas of Emphasis	
	riential Program		Applied Music	
_	reparing School		Composition	
			•	
	cipals vo Tooghing and Loodowship		Music History	
	re Teaching and Leadership	COE	Music Theory	
:	Childhood and Middle	COE	Piano Pedagogy	
	ood Education, B.S.	TAC	M.M. in Music	
_	, B.A., M.A., M.F.A.	LAS	Composition	. 1\
	ature, Writing	COR	Conducting (choral or instrumen	tai)
Finance		COB	Music Education	
French,		LAS	Music History	
_	and Business Studies, B.A.	LAS	Music Theory	
	l Program, A.A., A.S.	LAS	Performance (orchestral instrume	nt,
German		LAS	piano or voice)	
	n and Business Studies, B.A.	LAS	Piano Pedagogy	
	y, B.A., M.A.	LAS	M.M. with a double major	
	ualized Major, B.A.	LAS	Pharmaceutical Science, M.S.	COPHS
	tional Management, B.S.	COB	Medicinal Chemistry,	
	tional Studies, B.A.	LAS	Pharmacy Administration,	
_	pe, Third World		Pharmacology, Pharmaceutics,	
-	ism, B.A.	LAS	Clinical Science	
Publ	ic Relations, Advertising		Pharmacy, Pharm.D.	COPHS
Manage	ement Information		Philosophy, B.A.	LAS
Scier	nce, B.S.	COB	Philosophy & Religion, B.A	LAS
Market	ing, B.S.	COB	Physician Assistant, B.S.H.S., M.S.	COPHS
Mather	natics, B.A., B.S.	LAS	Physics, B.A., B.S.	LAS
Media .	Arts	JCFA	Political Science, B.A.	LAS
B.A.	in Digital Media Production -	_	Psychology, B.A.	LAS
Vio	leo Production		Public and Corporate	LAS
Mι	ıltimedia Studies		Communication, B.A., B.S.	
B.A.	in Electronic Media —		Religion, B.A.	LAS
Ele	ectronic Journalism		School Counseling, M.S.	COE
B.A.	in Electronic Media —		Science, Technology	
Me	edia		& Society, B.A., B.S.	LAS
Cult	ural Studies		Middle/Secondary Education, B.S.	COE
B.A.	in Recording Industry Studies		English, Foreign Languages:	
Music JCFA French, German, Spanish,				
B.A.	in Music		Mathematics, Science: Biology,	
			Chemistry, Physics, Social Studies	S
8	Butler University		· ,	

Physical Education/Health Education	
K12 licensure,	
Exercise Science	
Sociology, B.A.	LAS
Social Work	
Sociology and	
Criminology, B.A.	LAS
Software Engineering, B.A., B.S.	LAS
Spanish, B.A.	LAS
Spanish and	
Business Studies, B.A.	LAS
Theatre	JCFA
B.A. in Theatre	
B.S. in Arts Administration — The	atre
Urban Affairs	LAS

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

African Studies	Geography
Anthropology	German
Astronomy	History
Biology	International
Business	Studies
Administration	Italian
Chemistry	Jazz Studies
Chinese	Journalism
Classical Studies	Mathematics
Communication	Music
Sciences and	Peace Studies
Disorders	Philosophy
Communication	Physics
Studies	Political Science
Computer Science	Psychology
Dance	Recording
Economics	Industries Studies
Electronic Media	Religion
Studies	Science, Technology,
English Literature	and Society
English Writing	Sociology
French	Spanish
Gender Studies	Theatre
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#### **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 3,825 students. The faculty, too, has grown from two when the University was founded, to 306 full-time; 81 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 11 to 1. More than one-third of the faculty has been appointed since 1987, and the new professors have brought fresh enthusiasm and expertise in widely diverse specialties to their students and faculty colleagues.

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. Under-graduate research and independent study are encouraged. Although Butler professors are teaching faculty, they understand first-rate teaching must be complemented with scholarly activity that extends the boundaries of knowledge.

Butler students represent almost every state in the nation and 69 countries, reflecting diversity of cultures, interests, aspirations, personalities and experiences. Students can join one of more than 135 student organizations, 15 Greek organizations and 19 varsity athletic teams.

As it has for nearly 154 years, Butler continues to both value tradition and embrace innovation.

#### The campus

The city of Indianapolis encircles the University, while the 290-acre campus rests in a historic northside neighborhood. This serene beautiful area has more than 20 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 80 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 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 Buildings 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 newly constructed Richard M. Fairbanks Center for Communication and Technology houses telecommunications arts, communication studies, computer science and 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, housing the departments of biological sciences, chemistry and physics and providing extensive facilities and equipment for faculty and student research.

Linked to Gallahue is the College of Business Building. The structure was originally known as the Holcomb Research Institute 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.

Completing the U-shaped mall is the Pharmacy Building. A new 40,000-square-foot, four-story addition opened in August 2009.

Lilly Hall, housing the programs of the Jordan College of Fine Arts, is located to the 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 2,200-seat facility with a 90-foot stage.

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 382,414 volumes. It also is home to Butler's rare book and archives collections. Of particular note is its digital environment that integrates numerous electronic databases and Internet access into easily accessible 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 offices of student affairs, programs for leadership and service education, international student services, diversity programs, greek life and orientation programs, residence life and the Internship and Career Services also are located in the union. 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, upperclassman residential apartment village, University Terrace and fraternities and sororities provide additional campus housing.

At the north end of the 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, which houses the offices of admission, financial aid, alumni and parent programs and the Eidson-Duckwall Recital Hall.

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 athletic fields and Butler Prairie, a nature preserve.

On the east side, the road winds 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 has been renovated and is on the National Register of Historic Buildings. The 10,000-seat fieldhouse is the home of Butler basketball and commencement ceremonies. The Butler Bowl is the site of Butler football and soccer.

#### **Indianapolis**

The University remains deeply committed to serving its community. Clowes Memorial Hall and Jordan College of Fine Arts fulfill a cultural responsibility. Indianapolis area schools, corporations and cultural organizations benefit from the University's cooperation, and student interns serve in a wide variety of Central Indiana businesses, 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 13th largest city in the United States with a metropolitan area of nearly 1.7 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 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 Greek Festival, Penrod Art Fair, International Festival, Indianapolis 500 Festival events 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, and the Indiana Fever of the Women's National Basketball Association. The city also has an AAA professional baseball team and hockey team representing the United States Hockey League. The city hosts the NASCAR Brickyard 400 and the Indianapolis MotoGP races.

The city has hosted more than 360 national and international amateur sporting events, including the U.S. Olympic Committee's 1982 Sports Festival, the 1987 Pan American Games, numerous Olympic trials, NCAA championships and the 2001 World Police and Fire Games. Indianapolis boasts world-class sports facilities, including a domed stadium, natatorium, velodrome, 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 Final Four Championship in 1991, 1997, 2000 and 2006. The championship will return to Indianapolis in 2010.

#### History

Six years before the Civil War, two professors, a few assistant teachers and 20 students walked through the doors of Butler University in 1855 to begin years of academic excellence and visionary innovations. In the absence of high schools or adequate private academies, the University operated its own preparatory department until 1907. At its inception, this department enrolled about 60 students, with another 54 in the pre-prep classes. Originally named North Western Christian University and located at 13th Street and College Avenue, the school 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 third in the nation to do so.
- Butler admitted students representing all minorities 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.
- Yet another first in 1870, when 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. Sigma Gamma Rho sorority for African-American women was organized on campus on Nov. 12, 1922.

In 1875, the board of directors decided to sell the downtown campus and accept a gift of 25 acres in Irvington, what was 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.

The city continued to grow and Butler moved a final time in 1928 to its current 290-acre location that was known as Fairview Park. The new site was nestled in a wooded tract north of the city on the White River and Inland Waterway Canal with classes meeting in the Arthur Jordan Memorial Hall. Jordan was a local businessman and philanthropist who consolidated the city's four music conservatories into the Arthur Jordan Conservatory of Music, forerunner to the present Jordan College of Fine Arts.

As the campus grew, so did the University's academic offerings. In keeping with the mission of the charter, the University added to its original College of Liberal Arts and Sciences a cluster of professional schools: the College of Education (1930); the College of Business Administration (1937) now known as the College of Business; the College of Pharmacy (1945), now known as the College of Pharmacy and Health Sciences; and the Jordan College of Music (1951), currently named the Jordan College of Fine Arts.

To serve the needs of the growing community, Butler began offering evening courses in 1899, established a summer session in 1905 and created a graduate division in 1932. When a wooden structure used as a campus club and cafeteria burned in 1946, faculty, students and alumni joined to raise money for a new student center, named for John W. Atherton, the

University's long-time financial secretary.

The early '60s saw the addition of Lilly Hall, made possible by the Lilly Endowment and the Jordan Foundation, to house the Jordan College of Music. The G.H.A. Clowes family and other donors erected Clowes Memorial Hall, a center for the performing arts and culture that opened in 1963 on Butler's campus.

In 1985, the University completed an extensive self-study to plan Butler's future involving the efforts of more than 200 volunteers. The commission was chaired by Thomas E. Reilly Jr. (then president of Reilly Industries Inc. and a member of Butler's board of trustees), who charted the University's course for the next five years.

When Dr. Geoffrey Bannister became president of Butler in 1989, he brought with him the Institute for Study Abroad, offering academic opportunities in England, Scotland, Ireland, Australia and New Zealand to students at Butler and other schools throughout the nation.

In 1988 the University launched the Partnership for Excellence, a \$75 million fund-raising effort to support faculty development, student aid, upgrades of physical facilities and general campus development, including library resources and computers.

Butler's University strategic plan *Dare to Make a Difference* sets a new course for the University through 2014. The plan reaffirms the University's historic mission and commitments and the values that inform them. Butler University has recently marked its sesquicentennial with a renewed commitment to its founding ideals and a forward-looking vision.

# During the past 10 years the University has:

- Increased the quality and size of its student body and faculty.
- Added an engineering component to the College of Liberal Arts and Sciences, a dual degree program with Purdue University.
- Improved student life and services by renovating residential facilities and building and upperclassman residential apartment village. Atherton Union was expanded to include the Reilly Room, the Efroymson Diversity Center and improvements to the C-Club food court. In 1999, not only was there renovation and an expansion of the bookstore, but Starbucks Coffee Company also opened their first Indianapolis

- coffee shop in the bookstore location.
- Renovated the Welcome Center in Robertson Hall and the buildings of pharmacy and health sciences and business.
- Built the Fairbanks Center for Communication and Technology, housing the School of Journalism, telecommunication arts, communication studies and computer science in 2001.
- Established the Eugene S. Pulliam School of Journalism as part of the College of Liberal Arts and Sciences, housed in the Fairbanks Center.
- Developed a competitive intercollegiate sports program for men and women.
- Upgraded Butler's technology and communications system.
- Developed Hampton House, where participants explore issues concerning leadership and service based on the ideals of Robert K. Greenleaf's servant-leader model.
- In the past decade, Butler sports teams have captured 26 conference championships (in four different leagues). The Bulldogs have made appearances in NCAA National Championship Tournaments in men's and women's basketball, men's soccer, volleyball, men's cross country, lacrosse and baseball. In addition, Butler has led the MCC/Horizon League in number of studentathletes named to the MCC/Horizon League Academic Honor Roll for five straight years.
- Installed the first woman, Dr. Gwen Fountain, to serve as interim president from 2000 to 2001.
- Appointed Dr. Bobby Fong as the 20th president on June 1, 2001.
- Built a 48,000-square-foot expansion of Lilly Hall and the 140-seat Eidson-Duckwall Recital Hall.
- Secured its largest gifts a \$25 million grant from the Lilly Endowment Inc. The gift supports the College of Pharmacy and Health Sciences Expansion Project. In 2005 the University received a \$22 million grant from the Endowment to fund the Butler Business Accelerator.

Today, the city of Indianapolis has once again surrounded Butler, but the campus retains a serene and park-like atmosphere.

More importantly, a solid foundation for creative changes and progress was laid in 1855, and, 154 years later, though traditional methods continue, the path for visionary ideas and innovations in higher education will keep Butler achieving academic excellence for future generations.

#### **Programs for Overseas Study**

Butler University encourages students to study in international settings as part of their academic experience. Students may choose to study for a semester, year or summer vacation period. All students who wish to study abroad must apply through the Center for Global Education. Interested students may study abroad during their sophomore and junior year and possibly their senior year if their academic dean approves their petition to intrude upon their final 30 hours at Butler.

The Center for Global Education provides study abroad advising, organizes pre-departure and reentry sessions, and maintains Butler's list of Approved Programs for Overseas Study. This list of overseas study opportunities offers 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 detailed information about study abroad, please contact the Center for Global Education in Jordan Hall 212, (317) 940-8473 or visit our website at www.butler.edu/global-education/.

#### **Reciprocal 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. Some of these exchange opportunities have been developed by Butler; 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, The Netherlands, Germany, France, Chile, Brazil, 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 over 250 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 before Butler will accept their application for approval to study abroad.

#### **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 3,500 students from 400 U.S. universities to more than 90 universities in Argentina, Australia, Chile, Costa Rica, Cuba, England, Mexico, New Zealand, Northern Ireland, Republic of Ireland, Scotland, and Spain.

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.

In addition to IFSA-Butler, students may also 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. Educational opportunities may be classroom based or experiential, including internships or service learning.

#### **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 the 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.

#### **Tuition and Financial Aid** Applicability for Study Abroad

In most cases, federal and state aid will apply to study abroad costs if the student is currently receiving aid. Students who study abroad will pay Butler University tuition during their semester(s) abroad. Those who participate in 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. Those who participate on the Butler Semester in Spain program as well as in reciprocal exchange programs — through Butler's bilateral exchanges or ISEP — may apply 100 percent of their Butler institutional financial aid to their tuition for their semester(s) abroad.

#### **Washington Semester Program**

Butler University runs a semester 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 for numerous senators and representatives. During their intern semester, students take courses which are specially designed to enhance their D.C. experience, such as "The Public Arts Washington, D.C." and "International Affairs." Students register and pay tuition with Butler, receive their regular financial aid and earn credits in their degree programs. Information and application are available on the College of Liberal Arts and Sciences website and from the Office of Internships and Career Services.

DC 300. 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)

DC 301. 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 D.C. Academic Internship Program. Approval by Program Coordinator required. REPEATABLE FOR CREDIT (U)(1)

#### Extended programs

The extended programs are administered by the Provost. These programs serve adult and part-time learners, as well as gifted and talented high school students.

Individuals who pursue courses under the auspices of extended programs are admitted to the university on a non-degree-seeking status. Students enrolled only in summer classes also are admitted to the university as non-degreeseeking. Students not pursuing degree programs are advised by the staff in the Learning Resource Center. Only undergraduate students are admitted and advised under the auspices of extended programs.

#### 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 College; 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, or call 940-9442 for details.

#### Butler University's Center for Citizenship and Community

Butler University's commitment to combining service and academic learning is realized by the Center for Citizenship and Community (CCC). The CCC coordinates the Indianapolis Community Requirement of the new core curriculum and oversees service learning, a teaching practice that links academic experience and reflection with relevant community service. In addition, the CCC collaborates with faculty, staff, students, and other academic units on campus to develop innovative inter-college programming to enhance disciplinary-based competencies, develop social and personal responsibility, foster intercultural competencies, and cultivate civic mindedness.

The center's purpose and activities are linked to the university's educational mission and draw upon Butler's five colleges: Liberal Arts and Sciences, Business, Pharmacy and Health Sciences, Education, and Fine Arts.

#### The center's activities include:

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

ABOUT BUTLER UNIVERSITY

14

responsible citizens prepared to address future challenges.

For further information, contact: Donald Braid, director, Center for Citizenship and Community, Butler University, 4600 Sunset Ave., Indianapolis, IN 46208-3485, (317) 940-8353, dbraid@butler.edu, www.butler.edu/centerforcc.

# CUE@B: The Center for Urban Ecology at Butler

The CUE@B builds upon a solid history of student-faculty research and community service to foster and support the exploration and stewardship of the urban ecosystems of Indianapolis. The center uses the Butler Campus as a living laboratory around which to focus its projects and inspiration. To this end, the center operates with a foundation in the biological sciences to facilitate cooperative research projects among Butler undergraduate students, faculty, Indianapolis Public Schools, and other community partners with the primary goal of providing experiential learning opportunities for students.

#### **CUE@B** Activities

- CUE@B internship program that places students with our community partners for real-world experience
- Students participate in long term research projects sponsored by faculty and the center
- Students are encouraged to design and implement new projects through the center
- CUE@B sponsors service projects on campus and in the community
- Outreach programs with after school organizations and local schools
- Commitment to the Shortridge Magnet School and creating hands on learning for its students

For more information visit www.butler.edu/ cueb or contact Marjorie Hennessy, Academic Program Coordinator, 940-6505, mhenness@ butler.edu.

### The Butler Center for Faith and Vocation

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 and Veritas, and Methodist, Lutheran, Episcopalian 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 go to www.butler.edu/cfv; call (317) 923-7253 or e-mail Judith Cebula at icebula@butler.edu.







#### **Student Affairs**

The Division of Student Affairs exists to provide a full range of coordinated services to all Butler students. The vice president for student affairs serves as the primary liaison for students and the various other segments of the University community. This office is located in Atherton Union, Room 200.

Butler University is concerned with the overall quality of the life of its students. Through the Division of Student Affairs and under the direction of the vice president for student affairs, Butler provides a range of programs, activities and support services designed to meet the needs of its students. Rules and regulations governing student life are outlined in the Student Handbook.

Health Services is available to graduate and undergraduate students of Butler University. Hours are posted. Services are provided on a walk-in, first-come, first-served basis and by appointment. Emergencies are given priority. The center is staffed by registered nurses and provides treatment for minor accidents and illnesses on an outpatient basis. A physician is available by appointment every day of the week 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. Student appointments with the physician are scheduled after consulting with a nurse by phone or in-person. 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 record is required to be on file at the center prior to attending classes. Health Services is located at 530 W. 49th Street, 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 students' 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. The center is staffed by licensed psychologists and closely supervised interns. The predoctoral internship is fully accredited by the American Psychological Association. Students are seen by appointment. Students who wish to start counseling can phone 940-9385. Students seeking resources, information and programs can also find those services at CCS. Counseling and Consultation Services is located at 530 W. 49th, in the Health Recreation Complex, adjacent to Health Services.

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 supervise the student-run Volunteer Center, which connects students to service opportunities with Indianapolis agencies.

The Office of Volunteerism and Service Learning director works to assist students in their service endeavors by acting as a liaison between the community and Butler University. The director also provides support to faculty in their service-based learning classes.

PuLSE sponsors the Legacy Leadership series, 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 office is located in Atherton Union, room 101, adjacent to the Reilly Room.

The University Band and Spirit Programs provides band, cheerleaders, and/or a mascot for University-wide events, off-campus events and athletic events. Students are encouraged to get involved in the Butler Marching Band, Basketball Band, Cheerleaders or Mascot programs by visiting the band website at www.butler.edu/bands or visiting their office in 200 Atherton Union.

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 in the Student Handbook and the PuLSE Office.

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 the home to many of these religious organizations, including Catholic, Jewish, Evangelical Christian, Mainline Protestant and Orthodox Christian groups. Clergy and other religious leaders are available for individual conferences and spiritual counseling. A wide range of programs dealing with religious and spiritual concerns is also offered by the Center. For more information go to www. butler.edu/cfv or call (317) 923-7252.

In addition, 14 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, Sigma Nu and Tau Kappa Epsilon. The sororities are Alpha Chi Omega, Alpha Phi, Delta Delta Delta, Delta Gamma, Kappa Alpha Theta, Kappa Kappa Gamma and Pi Beta Phi.

Housing and Food Service — 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 in the Office of Residence Life, 303 Atherton Union. The residence life staff works to provide a living environment that

is conducive to students' intellectual, social, cultural and personal development. There are many leadership and employment opportunities available to students in the residence halls.

A variety of block meal plans are available to resident students that combine all-you-care-to-eat meals with flex dollars. Declining balance flex dollars may be used at Starbucks, C-Club, Zia Juice Bar and the Dawghouse (a convenience store in the Apartment Village). Students who reside off campus, faculty and staff are able to purchase meal plans also. Students select a meal plan when they submit their housing contract but they have the ability to change plans within the first two weeks of each semester. Dining managers are available to meet with students about special dietary needs and restrictions. University Dining offices are located on the main floor of the Atherton Union. Member of Greek organizations may have the ability to secure meal plans through their respective fraternity or sorority.

John W. Atherton Union houses the university bookstore and food service operation. The Union maintains numerous facilities, including, student organization offices, Volunteer Center, meeting rooms, ATM, computer lab, and various student affairs offices. The campus bookstore and one of the University's dining rooms are also located in Atherton Union. Snacks, grill and fountain items are available in the C-Club (Campus Club) and in Starbucks Coffee Shop. The PuLSE Office, which is responsible for the operation of Atherton Union, is located in Atherton Union, room 101. Any concerns regarding Atherton may be directed to this office.

The Office of Residence Life is an integral part of the student affairs office. 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 office is located in Atherton Union, Room 303.

The Office of Greek Life and Orientation Programs serves as the administrative focal point for all fraternity/sorority activities as well as new student orientation. 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 office is responsible for overseeing recruitment, working

with housing 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. In addition, the office collaborates with numerous campus offices in the annual coordination of Welcome Week. The office is located in Atherton Union, Room 312.

The Office of Diversity Programs combines those campus services designed to enhance the cultural diversity and awareness of the campus community, and exists to support the admission and retention of students representing international and multicultural populations. The director serves as advisor to several multicultural student organizations and coordinates the Multicultural Resource Center, the Morton-Finney Leadership Program, and the Celebration of Diversity Distinguished Lecture Series, a collaborative diversity initiative between Butler University and the Office of the Mayor, and the "Celebration of Diversity" on campus.

The Assistant Director of International Student Services provides a wide range of services to international students, including advising them on cross-cultural concerns and immigration and visa requirements, and maintaining all records in cooperation with the registrar to ensure compliance with SEVIS/INS (Student and Exchange Visitor Information System/Immigration and Naturalization Service) regulations and requirements. Advising is also provided for International organizations, which serves as the vehicle for coordination of Butler international activities on campus and special projects.

Butler University Police Department (BUPD)'s purpose is to maintain a safe and secure environment for the university community. It is responsible for investigating incidents, traffic enforcement, issuing student identification cards and providing assistance in emergency situations, including contacting local fire, police and ambulance services. Officers are on duty 24 hours a day, seven days a week. The police department also is responsible for coordinating crime prevention programs for students, faculty and staff throughout each semester.

Victim Advocate — The needs of someone who has been sexually assaulted vary from person to person and may vary over time. The University offers services and connects to external resources so that a student may choose what she or he would find most helpful

and healing. The Victim Advocate program at Butler University provides 24-hour response by a trained Victim Advocate to students who have experienced sexual assault or interpersonal violence. To obtain assistance and an explanation of services contact the Victim Advocate (910-5572) or BUPD (940-9396). 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 Room 101 of the Health and Recreation Complex (940-8311).

Recreation — The mission of the Butler Recreation is to create opportunities and environments for the university community and guests that will inspire people to participate in leisure activities, both passive and active. Through Intramurals, Challenge Education, Club Sports, Fitness and Aquatics programs, we support 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.

Fitness Program (DawgFit) — This program includes personal training, nutrition consultations, physical assessments, Fitness 101 workshops, group exercise classes, and the physical areas with over 75 pieces of cardio and strength equipment promotes fitness. Butler students trained in personal training are available for purchase to get you started on a workout routine specifically suited for you and your personal goals.

Intramural Program — Intramural sports gives Butler students an opportunity to compete against other students in a variety of sports and activities like flag football, volleyball, softball, dodgeball, soccer, ping-pong, and many more!

Butler's Experiential Education Program is both curricular and co-curricular. It involves participating in initiatives that include enhanced communication, trust, group problem solving, confidence building and respect for yourself and others. Experiential learning also encourages enhancing the classroom experience by taking on Butler's Challenge Course — a high course, complete with a climbing/rappelling tower, and a low course, where teamwork and cooperation are essential elements.

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

**Aquatics Program** — Butler's pool is located inside the HRC. Lap swimming is available; however, we also offer swim lessons for all ages and skill levels in addition to a variety of skill classes, possibly lifeguard training, CPR, First Aid, etc.

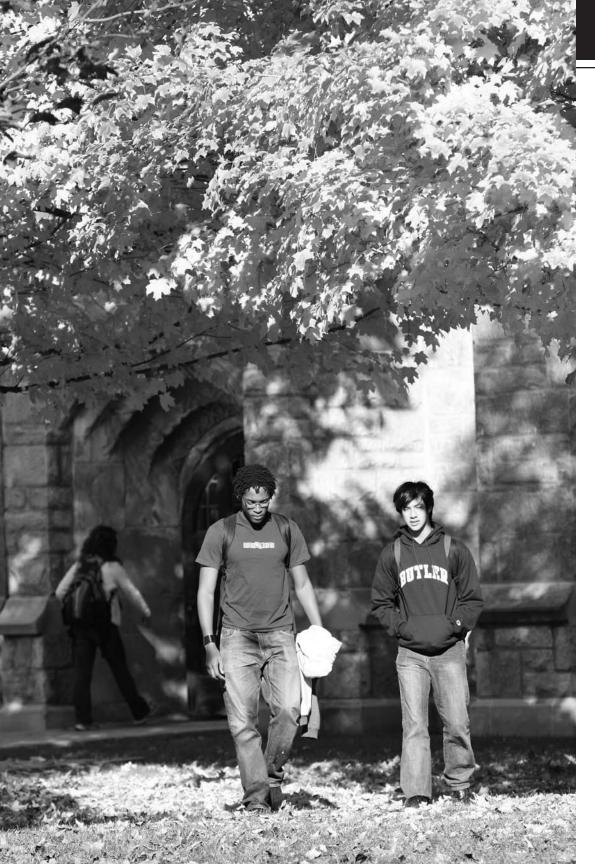
HRC — The Health and Recreation Complex is the administrative home to all of the recreation programs in addition to the Health and Counseling Centers and The Zia Juice Bar, which serves a selection of juices, smoothies and grab-and-go options. With mind, body, and spirit at the heart of what we aim to improve, you'll always feel your best when using the facility or one of our many programs!

Intercollegiate Athletics — Butler University is a Division I member 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 15 teams, except football, compete in the Horizon League, along with Cleveland State, Detroit, Illinois-Chicago, Loyola-Chicago, Valparaiso, Wisconsin-Green Bay, Wisconsin-Milwaukee, Wright State and Youngstown State. The men field Horizon League competitive teams in baseball, basketball, cross country, golf, soccer, tennis and track while the women compete in basketball, cross country, golf, soccer, softball, swimming, tennis, track and volleyball.

The Butler University football team (Division I-AA) is a member of the Pioneer Football League, which includes Dayton, Drake, San Diego, Valparaiso, Davidson, University of Jacksonville, Morehead State and Campbell.





### ACADEMIC PROGRAMS AND RESOURCES

#### **Learning Resource Center**

The Learning Resource Center (LRC) is a coordination site for services, programs and resources that promote academic success. LRC 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.

#### **Student Disability Services**

The Office of Student Disability Services exists to facilitate and coordinate support for individuals with a variety of disabilities. Physical and/or academic support may be arranged if the need to provide services is properly substantiated by written documentation from the appropriate licensed professional. Documentation must be submitted to the director of student disability services before requests for accommodations can be considered. To obtain further information regarding policies and procedures or to discuss questions and concerns, please contact student disability services in Jordan Hall, Room 136, 940-9308.

#### **Tutoring**

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

Study Tables are essentially group walk-in tutoring sessions that meet at a specified time and place on a regular basis. Study Tables are coordinated by each respective department, 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 136).

Individualized peer tutoring is coordinated through the Learning Resource Center and requires the recommendation 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:

- A recommendation from the instructor of the course is required.
- Student must be attending all classes and labs.
- 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 Learning Resource Center will pay for the service. In most cases, individualized tutoring is limited to 1-2 sessions per week for a limited number of weeks, depending on individual circumstances.

### Academic Success Workshops

The Learning Resource Center staff is available to assist all Butler students in developing and enhancing skills that promote academic success. Staff work with students on skill development both individually and in a group workshop format. Workshop topics may vary from semester to semester, but generally include the following:

- Take Charge of Your Time!
- Study Habits that Work!
- Prepare for Exams!

- Enhance Your Memory!
- Read Effectively!
- Review Notes Effectively!
- Finals...Have a Plan!

The workshops provide students with a comprehensive battery of strategies and techniques that can assist in meeting the demands of college-level academics.

#### **Academic Success Coaching**

Academic Success Coaching sessions are available to any Butler student interested in enhancing academic skills. The Academic Success Coaching process includes the completion of an Academic Performance Self-Assessment. Students will gain insight into areas of academic strength and will identify strategies to address academic concerns. Students will work corroboratively with their Academic Success Coach to develop a plan of action to improve academic performance. Students will learn techniques to aid in approaching their coursework in an active and engaged manner.

# The Internship and Career Services Office

The Internship and Career Services Office provides students and alumni of Butler University support in developing academic and career opportunities. On-campus employment for students is available to currently enrolled students through the office. Listings of full-time career employment, internships, part-time/ seasonal employment and other experiential learning opportunities are available in the office or via the career services homepage. Assessment instruments (Strong, MBTI) are available through counselor supported administrations. Extensive information on occupations, how to job search, and individual school and employer information is available on our website at www.butler.edu/career. On-campus interviewing for full-time employment and internships is available in the fall and spring semesters to students. Workshops on job search strategies, résumés, interviewing, networking and related topics are presented throughout the year. The office is located in Atherton Union, Room 315.

#### Math Lab

The University core curriculum requires all students to take a course in Division 5, which

is typically a mathematics course. There is a wide range of classes to fulfill the core requirement, and the math lab exists to help students enrolled in core or prerequisite math courses. These courses include MA 101, MA 102, MA 104, MA 106, MA 125, MA 162, and CC 215. Peer tutors are usually mathematics, actuarial science or secondary education majors, specializing in mathematics. A student coordinator oversees the tutors, arranging schedules for the tutors to ensure the lab operates successfully.

The lab runs Sunday through Thursday, with both afternoon and evening hours each day except Sunday. Hours are posted at the Math Lab and on the website (www.butler.edu/math-actuarial. Appointments are not required; students may drop in any time the lab is open.

The Math Lab is the oldest tutoring lab on campus. It continues to grow each year. The math lab is located in JH 272 C; more information can be obtained by calling the Department of Mathematics and Actuarial Science at 940-9521 or 940-9441.

#### Writers' Studio

Writing is essential to intellectual life, the learning process and professional development. University work involves communicating ideas and information in a wide range of subjects and disciplines. Peer tutors are available to help others at any point in the writing process. Tutors are available for writers at all levels of proficiency. Assistance is available to generate ideas for a paper, develop those ideas and work on structure, organization and a final read-through. Help is available for all types of writing projects, including essays, articles, lab reports, research papers, applications, creative writing and preparation for essay exams. The services of the Writers' Studio are free of charge. Hours are generally 10 a.m.-6 p.m., Monday-Thursday; 10 a.m.-2 p.m. on Friday; and 4-7 p.m. on Sunday. Students may either stop by the Writers' Studio in Jordan Hall, Room 304 or call for an appointment at 940-9804.

#### **Speakers Lab**

The Speakers Lab is a tutoring organization that provides assistance in creating and delivering oral presentations. In addition, Speakers Lab tutors engage the community by volunteering with St. Vincent New Hope and Girls Inc. Located in Fairbanks Building, peer tutors are available to assist students by walk-in or

appointment. Services include: topic selection, research, outlining, organization, delivery and communication anxiety. For more information, visit their website at www.butler.edu/speakerslab or call the Speakers Lab at 940-8354.

#### Modern Language Center

The Modern Language Center (MLC) is located in Jordan Hall, Room 391 and provides resources for language faculty and students as well as others in LAS and university-wide departments. Students are welcome to use the MLC for language-related and other projects. The center has available individual and small group video stations, [PC] and Macintosh computers, satellite downlink and a variety of study aids and course reserve materials for modern language and other LAS and university courses. The center is capable of transferring videos to and from the various electronic formats used worldwide. In addition, the MLC controls Jordan Hall, Room 387, a multi-media classroom, featuring large-screen video, DVD projection, as well as computer and slide capabilities. Language tutoring is offered by the Department of Modern Languages, Literatures & Cultures. The MLC is open Monday-Thursday, 9 a.m.-9 p.m.; Fridays, 9 a.m.-noon; and Sundays 3-7 p.m. For more information, contact the MLC at 940-9754 or 940-9894. More information is available at: www.butler. edu/modern-language-center.

#### Jordan College of Fine Arts

The Jordan College of Fine Arts Multisensory Learning Facility (MLF) is housed in Lilly Hall, Room 149. This facility was created in 1995 for teaching, learning and creating digital arts within Butler's dance, music, media arts and theatre core curricula. iMac DVD/CD Rom computers, KorgX5 synthesizers, musical instrument digital interface (MIDI), digital image scanners, a digital video and image camera, digital storage and retrieval system and a 280-gig server all are interconnected via ethernet and a Korg group control system. A wide variety of high-end software packages are available for learning and teaching applications which allow students, faculty and staff to author, edit and display digital media. The MLF is staffed with trained technical multimedia consultants.

#### Student-athletes

The Department of Athletics coordinates learning assistance for student-athletes. Athletic

competition requires a considerable commitment of time and energy. Academic responsibilities are considered the highest priority for student-athletes attending Butler University. Student-athletes should refer to the Student-Athlete Handbook for more information, or see the Coordinator of Academic Support Sonya Hopkins (940-8378) for additional assistance.

### Butler University Counseling & Consultation Services

The Counseling & Consultation Services is located in the Health and Recreation Complex. The service offers individual and group therapy for difficulties such as depression, anxiety, eating and body image, grief and loss, alcohol and other drugs, stress management, and relationship concerns. Individual and group therapies are free of cost and strictly confidential. The service conducts evaluations for substance abuse and other mental health concerns for individuals mandated for such assessments by others within the University. The service also offers educational outreach programs and consultation services to the entire university community. Alcoholics Anonymous, Overeaters Anonymous, and Al-Anon groups meet weekly in our facility. Office hours are 8 a.m.-6 p.m. Monday, Tuesday, and Wednesday and 8 a.m.-5 p.m. Thursday and Friday. Appointments to see a therapist may be made in person or by telephone at 940-9385.

#### Honors programs

**Administration:** Anne Wilson, Ph.D., director, University Honors Program

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 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 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). Entrance to the honors program for incoming students will be based on an 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:
Introduction to Honors (HN 100) or Honors
First Year Seminar (HN 110, HN 111)

Taken in the first year. Students who do not take HN 100 in their first semester or HN 110, HN 111 in their first year must replace this experience with another honors course.

A student must earn a minimum grade of B to receive honors credit for any honors course. Students must take HN 110 and HN 111 to receive honors credit if this option is chosen.

### Honors Seminar and Honors Colloquium (HN 200, HN 300)

Students must complete three of these courses (at least one 200-level and one 300-level), most often before the end of the sophomore year.

#### Departmental honors course

Students must take the designated departmental honors course within their department or college for honors credit.

#### Honors Thesis Proposal Course (HN 397/398)

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 honors 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 on the Friday after spring break. Each student must give an oral presentation of her or his thesis before an audience at an appropriate forum.

#### Other requirements

Cultural events. Students are required to attend a total of 12 cultural events during their first three years (approximately two per semester). Students entering after one semester must attend 10 events; those entering after two semesters must attend eight events.

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 G.P.A. of at least 34, 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

HN 100. Introduction to Honors: Introductory course of the honors curriculum designed to transition students from high school academic experiences to Butler's Honors Program. HN 100 explores cross-disciplinary topics and integrates knowledge from different disciplines in an active, challenging learning experience. Individual sections will have detailed course descriptions. Prerequisite: Registration in the University Honors Program or permission from the University Honors Program director. (U)(2)

#### HN 110. Honors First Year Seminar I:

Introductory course of the honors curriculum 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 HN 110 will have more detailed course descriptions. Students who enroll in this course are expected to enroll in HN 111 in the spring. Completion of HN 110 and HN 111 together will satisfy the requirements of FYS 101, FYS 102, and HN 100. Completion of HN110 alone will only satisfy the requirements for FYS 101. (U)(4)

#### HN 111. Honors First Year Seminar II:

Second semester of the introductory course of the honors curriculum 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 HN 111 will have more detailed course descriptions. Completion of HN 110 and HN 111 together will satisfy the requirements of FYS 101, FYS 102 and HN 100. Completion of HN 111 alone will only satisfy the requirements for FYS 102. (U)(4)

#### HN 200. In-Depth Honors Seminar:

Students will participate in a comprehensive exploration of a single topic: a great book or 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 permission from the University Honors Program director. (U)(2)

### HN 300. 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 permission from the University Honors Program director. (U)(2)

HN 351, 352. 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: 1) At least one HN 100 (or HN 110-111), HN 200, or HN 300 experience; 2) instructor's consent and 3) approval by the honors director. (U)(1, 2)

HN 397, 398. Honors Independent Study Thesis Proposal: This course grants credit to honors thesis proposal writers, and is required by the honors program curriculum. Students are required to attend three proposal writing workshops during the semester, create a study plan with a 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: 1) a provisional pass or pass for the honors sophomore review; 2) instructor's consent and 3) approval by the honors director. P/F (U)(1,2)

#### **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 reward 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. ("With honors" is 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.
- Include questions that require synthesis
  of ideas and comprehensive reflection
  about a substantial portion of student's
  coursework in the department.

#### **Post-Graduate Studies**

The Office of Post-Graduate Studies helps students make informed decisions about pursuing a graduate or professional school education. Post-Graduate Studies offers a diverse range of activities, programs, and services 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, careeroriented publications, and alumni placement information. Post-Graduate Studies 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. Post-Graduate Studies staff serves as advisors to the Pre-Dental Society, Pre-Health Society (a recognized chapter of the American Medical Students Association), Pre-Law Society and the Mock Trial Team (a member of the American Mock Trial Association).

Students interested in pre-health, pre-law or pre-graduate school advising should contact one of our advisors at (317) 940-6567 or via e-mail at pgstudies@butler.edu. The Office of Post-Graduate Studies is located in Jordan Hall 212. For more information about programs, services, and student organizations, visit www.butler.edu/postgraduate.

#### 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 Office of Post-Graduate Studies concerning the requirements of the particular professional schools in which they are interested. The pre-professional course-work varies according to the student's goal, but every student has the choice of a number of elective courses. These are offered both to enhance pre-professional training and to broaden and deepen the student's education. Students may also participate in research programs, shadowing experiences, and campus and community service opportunities. Many pre-health students are also 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 thirty (30) hours of course work 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. Students are encouraged to visit the Office of Post-Graduate Studies as early as possible during their academic career at Butler.

Several pre-law students each year are members of the intercollegiate mock trial team. Mock trial provides an opportunity for students to learn litigation skills from practicing attorneys who coach and advise the team. Students may also participate in engaged learning experiences such as internship opportunities in Indianapolis or Washington, D.C., through the Butler Washington Semester Program.

#### **Pre-seminary**

Butler offers a wide range of advising services to pre-theological students through the Center for Faith and Vocation, 4615 Sunset Ave. Indianapolis, IN 46208, (317) 923-7253, or email jcebula@butler.edu. Students interested in graduate theological study or professional religious ministries should contact the Center as early as possible in their Butler career.

# National Scholarships and Fellowships

The Office of Post-Graduate Studies provides advising for students interested in applying for nationally competitive scholarships such as Fulbright, Goldwater, Marshall, Rhodes, and Truman. These programs are highly competitive and require institutional endorsement through an internal selection process. For more information about specific scholarship programs and internal deadlines, please contact the Office of Post-Graduate Studies.

#### **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; liberal arts; music and fine arts collections, with accompanying listening/viewing facilities; the Education Commons (education collections); and the Curriculum Resource Center. 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 330,000 volumes of books bound periodicals, and manuscripts; 20,000 e-books; over 35,000 electronic journal subscriptions, 16,000 audiovisual materials; and more than 17,000 musical scores.

Professional librarians are available to offer individual research assistance through walk-up assistance at the libraries' information desks, instant messaging: www.butler.edu/library/ask, phone: 940-9235, and by appointment. Librarians also collaborate with assigned colleges and departments to provide discipline-specific classroom instruction on library research skills. Both libraries provide access to collections of subscription-based, online databases and print indices that support the campus academic

curriculum. These resources provide access to scholarly and professional journal literature, magazine and newspaper articles, and government documents. The libraries' web site: www.butler.edu/library serves as a portal to the libraries' online and print collections and provides details about services, staff, policies and hours. Subject LibGuides are available at the libraries' web site to provide instruction in identifying the key resources available for specific disciplines and sub-disciplines.

#### **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. The building was designed by world-famous architect Minoru Yamasaki 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 center, offers laptops for checkout, and supports wireless access throughout the building.

The lower level of Irwin Library houses the Education Commons, which serves as a centralized library resource location for College of Education students and faculty. In addition to scholarly books and periodicals covering education-related topics, the Education Commons collections include children's and young adult literature and related reference books, K-12 textbooks, and elementary and secondary curriculum resource materials. A Rich Media Room, where students can record and edit audio and video presentations, is available to support students working on multimedia projects. The Education Commons also includes group workstations, the Phi Delta Kappa Reavis Reading Area, and a classroom where several College of Education courses are held.

31

Music, art and dance materials are located together in specially designated areas of Irwin Library. Reference materials and the Music and Fine Arts Librarian's office are located on the main floor in the northeast corner of the building. Circulating materials in these disciplines are housed on the second floor. CD, DVD, and videocassettes can be obtained at the Circulation Desk.

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; the most important Sibelius collection outside of Finland; and other smaller specialized collections. This department also administers the University Archives and the Eliza Blaker Room.

#### **Lilly Science Library**

The Ruth Lilly Science Library is located in the heart of the Butler University science complex, on the second and third floors of the Holcomb Building. Comfortable furnishings and a skylight on the third floor create a pleasant and quiet atmosphere for research and study. The 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/videocassette 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.

#### **Information Technology**

The Department of Information Resources is responsible for all university computing equipment, systems and network infrastructure as well as providing technology support services to the students, faculty and staff of Butler University.

#### Network infrastructure

The Butler Network is a joint effort between Information Resources and Facilities Management that provides voice and data services to the entire Butler campus. The Butler Network is accessible by high-speed Ethernet or wireless connection and provides connectivity for computers, printers, phones, and a myriad of other IP enabled devices. The Butler 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. For information on all of IR's services visit www.butler.edu/ir/.

#### **Computing Labs**

Butler University supports over 15 student computing facilities, several of which are open 24 hours during the fall and spring semesters. Standard applications include Microsoft Office, Adobe Creative Suite, and web browsers. All computer labs have access to Butler's online library resources, high volume laser printers and network file storage. Most labs are available for use outside of scheduled class time. Additional labs are available in the Irwin and Science libraries as well as each of the residence halls. Visit www.butler.edu/labs for hours and locations.

#### **Electronic Resources**

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

- Email & Personal Calendaring http://bumail.butler.edu
- Password Management http://password.butler.edu
- Blackboard Course management http://blackboard.butler.edu
- My.butler portal Grades, course registration, student account, etc. – http://my.butler.edu
- BUfiles Network file storage http://www.butler.edu/ir/bufiles
- BUconnect BUfiles from anywhere http://buconnect.butler.edu

Students also have access to networked printers, personal web site hosting and, through the library, access to 115+ archives and databases.

# Technology in University Housing

All University housing is wired for high speed network access, with one dedicated network connection for each student. Residence halls and the Apartment Village all have a 24-hour computer lab and at least some wireless available. Each room has one connection to the campus cable TV network. Students may supply their own cable ready TV. Basic cable is provided. The campus phone system provides free local calls, personal voicemail, caller ID, and call forwarding. Students must supply their own telephone (2.4 GHz cordless phones are not allowed because they interfere with the wireless network).

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 anti-virus program. More information on these standards as well as computer recommendations can be found at www.butler.edu/ir/.

#### **Computer Purchases**

Butler provides discounts on computer hardware through Dell and Apple. Academic pricing on many software titles is also available. See the Information Resources web site at www.butler.edu/ir for information and links to the online store.

Support

All technology is supported through the Information Resources Help Desk. The Help Desk provides phone, email, web and walk-in support.

#### **Help Desk Contact Information**

Phone: 317-940-HELP (4357) Email: helpdesk@butler.edu Web: www.butler.edu/ir/help Walk-in: Holcomb Building Room 315

# The Institute for Research and Scholarship

Coordinates the activities of three separate granting committees designed to promote the research and creative pursuits of Butler's faculty and students. In addition, external sources of funding are actively monitored and explored.

## Holcomb Undergraduate Grants

The Holcomb Undergraduate Grants Committee supports the research and creative projects of students in all disciplines in the following ways:

 Student Thesis Grants support some of the costs of conducting research necessary

- for completion of theses.
- Funds are available to support the travel costs of presenting the results of research or creative endeavors at international or national conferences.
- 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 room 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 are also 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 funding for this program is generously donated by the Fairbanks Foundation.
- The Butler University Undergraduate Research Conference attracts over 500 participants from colleges and universities around the Midwest and beyond. Presentations are given in 22 different disciplines.

#### **Butler** awards

The Butler Awards Committee supports research or creative projects of the faculty in the non-sciences in the following ways:

- Faculty Research Grants support original research projects and equipment purchases.
- Instructional Development Grants support creation or revision of non-science courses.
- Provides funding for travel to present results of original research at international or national conferences.
- Short Course Grants provide opportunities for faculty development through attendance at continuing education short course programs.
- Mini grants designed to support small research needs for projects that are not supported by other funding.

#### **Holcomb Awards**

The Holcomb Awards Committee supports research or creative projects of the faculty in the sciences in the following ways:

- Faculty Research Grants support original research projects and equipment purchases.
- Faculty Fellowships fund small research or creative projects, usually in the summer.
- Instructional Development Grants support creation or revision of non-science courses.
- Provides funding for travel to present results of original research at international or national conferences.
- Short Course Grants provide opportunities for faculty development through attendance at continuing education short course programs.
- Mini grants designed to support small research needs for projects that are not supported by other funding.

#### **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. For more information on being part of the Army ROTC program please contact: (317) 274-0073; fax: (317) 274-0069; e-mail: goarmy@iupui.edu; or Web site: www.iupui. edu/~armyrotc/. Air Force ROTC courses are offered at the Indiana University campus, Bloomington. For more information on being part of the Air Force ROTC program please contact (800) IUB-ROTC or afrotc@indiana.edu.

**AI 101/102.** The Air Force Today I/II: (U)(2)

AI 201/202. The Development of Air Power I/II: (U)(2)

AI 301/302. Air Force Management & Leadership I/II: (U)(2)

AI 401. National Security Affairs & Prep for Active Duty: (U)(3)

AI 402 National Security Forces in Contemporary American Society: (U)(3)

**RZ 101. 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. (100-level ROTC courses fulfill the PE 102 requirement.) (U)(1)

RZ 102. 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. (100-level ROTC courses fulfill the PE 102 requirement.) (U)(1)

**RZ 120.** Leadership Lab: Must be enrolled in an Army ROTC class. Different roles assigned based on level in the program. Learn and practice basic soldiering skills. Build self-confidence, team building and leadership skills that can be applied throughout life. Course meets one Friday a month and one Saturday a semester. (Pending approval) (U)(1)

**RZ 121. Leadership Lab:** Must be enrolled in an Army ROTC class. Different roles assigned based on level in the program. Learn and practice basic soldiering skills. Build self-confidence, team building and leadership skills that can be applied throughout life. Course meets on Friday a month and one Saturday a semester. (Pending approval) (U)(1)

#### RZ 201. 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)

**RZ 202.** 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)

RZ 301. 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)

**RZ 302.** 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)

**RZ 401. 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)

**RZ 402.** 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)



### Admission Information and Requirements

# Contacting the Office of Admission

Office of Admission Butler University 4600 Sunset Avenue Indianapolis, IN 46208-3485

Local: (317) 940-8100 Fax: (317) 940-8150 Toll free: 1-888-940-8100 Email: admission@butler.edu Web: http://go.butler.edu

CEEB SAT code: 1073; ACT code: 1180

#### Visiting campus

Students and their families are encouraged to visit the 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.—4 p.m. weekdays. The office is open 9 a.m.—noon 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 http://go.butler.edu and click on "Visit Butler."

#### First-time students (freshmen)

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.

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

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

All credentials for admission must be received by the Office of Admission before the student's application can be processed. It is the student's responsibility to see that all required documents are sent. Students are notified of the admission decision in phases. Admission decisions for students applying by the Early Action I deadline of Nov. 15 will be released on or before Dec. 20. Admission decisions for students applying by the Early Action II deadline of Jan. 15 will be released on or before Feb. 1. Admission decisions for students applying by the Regular Decision deadline of Feb. 15 will be released on or before March 6. Students who apply after the Regular Decision deadline of Feb.15 will be notified on a rolling basis. Admitted students may elect to defer their enrollment for one year.

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

#### Advanced course placement

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

• the Advanced Placement (AP) examinations (administered to high school students in participating high schools),

- the International Baccalaureate (IB) program, or
- the College Level Examination Program (CLEP) tests (administered at test centers).
- Applicants should request that their AP and CLEP scores be reported to the Office of Registration and Records. Scores required for credit have been established by the appropriate department heads and are available in the Office of Admission and on the admission web site.

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 perform the work. A student who wishes to receive credit for the course or courses bypassed should consult the appropriate dean and department head 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: go.butler.edu, or submit the Common Application online: www.commonapp.org. Butler gives equal consideration to both the Butler and Common applications.

#### Fine arts applicants

Dance, Music and Theatre students must complete a Jordan College of Fine Arts (JCFA) application in addition to the Application for Freshman Admission and Scholarships. A personal audition is required of all dance, music and theatre majors. Both applications must be submitted before an audition can be scheduled, at least two weeks prior to the audition date. Information on fall and spring audition dates and specific audition guidelines is available online.

A separate JCFA application also is required for admission to the **arts administration** and **media arts** departments. A personal interview or special essay is required.

Please note that all students who wish to be considered for JCFA talent awards should complete the audition process early in the year.

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.
- Official score reports of the SAT and/or ACT, including the writing components, should be sent directly to Butler University (codes: SAT-1073; ACT-1180).
- 5. A writing sample as indicated on the application.
- 6. A list of activities/resume 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.
- Essay: Your personal statement/essay should include information concerning your life, education, practical experience, special interest and specific purpose for applying to Butler University.
- 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 2009-2010 academic year, the estimated total cost used on the Form I-20 for undergraduates is \$42,760 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).
- 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.
- Official score reports of the SAT or ACT, including the writing component, should be sent directly to Butler University (codes: SAT 1073; ACT 1180)
- 5. A writing sample as indicated on the application.
- 6. Two letters of recommendation.
- 7. 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 three **non-binding** admission programs for freshmen, each following an established timeline. Students applying for Early Action I should present a strong record of academic achievement and plan to take the SAT or the ACT no later than October/November.

#### **Early Action I**

- Compete application postmarked on or before **Nov. 15.**
- Decisions will be released on or before **Dec. 20.**
- Consideration for the Freshman Academic and Departmental Scholarships and the Honors Program
- Enrollment Form and deposit returned by Feb. 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.

#### **Early Action II**

- Complete application postmarked on or before **Jan. 15.**
- Decisions will be released on or before **Feb. 1.**
- Consideration for Freshman Academic Scholarship and the Honors Program
- Enrollment Form and deposit returned by March 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 April.

#### Regular Decision

- Complete application postmarked on or before Feb. 15
- Decisions will be released on or before March 6
- Enrollment Form and deposit returned by May 1\*

\*Returning the Enrollment Form and deposit by this date makes you eligible to attend New Student Registration beginning in May.

#### Special note to pre-pharmacy applicants:

Students interested in majoring in **pre-pharmacy** must submit an application and all supporting materials no later than Nov. 15 (postmark date). Applications postmarked after this date will not be considered for the program.

### 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 tuition. The deposit is refundable until May 1 prior to the fall term of enrollment, and Dec. 1 prior to the spring term of enrollment. Deposits paid after May 1 for fall enrollment or December 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

### Advance Course Registration (Early Registration)

Special registration days for early action students guarantee early selection of courses and instructors. Advance registration sessions 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**

The 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-member-in-residence 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 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 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. 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

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 pre-pharmacy or pre-physician assistant programs 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 on-line.)
- Official transcripts from all colleges previously attended and/or currently attending, 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. This is not required of students who have earned a four-year undergraduate degree.
- A personal statement as indicated on the application.
- 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 who are applying for the pharmacy or physician assistant programs also must submit the official results of the Test of English as a Foreign Language (TOEFL) indicating a score of 550 (paper-based), 213 (computer-based) or 79 (internet-based).

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

#### Transfer Scholarships

A limited number of scholarships are available for students who transfer to Butler for the fall semester and enroll in a minimum of 12 credit hours of study per semester. Only students applying to the colleges of business administration, 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 applicants special requirements

The College of Pharmacy and Health Sciences offers a Doctor of Pharmacy and a Master of Science in Physician Assistant Studies.

Pharmacy and Physician Assistant transfer applicants are considered only for summer and 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 December 1 (postmark date). Students applying to the professional phase of the program must complete an application through the Pharmacy College Application Service (PHARMCAS: www.pharmcas.org) by February 1. Transfer admission into the program is limited to:

- 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, and
- 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 (Oct.) testing.

#### Physician Assistant applicants

The Physician Assistant (PA) curriculum consists of a two-year pre-professional phase and a three-year-plus-one-summer professional or clinical phase. Applications and records for the professional phase (third year) of the PA program must be filed through the Central Application Service for Physician Assistants (CASPA: www.caspaonline.org) by Dec. 1. Qualified candidates will be invited to campus for an interview with faculty. Transfer applications for the pre-professional phase of the PA program are reviewed on a rolling basis.

### 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 and is refundable through May 1. 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 indicating graduation date from a secondary school approved by a state or regional accrediting agency as well as 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. 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 readmission by the appropriate college dean.

#### Non-degree

Applicants who wish to take courses for credit while not pursuing a degree may apply for a non-degree status. Non-degree applications may be obtained from the Office of Admission, or found on the admission web site or in the fall and spring schedule of classes, 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 non-degree.

# The following are all non-degree options:

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. All persons must make application to this program at least 30 days prior to the first day of class. 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. If you have been part of the AFE program in the prior two years, it is not necessary to provide transcripts again. 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.

Gifted and Talented — Selected high school students may be admitted as non-degree students to take designated courses for college credit at Butler University while still attending high school. Credits earned may be applied toward a degree at Butler.

Such students must submit a non-degree application, a written recommendation from a high school teacher or principal, and a transcript indicating exceptional ability to the Office of Admission. Applications will be reviewed by the Admission Committee and the department(s) of the college in which the student will take classes. Gifted and talented 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.

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

# Non-degree to degree-seeking status

Students who have been attending Butler University in a non-degree capacity may apply for degree-seeking status by submitting an application for admission and following the guidelines listed in 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 60 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 hours, which normally signifies one recitation a week throughout a semester or an equivalent.

#### **Educational Costs 2009-2010**

Tuition charges are based on the number of credit hours and the college of enrollment. The rates are as follows:

### Undergraduate tuition COB, COE, JCFA, LAS

Full time (12–20 hours)	\$14,230/semest
1–11 hours	\$1,200/hr
Each hour above 20 hours	\$1.200/hr

#### College of Pharmacy and Health Sciences

Full-time (12–20 hrs)	
Health Sciences year 1	
(pre-Health)	\$14,230/semester
Health Sciences year 2	
(pre-Health)	\$14,230/semester
Health Sciences	
year 3 curriculum	\$15,390/semester
Health Sciences	
year 4 curriculum	\$15,390/semester
Pharmacy year 1	
(pre-Pharmacy)	\$14,230/semester
Pharmacy year 2	
(pre-Pharmacy)	\$14,230/semester
Pharmacy year 3 (P1)	\$15,390/semester
Pharmacy year 4 (P2)	\$15,390/semester
Pharmacy year 5 (P3)	\$15,390/semester
Pharm.D. (6th year only)	\$34,130/year
billed 5% Summer I	(\$1,705), 5%
Summer II	(\$1,705), 45%
Fall*	(\$15,360), 45%
Spring*	(\$15,360)
*Each hour above 20	

hours is \$1,270/hour

1-11hours \$1,270/hr Each hour above 20 hours \$1,270/hr

#### Graduate tuition

### Tuition rate — graduate by college of enrollment:

Liberal Arts and Sciences	\$410/hr
MFA Creative Writing	\$600/hr
College of Education	\$410/hr
Jordan College of Fine Arts	\$410/hr
Pharmacy and Health	
Sciences	\$550/hr
PA Masters – Clinical Phase	\$440/hr
MBA (continuing)	\$550/hr
MBA (new student	
fall 2009)	\$600/hr
MPAcc	\$550/hr

#### Miscellaneous fees

Full-time activity fee	\$138/semester
Health and Recreation	
Complex fee	\$255/semester
Applied music course fee	\$210/credit hou
Welcome Week fee*	
First year student	\$120
Transfer student	\$80
Early registration fee*	
New student	\$100
Residence hall program fee	\$35/year
COPHS mobile	
computing fee	\$475/semester
COPHS mobile	
computing fee (P4 only)	\$150/semester

<sup>\*</sup> on time fee only

### Room & board rates Ross Hall/Schwitzer Hall

Triple Room	\$1,890/semester
Double Room	\$2,140/semester
Single Room	\$3,185/semester

#### Residential College (Resco)

Double Room	\$2,385/semester
Single Room	\$3,435/semester

#### **University Terrace**

Shared Room	\$2,775/semester
Single Room	\$3,280/semester
Studio Apartment	\$3,790/semester

#### **Apartment Village**

Single Room \$3,780/semester

#### **Board Rates**

Unlimited Meal Plan
plus \$75

290 Block Meal Plan
plus \$100

240 Block Meal Plan
plus \$150

180 Block Meal Plan
plus \$2,485/semester

\$2,485/semester

\$2,485/semester

#### **Commuter Meal Plans**

75 Block Meal Plan
plus \$300 \$760/semester
50 Block Meal Plan
plus \$400 \$760/semester

The above charges do not include the cost of books, supplies, long distance telephone, parking decal or other incidental expenses the student may incur during the course of the academic year.

#### Educational costs 2010-2011

Tuition and fees for the 2010-2011 academic year will be published in the Fall 2010 Schedule of Classes. This schedule will be available by March 2010.

#### **Payment Terms**

Students who register through the early registration process for fall 2009 will be billed in July 2009 for tuition, fees and room and board charges. Fall 2009 early registered students must pay in full or be enrolled in the monthly payment plan no later than Aug. 4, 2009. Failure to do so may result in the cancellation of classes. Students who register after their regular registration time frame will be required to pay all charges in full in order to receive grade or transcript information. Students whose enrollment in a course(s) is added after the term or semester has ended must pay for the course(s) BEFORE grade and/or transcript information will be released from the University. Students who have not enrolled in the monthly payment plan and have not paid their charges in full by the first day of each semester will be assessed a monthly finance charge of 1.5% (18%APR).

The Office of Student Accounts will implement an electronic billing format in summer 2009. Additional information will be provided before the electronic format is implemented.

Payment is accepted in the form of personal check, ACH/electronic check and on-line Credit Card. ACH/electronic check payments

are not subject to a convenience fee. Payments made via Master Card, Discover and American Express will be charged a 2.75% convenience fee.

Butler University offers a payment plan that allows students and families to divide the semester tuition, fees, room, board, and miscellaneous charges into manageable monthly payments. The fee to participate in the plan varies based on your choice of plan. Information regarding the 2009-2010 payment plans is available on the Office of Student Accounts website at www.butler.edu/studentaccounts/. Establishing the payment plan will prevent the standard finance charges (1.5% per month) on current semester charges. Any scheduled payment plan payment that is not received by the plan due date will be assessed a late fee of \$40. Payment plans will be cancelled when two payment plan payments are not received or are received after the due date. Once the payment plan is cancelled due to late payment, the standard finance charge will accrue against the total outstanding balance. Persons with past due balance or poor payment histories with the University may be denied participation in the payment plan. Students with past due balances may have classes cancelled. Students who fail to attend class and/or pay their tuition are not considered withdrawn from the course(s). Withdrawals must be made through the adviser 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.

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 PharmD. The pre-payment plan does not apply to graduate programs. Contact the Office of Student Accounts for contract and cost information.

#### Accept Financial Responsibility

Butler University policy requires all students to complete the Acceptance of Financial Responsibility process now included in the Finance section of the Student Center each semester prior to enrollment. The Acceptance of Financial Responsibility statement outlines the student's responsibility for paying all expenses in addition to the penalties that may

be incurred by the student if the expenses are not paid in a timely manner.

#### **Tuition Refund Schedule**

The official schedule will be posted at www.butler.edu/student-accounts/.

Any student needing to change their class schedule after the first day of the term should refer to the refund schedule prior to making any schedule change. It is critical that any student receiving financial assistance, particularly the Higher Education Award, Freedom of Choice Grant or Twenty First Century Scholar Award, contact the Office of Financial Aid before changing your enrollment.

#### Credit balance accounts

The Office of Student Accounts requires students to complete a refund request form in order to receive a refund check; however, if the credit on the account is due to a Federal Stafford loan or other Federal Title IV financial aid, the Office of Student Accounts will issue a check to the student without the written request. If the credit balance on the account is due to a Parent Loan for Undergraduate Students (PLUS loan), the refund check will be issued in the name of the parent borrower and mailed to the address on file. If the student is anticipating a credit balance on his or her account, it is recommended that a refund request form be completed, even if you believe the source of the refund is from Title IV financial aid. With the exception of the PLUS loan refunds, checks can be issued to the student only. Refund checks are issued once a week. Refund checks are not issued when classes are not in session.

#### Butler University Return of Funds Procedures (2009-2010 Academic Year)

Federal regulations require that, as a part of an institution's Return of Funds Policy, an office or offices must be designated as the contact point 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 a later date.

#### **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 student accounts office 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% (18% APR). If the third party will not pay the finance charge, the student will be responsible for payment. Students will continue to receive a billing statement directly from Butler University until the account balance is paid in full. It is the responsibility of the student to contact the third party payer to determine why a delay in payment has occurred.

#### **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 \$25 handling charge. If the check is for payment of a debt, it also will be considered as nonpayment. Students also may be held responsible for 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 request for a department requested hold 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 agent. All costs of collection will be the responsibility of the student. Interest charges and collection fees will be charged to the student account.

#### **Business Services**

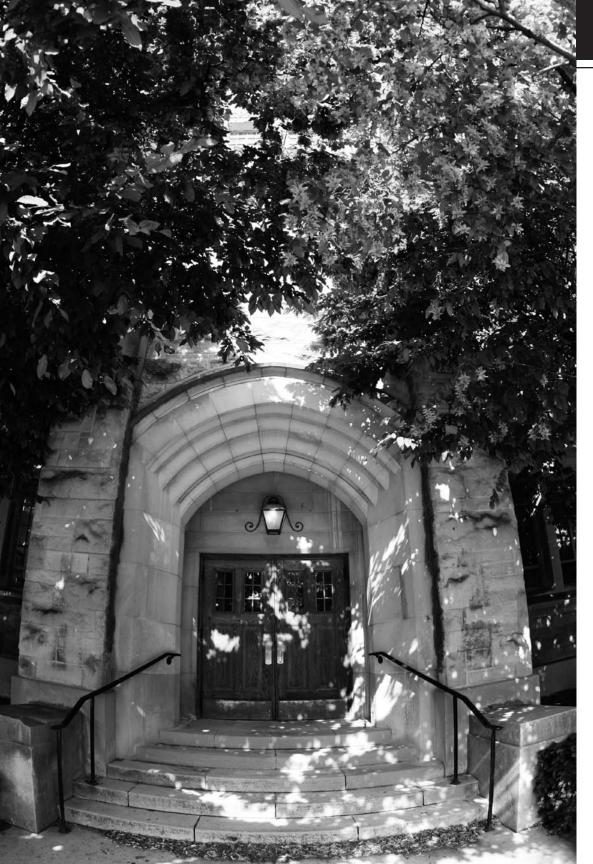
Checks totaling up to \$100 per day may be cashed by enrolled students with a valid Butler I.D. card at the Office of Student Accounts during the cashiering hours. The university reserves the right to deny check cashing

privileges for students on financial hold or have a history of returned checks with the university. A returned check fee will be assessed to any student having a check returned for any reason. Any returned check that has not been cleared may result in the holding of grades and transcripts and the loss of check-cashing privileges. Money orders are available for purchase up to a maximum of \$200 each. A valid Butler I.D. must be presented to purchase a money order and a \$2 fee will be charged.

#### Withdrawals

All withdrawals must be made through the dean of the college in which the student is enrolled. Non-attendance and/or non-payment does not constitute a withdrawal.





### 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.

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.

#### Student affairs

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 who possess strong high school academic record.

Entering freshmen may be offered an academic scholarship based on a combination of ACT or SAT scores and high school class rank, regardless of academic major or need. All application material for admission must be received by January 15 to be considered. Complete applications for admission received between Jan. 15 and Feb. 15 will be considered for scholarship based on available funds and the quality of the application pool. The scholarships are renewable for the 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 3.00 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 value of the scholarship by meeting the required G.P.A. All G.P.A.s are automatically reviewed at the end of each spring semester. Please refer to the original award letter and acceptance form regarding the criteria specific to your award.

#### JCFA 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 freshman year tuition and may be renewed. Renewal of your talent award is determined by satisfactory academic progress towards a degree in the Jordan College of Fine Arts and artistic achievement. Recipients are selected by the faculty of the Jordan College of Fine Arts and approved by the Office of Financial Aid. JCFA 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.

# National merit and national achievement scholarship

Semi-finalists in the National Merit or National Achievement Scholarship Programs will receive a guaranteed minimum amount within the Freshman Academic Scholarship Program. Finalists who designate Butler University as their sponsor are eligible to receive an additional award of \$1,000.

# 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 year in question 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 Stafford 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. The request for leave must be made in writing to the Office of Financial Aid. 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 re-enrolls at Butler at a later date.

#### Grants

Grants are gift-aid for students who demonstrate financial need and are enrolled full-time as an undergraduate student pursuing their first bachelor's degree and demonstrate financial need. 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 Stafford Loans.

#### Indiana state grants (Higher Education Award, Freedom of Choice Grant and Twenty-First Century Scholars)

Dependent students, whose parents are residents of Indiana, apply for financial aid from the State Student Assistance Commission of Indiana (SSACI) 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. SSACI will not consider applications received after this date.

#### 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 FAFSA and the student's academic strength. Priority is given to students who file the Free Application for Federal Student Aid (FAFSA) by March 1, complete their financial aid file by May 1 and 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; however, 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 a 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 Stafford Loan**

The Federal Stafford 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 program and enrolled at least half time (6 credit hours per semester). There are two components to the Federal Stafford Loan Program — subsidized and unsubsidized. The terms and conditions of loans made under the unsubsidized Federal Stafford Loan are identical to a subsidized Federal Stafford 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 the current interest rates, please contact the Office of Financial Aid or go to www.simpletuition. com/butler/.

#### **Federal 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 the current interest rates, please contact the Office of Financial Aid or go to www.simpletuition.com/butler/.

#### Private loans

These loan programs are specifically designed to provide students and their families with alternative financing 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 recommend the 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.simpletuition. com/butler/.

#### Special loan programs

Flossie Cline Loan Fund. This is a memorial loan fund available to students in the College of Education who are studying for their teaching certificate. The loans are distributed through the Office of Financial Aid with approval of the College of Education. They provide for a minimum of \$500 per semester with a total four-year maximum of \$4,000. Repayment is made after the student's graduation on an agreed-upon schedule with an interest assessment of six percent.

#### The Dean Emeritus Karl L. Kaufman Loan

**Fund.** This is a loan fund established by alumni and friends of the College of Pharmacy and Health Sciences in honor of Dr. Kaufman. The loans are distributed through the College of Pharmacy and Health Sciences to pharmacy majors. The maximum that may be borrowed is \$400 per semester for two semesters. Repayment is made on an agreed-upon schedule after the student's graduation.

The Indianapolis Chapter of the Women's Organization of the National Association of Retail Druggists Loan Fund. This is a loan fund established for students enrolled in the College of Pharmacy and Health Sciences. The conditions and amounts are the same as described for the Karl L. Kaufman Loan Fund.

### Named scholarships, awards and prizes

Over the years, many individuals over the years have recognized the need for financial assistance to students with ability and a sincere desire to pursue a liberal education. These donors, many of whom are Butler alumni, have established annual or endowed scholarships and awards to benefit Butler students.

\*The following is a list of the current scholarships. Most are used to underwrite Butler University financial aid programs and cannot be applied for directly unless otherwise indicated.

#### General scholarships

Butler University Alumni Association Scholarship. The Butler University Alumni Association established this scholarship to provide a vehicle for alumni to express their appreciation for the education they received at Butler and to provide similar opportunities for future graduates.

Miriam F. Annis Memorial Award. Through this award, a student or students will be recognized based on improvement in cumulative grade point average during either the sophomore or junior year. A secondary consideration is financial need. This award was established by Robert B. Annis in memory of his wife, a 1928 graduate of Butler.

**Mildred Beard Scholarship.** An endowed general fund established by Mildred Beard, a 1932 Butler alumna, to assist students who show financial need. The Office of Financial Aid selects the recipients.

#### Black Alumni Association Endowed Scholarship.

The Butler Black Alumni Association (formerly the Minority Alumni Council) established this fund to assist full-time black students who exemplify commitment and identification with the African-American community, with special consideration given to students who demonstrate financial need. Potential recipients may be recommended by the vice president of the association with final confirmation by the financial aid office.

**Susanna Jane Blessing Memorial Scholarship.** The donor for this scholarship was Robert C. Blessing, a 1925 alumnus who

was interested in assisting serious students worthy of such help. The scholarship memorializes his late first wife.

**Ida E. Brown Scholarship.** Ida Brown, Class of 1919, provided in her will for a scholarship fund that would assist "worthy students of Butler University."

**Butler University Endowed Scholarship.** This fund provides scholarship support to a Butler student or students. It is administered by the Office of Financial Aid with preference given to worthy full-time students at Butler University.

#### ButlerRising Faculty/Staff Endowed Scholarship.

Alumni, parents and friends created this fund during the ButlerRising Campaign from 2006 to 2009 by giving to the general endowed scholarship fund for the campaign. Endowed scholarships were the largest component in this fund-raising effort. The fund is used to provide scholarship support to a Butler student or students.

Alfred Campbell Scholarship. This fund was established by a gift from Mr. Campbell's estate to provide tuition support to deserving students. Preference is given to young men and women from Jefferson Township or Prairie Township in Tipton County, Indiana, or from Tipton County at large.

#### Helen Ruth Cook Carpenter Scholarship.

L.H. Carpenter established this scholarship in loving memory of his wife Helen Ruth Cook Carpenter in recognition of her long-standing interest in education. Priority is given to graduates of Southwood and Northfield High Schools of the Metropolitan School District of Wabash County based on financial need and academic achievement.

#### Peggy Bosart Carpenter Endowed

Scholarship. This fund was established by Walter "Bud" Carpenter in memory of Helen M. "Peggy" Bosart Carpenter, Class of 1942. During their 58 years of marriage, the couple amassed a collection of more than 11,000 sea shells that was considered among the best collections in the country. This scholarship provides support to a Butler student or students.

**Mary Lou Carroll Scholarship.** Mary Lou Carroll, Class of 1939, provided in her will for a scholarship to benefit student recipients to be determined by the University.

Emil V. Cassady and Dorothy Duesenberg Cassady Scholarship. This endowment fund from the Dorothy Duesenberg Cassady Trust was established to provide general scholarships. Emil was a member of the Class of 1922 and his wife Dorothy was a member of the Class of 1929. Joseph Chasey Scholarship. A scholarship is provided annually to a student who, in the judgment of Butler University, is most deserving of scholarship assistance based upon need and the student's interests and capacity to excel in academic studies. The scholarship was provided through a bequest from the estate of Gladys Chasey in memory of her husband, a member of the Class of 1969.

#### Grace Julian Clarke Scholarship Award.

Grace Julian Clarke graduated from Butler College in 1884 and became the first female columnist for *The Indianapolis Star*. This scholarship is given to a female student, based on need — to a "girl needing additional funds to enable her to take work at Butler College."

Class of 1935 Recognition Award. Members of Butler's graduating Class of 1935, wishing to provide financial assistance to deserving Butler students, endowed this scholarship that provides support to full-time students in good standing with the University who maintain a cumulative grade point average of 3.0 or better.

Class of 1938 Scholarship. Members of the Class of 1938 established this scholarship to commemorate their 50th class reunion in 1988. They considered this project to be a fitting tribute to each member of the class and an appropriate expression of their appreciation for the education they received at Butler. It is their legacy, supporting a belief that they could do nothing more worthwhile than to help future students of Butler University.

#### Byron "Tubby" Reed Class of 1939

Scholarship. This endowed fund was established through gifts from Butler's Class of 1939 at its 60th reunion in 1999. It honors A. Byron Reed, Class of 1939, former president and chief officer of Munsingwear Inc., in Minneapolis and vice chairman of Butler's Board of Trustees in the 1970s. Preference is given to full-time students in good standing with the University who have a cumulative grade point average of 3.0.

**Class of 1940 Scholarship.** Members of the Class of 1940, desiring to provide financial

assistance to current Butler students, raised \$11,550 to commemorate their 50th class reunion and establish this scholarship in 1990. They considered the scholarship to be an appropriate legacy to help future students, as well as a tribute to each class member and expression of appreciation for the education they received at Butler University.

Class of 1941 Scholarship. This scholarship, endowed by members of the Class of 1941, provides financial assistance to worthy Butler students who are in good standing with the University.

Butler University Class of 1942 Endowed Scholarship. Members of the Class of 1942 celebrated their 60th reunion in 2002 by establishing this fund to benefit deserving Butler students for years to come and to provide them with the same opportunities they enjoyed. This scholarship is awarded to an undergraduate student who demonstrates financial need. Preference is given to a full-time student in good standing with the University. Recipients must have a cumulative grade point average of 3.0.

Class of 1943 Scholarship. Members of the Class of 1943 established this scholarship to assist deserving Butler students. This fund provides support to full-time students in good standing with the University who maintain a cumulative grade point average of 3.0 or better.

Class of 1945 Sesquicentennial Scholarship. Members and friends of the Class of 1945 established this scholarship to provide financial assistance to deserving Butler students. Preference is given to full-time students in good standing with the University who maintain a

#### Butler Class of 1950 Endowed Scholarship.

cumulative grade point average of 3.0 or better.

This scholarship was established by members of the Class of 1950 to provide financial assistance to deserving Butler students. Preference is given to full-time students in good standing with the University who maintain a cumulative grade point average of 3.0 or better.

**Butler Class of 1951 Endowed Scholarship.**Gifts from members and friends of the Class

of 1951 made possible this scholarship, which provide financial assistance to deserving Butler students. Preference is given to full-time students in good standing with the University

who maintain a cumulative grade point average of 3.0 or better.

Class of 1953 Scholarship. Members and friends of the Class of 1953 established this scholarship to provide financial assistance to deserving Butler students. Preference is given to full-time students in good standing with the University who maintain a cumulative grade point average of 3.0 or better.

Butler Class of 1955 Scholarship. Members of the Class of 1955 wished to provide financial assistance to deserving students attending Butler by establishing this scholarship. Preference is given to full-time students in good standing with the University who maintain a cumulative grade point average of 3.0 or better.

#### Class of 1980 Sesquicentennial Scholarship.

Members and friends of the Class of 1980 established this scholarship to provide financial assistance to deserving Butler students. Preference is given to full-time students in good standing with the University who maintain a cumulative grade point average of 3.0 or better.

Class of 1995 Endowed Sesquicentennial **Scholarship.** Members of the Class of 1995 wished to provide financial assistance to deserving Butler students by establishing this scholarship. Preference is given to full-time students in good standing with the University who maintain a cumulative grade point average of 3.0 or better.

#### Class of 2003 Endowed Scholarship.

Members of the Class of 2003 established this scholarship to provide financial assistance to deserving students enrolled at Butler who have learning disabilities. Preference is given to a student who has a learning disability and is enrolled with Student Disability Services, demonstrates financial need and has a cumulative grade point average of 3.0 or better.

Reunion Class Scholarship Fund. Combining all class reunion scholarship giving aside from those funds already established will consolidate the strength of many individual class gifts into one significant endowed scholarship. The principal will grow over time and have a greater impact as it represents a lasting legacy from all the class reunion programs. The recipient shall be a full-time Butler student who demonstrates financial need.

Mattie Rice Coney Scholarship. This is an endowed scholarship from the estate of Mattie Rice Coney for students from Marion County, Indiana. The University selects the recipient with preference given to those students who have demonstrated themselves to be good citizens of their community. Recommendations are considered from representatives of the local chapter of Sigma Gamma Rho sorority.

Edith I. Cooper Scholarship. Edith Cooper, Class of 1916, provided a bequest to establish this endowed scholarship fund. It is awarded based on need.

Marie Fisher Craig Scholarship. This scholarship, established by a bequest from the estate of Marie F. Craig, reflects her lifetime commitment to community service.

Doris Maxine Crane Scholarship. This fund was established by a bequest from the estate of Doris Maxine Crane. This scholarship aids students who are financing their education by working their way through school.

Dryden Book Fund. Dr. Hilary Gaudreau-Dryden, Class of 1993, and Dr. Earl S. Dryden, Class of 1992, established this fund to enhance Butler students' learning experience by providing them with financial assistance for books. Recipients should need financial assistance and have a 3.0 cumulative grade point average. The Drydens both serve on the College of Liberal Arts and Sciences Board of Visitors.

#### August S. and Gertrude Duesenberg

Scholarship. Emil V. Cassady, Class of 1922, and Dorothy Duesenberg Cassady, Class of 1929, established this scholarship by a bequest from their estate to honor Mrs. Cassady's parents and the Duesenberg name. Mr. Duesenberg and his brother Fred were the co-designers and developers of the famous Duesenberg automobiles and racing cars manufactured in Indianapolis.

John B. Dunn Speedway Scholarship. John B. Dunn, Class of 1977, established this scholarship for the benefit of graduates of Speedway (Indiana) High School who are full-time Butler students in good standing. Mr. Dunn is a former chair of the Butler Board of Trustees and chaired the ButlerRising Campaign. A member of the Athletic Hall of Fame, he also has provided generous support to many sports at Butler.

Robert Abraham Efroymson Memorial **Scholarship.** This is an endowed scholarship fund for minority students whose financial status would not otherwise allow them to attend Butler. It was established by the Moriah Fund in memory of Robert Efroymson, a lifelong Indianapolis resident, businessman, community leader and philanthropist.

John Henry Ekengren Memorial Scholarship. This fund was established by a bequest from the estate of Elsie P. Ekengren in memory of her

son, John. It is awarded to worthy students who demonstrate financial need.

Edith R. Elrod Scholarship. Edith Elrod, Class of 1932, provided funds by bequest to establish financial aid for women attending the University.

J. Richard Fernkas Memorial Scholarship.

Mr. Fernkas' family established this endowed scholarship in his memory. It is awarded to an incoming freshman based on need. Preference is given to students from Indianapolis Public Schools.

Suzanne Dunham Fong Scholarship. Butler University President Bobby Fong and his wife Suzanne Dunham Fong established this fund to honor her commitment to the growth and education of young people and to recognize the challenges she lived in losing her father in service to his country. The recipient of this scholarship shall have a parent who died while on active duty in the U.S. military or a U.S. police force. If no candidate meets this preference, the recipient shall be or have a parent who is disabled as a result of injuries received while on active duty in the U.S. military or a U.S. police force. If no candidate meets this preference the recipient shall have lost one or both parents to death.

Gwen Fountain Endowed Scholarship. This scholarship honors the work of Gwen A. Fountain, Butler's first female president. Dr. Fountain taught economics at Butler from 1977 to 1996, when she was appointed associate provost of student learning and then dean of academic affairs. She served on 36 University committees over 23 years while also volunteering in the Indianapolis community. This scholarship reflects the respect that Dr. Fountain generated among her Butler colleagues. It is awarded to a deserving Butler student, with a preference given to a sophomore, junior or senior with a

cumulative grade point average of 3.0 or greater who demonstrates financial need.

Edna Lane Frazier Memorial Scholarship.

Having a special interest in helping undergraduate students who desire to attain a college degree, Clarence Frazier, Class of 1935, established this scholarship in memory of his late wife Edna. She graduated in 1929 from the Eliza Blaker Teachers College, forerunner of Butler's College of Education. The scholarship provides full or partial tuition assistance.

Ruth French Scholarship. This fund was established by a bequest from the estate of Ruth French to benefit women at Butler.

Dudley R. Gallahue Scholarship. This scholarship was established by a bequest from the estate of Dudley Gallahue, an outstanding figure in the social, civic and business life of Indianapolis. It is awarded based on financial

Lova Conn Garriott Memorial Scholarship.

Established through a generous gift from Mrs. Garriott's estate, this scholarship is designated for financially needy undergraduate students in any area of academic study.

Jo Wanda Gibbs Scholarship. This is a scholarship for an outstanding pledge of Kappa Alpha Theta sorority.

Edwin J. and Kathryn F. Goss Endowed Scholarship. Ed and Kay Goss are loyal friends of Butler University and support many diverse areas and programs. Mr. Goss served on the Board of Trustees from 1983 to 1998, when he was named trustee emeritus. This fund provides scholarships to full-time undergraduate students who have demonstrated high academic achievement and who are in good academic standing with the University.

Rosie Green Annual Scholarship Award.

Rosie Green, a former employee of Butler's registration and records department, established this annual award for a student with a learning disability as identified through Butler University's Learning Resource Center.

Max Greenwald Scholarship. This scholarship was established by a bequest from the estate of Max Greenwald, a 48-year veteran sports writer for The Indianapolis Star. It is awarded to worthy students based on need.

56

Margaret Jane Hamilton Memorial Scholarship. This scholarship was established by a bequest from the estate of Dorothy E. Hatch to be used annually to assist one or more female graduates of Indianapolis public high schools.

Hargrove Family Endowed Scholarship. John and Mary Cheryl Hargrove established this scholarship in 2004 to salute student potential, measured not by grade point average or class rank, but by an upperclassman's combination of academic achievement, contribution to the University community and demonstrated capacity for leadership.

Miss Frieda P. Haseltine Scholarship. Frieda Haseltine, a member of the Class of 1916 and an Indiana journalist for nearly 50 years, provided funds to establish this scholarship.

Harry F. and Georgia Flota Hergt Memorial Scholarship Fund. This is an endowed scholarship for worthy students established in 1990 by the Georgia Flota Hergt Whalin estate.

#### Edith Marie Overtree Hittle Scholarship.

This fund was established in memory of a Butler alumna from the Class of 1937 to give a helping hand to deserving young people endeavoring to further their education.

Henrietta Waters Hudson Scholarship. This endowed scholarship was created by Henrietta Waters Hudson, who received her master of arts in education at Butler in 1934.

James E. Hughes Scholarship. This scholarship was created through a trust established by the estate of James E. Hughes. It is for worthy students from Indiana high schools whose financial condition might preclude a college education.

#### Indiana Federation of Clubs Scholarships.

In an effort to help women students, this organization created a fund for the benefit of those who maintain good campus citizenship.

#### Judith K. Johnson Endowed Scholarship.

Judith Johnson, Class of 1961, has been an active and loyal alumna who served on Butler's Board of Trustees for 14 years. She established this scholarship in 2007 to provide financial assistance to worthy full-time Butler students who are in good standing with the University.

Nellie Kern Scholarship. This scholarship was established by a bequest from the estate of Penelope Virginia Kern, who received her undergraduate degree from Butler in 1900. She went on to receive her Ph.B. from the University of Chicago and her EdM from Harvard Graduate School of Education. She was a teacher in Brazil, Ind.

**Jean R. Kettler Scholarship.** Established by the estate of Jean R. Kettler, Class of 1927, this scholarship will be awarded to students belonging to a sorority.

Kiwanis/Lawrence E. and Maysel D. East Scholarship. Through the generosity and continuing interest in Butler by the Kiwanis Foundation of Indianapolis, this scholarship is awarded to a student selected on the basis of scholarship, leadership and citizenship.

Bernard and Maude Lacy Scholarship. This is an unrestricted scholarship established by a bequest from the Lacy estate. Mr. Lacy founded Litho Press Inc., which grew to become one of the leading commercial printers in the Midwest. Mrs. Lacy was a Butler alumna, Class of 1927.

**Dr. Henry S. Leonard and John H. Leonard Memorial Scholarship.** This memorial was established by a bequest from the estate of Jessa D. Leonard, a former employee of Butler University. The fund memorializes her husband Henry and son, John.

George J. Marott National Merit Scholarship Fund. George Joseph Marott came to Indianapolis in the 1870s from England, developed the city's largest retail shoe trade and led the establishment of Citizens Gas Company in 1905. When he died in 1946, he left half of his thriving shoe business to Butler University to establish a student loan fund, which became the George J. Marott National Merit Scholarship Fund.

**McBride Estate Scholarship.** This scholarship was endowed in 1988 by the estate of Marjorie Alice McBride, a 1935 graduate in education and member of Delta Gamma sorority.

Joan P. McDermott Scholarship. This fund was established by Joan "Jody" Pfeiffer McDermott's wish that one-fourth of her estate be given to Butler "to be held in its endowment

fund with the income to be used for scholarships only." Mrs. Pfeiffer, a teacher and civic volunteer, earned a bachelor's degree from Butler's College of Education in 1950 and a master's degree in 1953.

Frank McHale Trust Scholarship. This scholarship was established through a bequest form Mr. McHale, an Indianapolis attorney for 41 years. Funds are to benefit worthy students from Logansport or Cass counties in Indiana. Recipients may be enrolled in any area of study at Butler.

Virginia M. McKay Scholarship. Established through a generous estate gift from Virginia McCune McKay, this scholarship provides financial aid for worthy Butler students. McKay received a bachelor of arts degree in English from Butler in 1917.

Annalee Webb Miller Scholarship. A gift from the estate of Ms. Miller established this scholarship, which is awarded on the basis of academic performance and demonstrated need.

Margaret Ice Morey Scholarship. This fund provides scholarships to worthy women students, giving preference to residents of the state of Indiana. Margaret Ice Morey was a 1929 Butler graduate.

#### Dr. John Morton-Finney Scholarship.

Honoring Butler alumnus and Indiana educator Dr. John Morton-Finney, this scholarship program assists African-American students enrolled at Butler who attended high schools in the Indianapolis metropolitan area. Dr. Morton-Finney earned 12 college and university degrees, including a bachelor's degree in sociology and zoology from Butler in 1965. He practiced law in Indianapolis for more than 60 years until his death in 1998 at age 109. He embodied intellectual curiosity, a desire for success and academic achievement. The scholarship recognizes academically talented students with demonstrated potential to become community leaders. It covers tuition, room, board and books and can be renewed for fours years if the student maintains a cumulative grade point average of 3.0. For pharmacy students, the scholarships may extend to cover the six-year degree program. The scholarship is funded by Butler University.

Amos Nordman Foundation Charitable Trust Scholarship. The Amos Nordman Foundation Charitable Trust continues to support education by awarding this scholarship to deserving eligible male high school graduates with high academic standing and who are in need of financial assistance.

Nicholas Hartman and Marguerite Lilly Noyes Scholarship Fund. This half-tuition scholarship was established by a bequest from the estate of Mr. Noyes, who received an honorary degree from Butler in 1960.

Nicholas H. Noyes Jr. Memorial Foundation Inc. Scholarship. The foundation has provided for scholarships for the benefit of student recipients to be determined by the University.

Fey R. and June M. Orr Scholarship. Established by Butler alumnus Fey R. Orr and his wife June, this scholarship provides financial aid to students from Kankakee or Momence High School in Eastern Illinois who graduate in the top 30 percent of their class and demonstrate financial need.

Harriet L. Paddock Scholarship. This scholarship, endowed by the estate of Harriet L. Paddock, is awarded to students who attended public or private schools in Marion, Vigo or Montgomery counties in Indiana. Recipients must be outstanding students with financial need while at Butler in order for the scholarship to be renewable.

#### Butler Parent Council Book Scholarship.

The Butler University Parent Council promotes parents' active involvement in the life of the University and serves Butler in various advisory and supportive roles. This fund provides stipends to help students purchase books for their studies at Butler. Recipients must be in good academic standing.

**Miriam Roesener Prange Scholarship.** A gift from the estate of Henry C. Prange, this fund was established in honor of his wife to benefit worthy Butler students who would otherwise be unable to continue their education.

**Lola M. Rankin Scholarship.** This fund was established by a bequest from the estate of Lola M. Rankin, Class of 1942. This scholarship is for a deserving female student who demonstrates financial need.

58 Butler University Financial Aid

Anna R. Reade Scholarship. This fund memorializes Anna R. Reade, who dedicated her life to teaching. The donor, her brother Herbert J. Reade, specified in his will that the awardees be students of "unusual promise."

Henry E. Reich Scholarship. This scholarship was established by Jack E. Reich in memory of his brother, Henry. There are no geographic or field of study restrictions, but selection is based on academic performance and financial need.

Louise Rich Memorial Scholarship. This endowed scholarship is for students who achieve good academic standing.

Herman G. Riggs Scholarship. While serving as a member of the first executive committee for the Butler University Dads Association, Herman Riggs established a scholarship award for students with financial need. He was not a Butler alumnus, but he wished to express his deep interest in the University and his gratitude for the outstanding educational experiences received by his two daughters, both of whom were Butler graduates. Recipients must meet the usual scholastic requirements of the Office of Financial Aid.

#### Virginia Teague Robinson Scholarship.

Established in 1990 by Mrs. Robinson's will, this endowed scholarship fund is for deserving students who demonstrate academic excellence and show financial need.

Rogers-McCarthy Scholarship. This fund was established by a bequest from the estate of William P. McCarthy, Class of 1931, to honor the memory of his wife Mary Rogers McCarthy, Class of 1929, and her parents, Lete and Bertha Miller McCarthy.

#### Raman Sandhu Endowed Scholarship.

Jatinder-Bir "Jay" Sandhu, Class of 1987 and a member of the Butler Board of Trustees, established this fund to honor the life of his sister Raman Sandhu, who died of cancer at age 3. The recipient shall be a woman of Indian descent. If no recipient of Indian descent can be identified, preference is given to a female student whose parents served in the military.

**Sawyer Scholarship.** This fund was established by a bequest from the estate of Edward W. Sawyer to aid worthy Butler students who are members of the Christian Church (Disciples of

Christ). This scholarship must be applied for directly by contacting the Office of Financial Aid.

#### George and Marjorie Schley Memorial

**Scholarship.** This fund was established by a bequest from the estate of Marjorie Schley and is awarded on the basis of academic excellence.

Scotlyn Fund Scholarship. The Scotlyn Fund was created in 1987 by then-Butler President Jack Johnson and his wife Jane. Income from this endowed scholarship provides financial aid for minority students attending Butler, with preference given to African-American students who are citizens of the United States. The Johnson family continues to augment the fund principal.

Roda Selleck Scholarship. This scholarship was originally awarded to a Shortridge High School graduate determined by that school's art department and the principal. Later, it was awarded in alternate years to students at Butler and the Herron School of Art. In the late 1960s, legal counsel determined that the Selleck Scholarship could be used solely for Butler students.

#### J. Fenley Shepperd Endowed Scholarship.

This fund provides general academic scholarships for students of the Christian Science religion as taught by Mary Baker Eddy. The Office of Financial Aid determines the number of recipients, their qualifications and the scholarship amounts. If for any reason a student who meets this preference cannot be identified, the scholarship is not awarded.

#### Herbert Hill Smeltzer and Rebecca Bond Blackley Smeltzer Memorial Scholarship.

This general scholarship was created in 1998 by the Smeltzers' son, David, in their memory. Both were members of the Class of 1936. The scholarship is awarded to students based on academic achievement and financial need with preference to students who are completing their freshman year.

Reverend Jean McAnulty Smith Endowed Scholarship. Rev. Jean McAnulty Smith, Class of 1965, established this scholarship to provide financial support to full-time, African-American (including biracial) students with preference given to those from a single-parent home. More than one recipient may be named each year, and the scholarship is renewable.

Helen M. Smith Scholarship. This scholarship is made possible by a generous bequest from Helen Smith, Class of 1924. In her memory, the Butler University Board of Trustees designated the gift as an endowed scholarship fund.

Albert and Hazel R. Spikes Memorial Scholarship. Albert Spikes was illiterate throughout his life but nonetheless had a deep yearning to help young people acquire as much education as their talents and desires would permit. A successful businessman, he left the considerable accumulation of his hard-earned life savings to Butler to establish an endowed scholarship fund for African-American students. The scholarship is named in memory of him and his second wife Hazel.

Student Opportunity Scholarship. Lori and the late Daniel Efroymson established this as a special fund to assist students who would not otherwise be able to attend Butler University. The scholarship is based on need and can be awarded to new or returning students, and it can be renewed for multiple years of attendance at Butler.

Louis Tharp and James Baumgardner Gay, Lesbian, Bisexual and Transgendered **Scholarship.** Donors Louis Tharp, Class of 1972, and Jim Bumgardner wished to enhance student learning and experiences by providing financial assistance to gay, lesbian, bisexual and transgendered students as well as student who have distinguished themselves as effective advocates for GLBT students. Preference will be given to gay lesbian, bisexual and transgender students who are open about their sexual orientation. Recipients shall be sophomores, juniors or seniors with a cumulative grade point average of 3.0 or better and who are in financial need. The Alliance, in consultation with the Office of Student Affairs, will select top candidates for the donors' review. The final selection is made by the vice president of student affairs.

#### Chris Theofanis Memorial Scholarship.

Known to many as "Mr. Butler," Chris Theofanis graduated in 1952 and except for service during the Korean War, never left the University. He served Butler in many capacities related to public relations for 42 years. Very few were untouched by Theofanis' smiling face, words of encouragement and "can-do" spirit. The Theofanis Scholarship was established shortly after his death in 1999 with gifts given in his memory. In fact, the Theofanis scholarship received the largest volume of donor response of any memorial scholarship in Butler's history. Theofanis's wife Katie is also a Butler graduate as are their three children and their children's spouses.

Bernard F. Topmiller Memorial Scholarship. This fund provides a scholarship to a student or students at Butler University and may be in

addition to other scholarship assistance except when such aid is contrary to state law.

**Tibor Toth Memorial Scholarship.** Tibor Toth, a native of Budapest, Hungary, and a World War II veteran of the Hungarian military, was a prisoner of war in Siberia in Russia. He immigrated to the United States in 1956. Mr. Toth established this scholarship in 2000 through a bequest in his will to help deserving students obtain an undergraduate education.

**UPS Scholarship.** The UPS (United Parcel Service) Foundation of Atlanta, Ga., has been a generous supporter of independent higher education for many years. UPS provides funds through the Independent Colleges of Indiana Foundation that financially support deserving Butler students in a variety of academic disciplines.

Rex and Ruth Van Trees Scholarship. This fund was established through a charitable gift annuity by Mr. Van Trees, a 1949 graduate of Butler's journalism program. Ruth E. Redding Van Trees, a teacher, graduated from Northwest Nazarene College and later enrolled in elective classes at Butler. This scholarship is awarded to students who demonstrate financial need and are not members of a Greek-letter social organization.

Howard and Joan Waits Scholarship. Howard and Joan Waits established this fund to provide financial assistance to deserving students. It is administered by the Financial Aid Office, with first preference given to a member of Sigma Chi fraternity and second preference given to a member of a Butler University sorority.

John Henry Weidner Endowed Scholarship for Altruism. This fund was created by Butler's chapter of the John Henry Weidner Foundation for Altruism to support and honor Butler undergraduates who exemplify Weidner's altruistic spirit and unselfish regard for the welfare of others. Mr. Weidner was a Dutch citizen who was living in France when World

Financial Aid

War II began. He and his group of rescuers helped save more than a thousand people fleeing the Nazis. In 2006, the Butler University Student Sociology Association founded the first collegiate chapter of the national Weidner Foundation.

Theresa K. Weinberg Scholarship. This fund memorializes the life of Theresa K. Weinberg, who died suddenly at age 20 in September 1993 at the start of her junior year at Butler. It is intended to encourage students who, in the first year of their undergraduate careers, have shown the capacity to achieve educational and professional goals and who, by virtue of their concern for the welfare and well-being of others, have made a positive and special contribution to the life of the University community.

Cecil O. and Dr. Begen Wells Freshman Academic Scholarship. This fund was established through a generous estate gift from the Wellses in recognition of their commitment to Butler University, which, in his words, "... has helped this whole city grow and has made this community an outstanding one with a rich community life." These merit-based scholarships are awarded to full-time students who demonstrate qualities and high standards that make them deserving of special recognition.

Dwight F. and Eleanor McClain Whitmire Memorial Scholarship. Dwight F. and Eleanor McClain Whitmire were both Butler alumni: Dwight was a mathematics major who graduated in 1925, and Eleanor received a master's degree from the College of Education in 1948. This scholarship was established by a gift from Eleanor's estate to provide financial assistance to worthy students pursuing their studies at Butler University.

Beth Arvan Wiggins Book Fund. A 1993 graduate in public and corporate communications, Beth Arvan Wiggins established this endowed book fund in 2006 to help enhance the learning experiences of future Butler students. Recipients of the book scholarship will demonstrate financial need and have a cumulative grade point average of at least 3.0.

**Harold D. Wilkins Jr. Scholarship.** The Butler University Alumni Association established this scholarship in recognition of Harold Wilkins' outstanding service to his alma mater. The scholarship is awarded to a junior with a

2.5 grade point average or above and is renewable for the student's senior year.

**George Boyd Wilson Scholarship.** This fund was established in memory of George B. Wilson, Class of 1941, by a bequest from the estate of his mother, Linnie Boyd Wilson.

Basil L. and Mary E. Wimmer Scholarship. This scholarship was created as a tribute to Basil L. Wimmer, Class of 1946, and his wife Mary E. Wimmer. Recipients of Wimmer scholarships will demonstrate the capacity to achieve educational and professional goals and will require financial assistance.

**Kenneth Wood Scholarship.** This fund was established by friends and family of Kenneth Wood, who had a long history of devoted service to his pharmacy profession. The scholarship is to be awarded to a deserving student.

Lectania Newcomb Wright Memorial Scholarship. A deep and abiding interest in the welfare of Butler University and an earnest desire to provide meaningful assistance to Butler students for generations to come prompted John S. Wright, a botanist with Eli Lilly and Company, to establish this scholarship fund for young women in memory of his wife Lectania, Butler Class of 1892.

Zay Legacy Scholarship. This scholarship was established by Thomas Fischer, Class of 1975, and Maribeth Zay Fischer, Class of 1974, in honor of Zay family members and their relatives by marriage who attended or graduated from Butler, and in honor of their descendents, who they hope will continue this connection to and support of Butler. Recipients should have at least a 3.5 grade point average or rank in the top 20 percent of their high school or college class. Applicants' special talents and leadership abilities are important considerations. The scholarship is renewable.

Walter Roy Zimmerman Scholarship. Butler parent Sandra Ruby established this scholarship to honor her uncle. Preference is given to full-time Butler students with financial need from the greater Tri-County area of Detroit, Michigan, where Mr. Zimmerman lived his entire life. Further preference is given to students with a grade point average of 3.5 or higher.

# College of Liberal Arts and Sciences awards

\*The following is a list of the current scholarships. Most are used to underwrite Butler University financial aid programs and cannot be applied for directly unless otherwise indicated.

# **General Scholarships**

Barnes/Madden "Move Ahead" Scholarship. Tracy Barnes, Class of 1998, and Virgil Madden, Class of 1980, established this fund to provide financial assistance to deserving Butler students. Two awards are given annually. Recipients should be full- or part-time, African-American students with a grade point average between 2.0 and 3.0. They should be between their sophomore and senior years and are encouraged to volunteer with a local nonprofit organization.

### George Hooper Cornelius Sr. and Beulah Stockdale Cornelius Memorial Scholarship.

As a tribute to the Corneliuses' interest in Butler and their contributions to the community, family members established this memorial scholarship for the benefit of deserving sophomore, junior and senior students. Recipients must meet prescribed academic standards, have financial need and demonstrate high morals and good citizenship on the Butler campus.

#### Margaret O'Neil Culbertson Scholarship.

This fund was established by a bequest from the estate of Dr. Clyde Culbertson to honor the memory of his late wife, Margaret O'Neil Culbertson, Class of 1934. The scholarship is for students who are in the College of Liberal Arts and Sciences or who, because of poor preparation, need special instruction to increase their skill level and who merit such assistance based on their personal qualifications.

Patricia Hadley Fielder Scholarship. Patricia Fielder, Class of 1965, and her husband Frank established this scholarship in 1977 so students in the College of Liberal Arts and Sciences will be recognized with a financial award based on academic ability. The scholarship is intended to honor and support outstanding scholarship regardless of financial need.

Edith Dockweiler Hughes Scholarship. John D. Hughes, through a bequest in his will, established an endowed scholarship in memory of his mother, Edith Dockweiler Hughes. A 1905

graduate of Butler College, Mrs. Hughes firmly believed that individuals who participated in the activities of their community, church and school, doing all they could to help, would have no time for complaints. Mrs. Hughes died in 1947, and it is her son's wish that this scholarship provide assistance to students who have demonstrated scholastic achievement and leadership potential. Recipients are selected by a scholarship committee appointed by the dean of the College of Liberal Arts and Sciences.

**Dorothy Lynn Scholarships for the Liberal Arts.** Dorothy Black Lynn, Class of 1923, was a civic leader and philanthropist who received the Butler Medal in 1975. Her lifetime of support to Butler University culminated with a gift from a trust created by her estate, which provides scholarships for students in the liberal arts.

Charles O. McGaughey Leadership Award. Mr. McGaughey's family established this award in 1990 to honor his life of leadership and community service. It is for students who have completed two academic years in the College of Business or College of Liberal Arts and Sciences and who demonstrate leadership abilities and appreciation of basic American values as evidenced by a record of achievement in service to the community and to the University.

Betty Murnan-Smith Scholarship. Professor Betty Murnan-Smith established this scholarship in 2000. Preference is given to students in the College of Liberal Arts and Sciences who are single parents and demonstrate financial need. Recipients are expected to maintain at least a 3.0 grade point average. It is to be administered by the Office of Financial Aid and is renewable.

#### Herman & Margaret Pickard Scholarship.

This fund was established by Margaret "Maggie" V. Bradburn Pickard, Class of 1932, through her estate. It honors her pride in her Butler experience and bears her name along with that of her late husband Herman. It is administered by the Financial Aid Office to benefit worthy students in the College of Liberal Arts and Sciences. Preference is given to full-time students with a grade point average of 3.0.

Stephen G. and Sandra L. Ruby Book Fund. Butler parents Steve and Sandy Ruby established this fund to provide a stipend to Butler student or students to purchase books for their studies.

FINANCIAL AID

Recipients must need financial assistance, have a cumulative grade point average of 3.0 and must be enrolled in the College of Liberal Arts and Sciences.

Lon D. Showley Endowed Scholarship in the Liberal Arts. Lon Showley, Class of 1966, has a long record of support and involvement in the life of the University. Through this scholarship he wishes to provide financial assistance to students in the College of Liberal Arts and Sciences based on financial need. Recipients are full-time sophomores, junior or seniors.

Nick Smyrnis Annual Scholarship. This scholarship was created by the James Whitcomb Riley Chapter No. 232 of the Order of AHEPA (American Hellenic Educational Progressive Association) to honor Nick Smyrnis, Class of 1947, supreme president, Order of AHEPA, 1979-81. The scholarship encourages the study of the humanities. It is awarded annually solely on merit and may be awarded for a maximum of two years to the same student.

Allegra Stewart Scholarship. This is an endowed scholarship from the estate of Dr. Stewart, Class of 1921, who taught English at Butler for 56 years. She joined the faculty in 1923, was named to the prestigious Demia Butler Chair in 1939 and became acting department head in 1946. She founded Butler's literary magazine, Manuscripts, in 1935. Based on merit, the scholarship will be awarded to students in the College of Liberal Arts and Sciences who have achieved a grade point average of 3.0 or greater.

#### Kristopher Stewart Memorial Scholarship.

Daniel E. Stewart and Linda M. Stewart established this scholarship in loving memory of their son, Kristopher, who died in an automobile accident in fall 2004 while returning from a regatta with the Butler Crew Club. The fund has been supported by their family, friends and the Butler community. It provides undergraduate scholarships in the College of Liberal Arts and Sciences.

#### William B. Stokely Jr. Foundation Scholarship.

This endowed scholarship is awarded annually to a deserving sophomore. Stokely, whose grandfather, Alfred J. Stokley, served on the Butler Board of Trustees, was president and chairman of the food giant Stokely-Van Camp.

**Dr. Emma Lou Thornbrough Shortridge Scholarship.** Inspired by the research and teaching of Dr. Thornbrough, Dr. Paul A.
Hanson honored her by creating this scholarship to support Butler minority students from Shortridge High School in Indianapolis. Professor Thornbrough was herself a Shortridge graduate and during her career on the Butler faculty from 1946 to 1983, a pioneer in the writing of African-American history. Recipients should be Shortridge graduates who have completed a strong college preparatory curriculum and who are enrolled in liberal arts or education. The scholarship is renewable.

Corrine Welling Scholarship. Corrine Welling, Class of 1912, served the University for 33 years as a professor of English. Recipients of this scholarship will be known as Corrine Welling Scholars. Candidates must have a minimum grade point average of 3.25 overall and 3.5 in the major, as well as candidacy for bachelor's degree in the College of Liberal Arts and Sciences. Candidates also must submit a letter of recommendation from a professor and an essay.

# Astronomy and physics

See Physics and astronomy.

# **Biological sciences**

Dr. James Berry Tropical Field Study Fund.
James W. Berry was a member of Butler's biological science faculty from 1967 to 1996.
Among his many contributions, he initiated the zoology department's course in Tropical Field Biology in 1969. This fund provides special funding for students to participate in the Tropical Field Biology course, which involves not only the onsite study of ocean biology but helps students understand their responsibility to the environment as well.

Mary Jane Brown Fund. This fund was established by Dr. Brown, Class of 1919, to commemorate her retirement from distinguished careers in which she taught university-level zoology and the natural sciences, and conducted research at the Indiana University School of Medicine. It is used to help defray the cost of the marine biology trip associated with the Tropical Field Biology course.

L. Dorcas Bush Biological Sciences Scholarship. Established in 2000 through an estate gift from L. Dorcas Bush, this scholarship provides funding for deserving students in biological sciences.

May S. Iske Scholarship. May S. Iske, Class of 1924, served on the Butler faculty as a professor of zoology for 42 years. Her husband Paul was a physician who completed his pre-med studies at Butler. This scholarship is administered by the Office of Financial Aid. Preference is given to students who are biology majors and who maintain at least a 3.0 grade point average. It is renewable.

#### Frederick Kavanagh Botany Scholarship.

Dr. Kavanagh, a microbiologist retired from Eli Lilly and Company, established this endowed scholarship in the 1980s for the study of botany.

John E. Potzger Memorial Scholarship. John Potzger, educator and botanist, graduated from Butler in 1927. After receiving his master's degree from Butler in 1931 and his doctorate in botany from Indiana University in 1932, Potzger returned to Butler as professor of botany. He gained a national reputation for his research in taxonomy, quadrat studies and ring count, morphology and pollen analysis. This scholarship in his memory was established in 1955 for a deserving biology major in the study of botany or environmental science.

Katrina Roch Seitz Science Education Endowed Fund. Dr. Katrina Roch Seitz, Class of 1979, created this fund to support the natural sciences at Butler, including physics, astronomy, chemistry and biology. The fund may be used either as scholarship support for students or to host a scholar-in-residence at the University who will present lectures, workshops and seminars.

Philip St. John Fund. This fund honors Professor Emeritus Philip A. St. John, a member of the Butler faculty from 1967 to 1989. St. John was a professor of zoology, department head and associate dean of the College of Liberal Arts and Sciences. This fund helps to defray the cost of the marine biology field trip taken in conjunction with the Tropical Field Biology course offered in the Department of Biology.

Elise S. Turner Scholarship. This scholarship was established through the estate of Elise Turner, Class of 1952, for students majoring in biology. Application for this scholarship should be made directly to the biology department.

William G. and Lucile J. Weiss Scholarship Award. This award was established by a bequest from the estates of William G. Weiss, Class of 1932, and Lucile J. Weiss, Class of 1941, for students majoring in biology.

# Chemistry

Frances A. Brockman Chemistry Scholarship. This fund was established through the estate of Frances Brockman, Class of 1951, to benefit deserving chemistry majors in the College of Liberal Arts and Sciences. She was employed as a chemist with Eli Lilly and Company. While at Butler, she also played trumpet in the marching band, and her estate also established the Frances A. Brockman Music Scholarship in the Jordan College of Fine Arts.

Francis E. Cislak Chemistry Fellowship

Awards. Cislak Fellows are freshman chemistry

majors with outstanding scholastic and personal records, demonstrated interest in the natural sciences and selection based "with full consideration being given to deportment and extracurricular activities." Candidates apply directly to the chemistry department. The award was established in 1974 by a gift from Reilly Industries to recognize Dr. Cislak's outstanding contributions to his field. He held more than 100 patents in the United States and 30 in European countries and Japan. He was instrumental in the development of the Reilly Laboratories, and under his leadership, Reilly became the world's largest manufacturer of pyridine chemicals—by-products of coal-tar distillation whose uses include manufacture of pharmaceuticals. Upon his retirement from Reilly, Dr. Cislak lectured in chemistry at Butler.

Willard and Hazel Eason Scholarship. In

appreciation for the exceptional chemistry training he received at Butler, which provided the foundation for his highly successful career, the late Willard Eason, Class of 1954, and his wife Hazel M. Stratton Eason established this scholarship fund for students majoring in chemistry. Eason served on the Butler Board of Trustees. He received an honorary doctor of science degree in 1975 and the Butler Medal in 1994.

BUTLER UNIVERSITY

FINANCIAL AID

Lilly Industries Inc. Endowed Scholarship. Lilly Industries Inc., Indianapolis, endowed a scholarship for full-time chemistry majors in their junior and senior years. Recipients must be in good standing within the chemistry curriculum and be residents of Indiana or an immediately adjacent state. Although Lilly Industries was acquired in 2001 by Valspar Corp. of Minnesota, the scholarship still bears Lilly Industries' name.

G. Cullen and Margaret Lomax Thomas Scholarship. This fund was established in 1973 by Margaret Lomax Thomas, Class of 1918, widow of one of Butler's all-time great alumni and an outstanding athlete during his college years. G. Cullen Thomas, Class of 1913, built a career as a food chemist and was a consultant to the Food and Drug Administration. He served many years as a Butler trustee and became an acknowledged leader in his profession. The recipient of this scholarship will be a first-year student with a keen interest in the sciences, especially chemistry.

# Communication studies

Nicholas M. Cripe Scholarship. Former students, colleagues and friends of the late Dr. Cripe established this fund upon his retirement in recognition of his many years of service to Butler. Nationally recognized in his field, he was a well-loved professor of speech and a debate coach. This award is made annually to students majoring in speech or who are actively participating in debate or public speaking programs.

Charles and Ann Wagner Harper Memorial Scholarship. This fund was established by Ann Wagner Harper, Class of 1963 M.S. '68, a radio and television pioneer in Indianapolis. After a 25-year career in radio-TV and teaching, she joined the Butler faculty as professor of radio-TV and later served as chair of the department and station manager for WAJC-FM. Her late husband Charles Harper was instrumental in creating Central Purchasing and Stores at Butler. This scholarship benefits students majoring in communication studies or media arts with preference given to those who are academically qualified or are in financial need.

**John Chapman Miller Scholarship.** John Chapman Miller was born in Johnson County, Indiana, in 1831. His father died when Miller

was 3, leaving him to a childhood of hard labor to help support his family. Miller worked hard, saved money and completed his first degree at Indiana University in 1855. In 1871, he accepted the chair of philosophical and biblical literature at Butler and later served on the board of trustees. It was his practice to visit recitation rooms and report on the performance of faculty members and students. This scholarship is awarded to deserving students who are studying public speaking in the college curriculum. The award is given to the winners of the John Chapman Miller Speaking Contest held each semester.

Mary Elizabeth Perna Memorial Scholarship. Family and friends created this scholarship in memory of Mary Perna, Class of 1986, who died in her sleep shortly after her 20th birthday. The scholarship is designated for students active in intercollegiate debate at Butler University.

David H. and Virginia M. Waite Scholarship. Dr. David H. Waite, professor of speech at Butler and former department head, is nationally acclaimed for his expertise in communication studies and semiotics. His friends, former students and colleagues established the Waite scholarship in 1994 to honor both him and his wife, Virginia M. Waite. The scholarship supports communication studies students selected on the basis of professional goals, academic achievement and personal characteristics, with the objective of providing awards to applicants who have independent spirits and demonstrate outstanding potential to be effective communicators. Recipients are selected by the Department of Communication Studies and the Office of Financial Aid.

Robert T. and Jean W. Whitcraft Scholarship. This scholarship was established by a bequest from the estate of Robert T. Whitcraft, Class of 1930, with first preference for Butler students pursuing a course of study in journalism, communications or advertising. Jean Wells Whitcraft, Class of 1944, was a dedicated Indianapolis volunteer and avid supporter of

### **Economics**

Butler University.

Omar S. and Harriet D. Bruner Jr. Scholarship. This endowment, established in 1983 by Omar S. "Buck" Bruner Jr, class of 1948 and his late first wife Harriet, provides scholarships to students majoring in business administration, economics or pre-law who need financial assistance.

Craig Fenneman Endowed Scholarship. This fund was created in 2002 by Craig Fenneman, Class of 1991 and former president of Butler's Student Government Association. He is the owner of Fenneman & Associates, a commercial real estate development and management company; and owner and CEO of Southern Bells, Inc., a holding company for restaurant franchises. Preference is given to an entering first-year student who has declared an intention to major in economics. If no such students are available, consideration is given to those expressing interest in social sciences. The scholarship may be renewed as long as the recipient maintains a 3.0 grade point average and is enrolled in economics or a social science major in the College of Liberal Arts and Sciences.

John Newcomb Wright Memorial Scholarship. John S. Wright, a botanist with Eli Lilly and Company, and Lectania Newcomb Wright, Class of 1892, established this fund in memory of their son, a former Butler student who died at age 25. (There is a scholarship in Lectania Wright's memory as well.) Preference is given to English or economics majors.

Engineering

ICUE America Inc. Engineering Endowed Scholarship. The donors wish to provide financial assistance to Butler students enrolled in the College of Liberal Arts and Sciences. Preference is given to an entering first-year student who has declared a major in engineering, with further preference given to mechanical engineering.

ICUE America Inc. Engineering Field Project Fund. This fund was established by Butler parent, Steven North and his business associate Jesse Miles and Keith Reinsmith to provide opportunities for engineering students to engage in special service/learning projects. Income from the fund may be used to support student research projects, applied engineering projects, student travel to present research findings at conferences or other student actives outside of the classroom that enhance the learning experience of engineering students.

English

**Werner W. Beyer Scholarship.** Established in 1989 by an anonymous donor, this endowed

scholarship recognizes the contributions of Dr. Werner W. Beyer, head of the English department for many years. The scholarship is for liberal arts students, with preference given to English majors who demonstrate excellence in the use of the English language.

Mary V. Black Memorial Scholarship. This scholarship was established through a gift from the estate of Mary V. Black, who entered Butler at just 16 years of age. The fund provides scholarships for students majoring in English or history.

Marguerite Ham Carr English Literature Endowed Scholarship. Marguerite Ham Carr, Class of 1935, made possible this scholarship to assist students who demonstrate excellence in the study of English literature. Preference is given to a sophomore or above who has achieved at least a 3.2 grade point average. Mrs. Carr's family includes 14 other Butler alumni, including her husband Lawrence S. Carr, Class of 1934.

Jessie Hall Cochran Memorial Scholarship. Richard A. Cochran created this scholarship in memory of his wife, Jessie H. Cochran, who studied creative writing in Butler's English department. Preference is given to creative writing students.

Barbara Hendry Book Fund. Barbara Madden Hendry, Class of 1962, established this fund to provide deserving students with a stipend to purchase books for their studies. Preference is given to students majoring in English and/ or creative writing. All recipients should be in good standing with the University.

Margaret M. Kuhn Scholarship in Literature. Mrs. Kuhn's husband George A. Kuhn Sr. and son, George A. Jr., both served on the Butler Board of Trustees. This scholarship, endowed by the elder Kuhn in her memory, is available to upperclass students with records of distinction in any field of literature.

**Donald Sandstrom Memorial Scholarship.** Established by Rev. Fredric Sandstrom, Class of 1972, and Karen Sandstrom Muir, Class of 1970, in honor of her father, this endowed scholarship is intended for students who show promise as writers.

FINANCIAL AID

Jean W. Whitcraft Endowed Scholarship.

Alberta Wells established this scholarship in memory of her sister, Jean Whitcraft, an English major in the Class of 1944. Mrs. Whitcraft devoted her career to teaching and retired as head of the English department at Shortridge High School in Indianapolis. This scholarship benefits a Butler student or students who have expressed interest in teaching high school English.

Mary Louise Blauvelt Wingenroth Academic Scholarship. This endowed scholarship honors the memory of Mary Louise Blauvelt Wingenroth, Class of 1934, who had a special interest in literature and languages. It is given to a female English or Spanish major.

John Newcomb Wright Memorial Scholarship. John S. Wright, a botanist with Eli Lilly and Company, and Lectania Newcomb Wright, Class of 1892, established this fund in memory of their son, a former Butler student who died at age 25. (There is a scholarship in Lectania Wright's memory as well.) Preference is given to English or economics majors.

# History

**History Scholarship—Anonymous.** The principal donor of this scholarship wishes to remain anonymous. It benefits a full-time student enrolled at Butler as a history or anthropology major.

James F. Bash Memorial Scholarship. This scholarship provides support to an undergraduate student or students majoring in history and/ or political science with interest in American history or American studies. Preference is given to students who maintain a 3.0 grade point average.

Edward M. and Margery H. Bennett Endowed Scholarship. The Bennetts, both Class of 1952, established this scholarship to be awarded to a history major based on academic performance and financial need.

Mary V. Black Memorial Scholarship Fund.

This scholarship was established through a gift from the estate of Mary V. Black, who entered Butler at just 16 years of age. This fund provides scholarships for students majoring in English or history.

Bernice Abbott Cope Scholarship. Bernice Abbott Cope, Class of 1927 and a charter member of Butler's Alpha Chi Omega chapter, spent most of her life in service to her sorority and the needy worldwide. Through her estate, she established this scholarship for an undergraduate student who excels in the study of history.

Paul W. Finney Endowed Scholarship. Paul W. Finney, Class of 1922, enjoyed a long and successful career in the insurance industry. This scholarship was established in his memory by his brother, Robert A. Finney, Class of 1928, for history majors selected on a basis of academic achievement and of sophomore standing or higher.

Professor Emma Lou Thornbrough Student Scholarship. The late Professor John Hope Franklin, Classes of 1936 and 1939, was a renowned historian. His admiration for Professor Thornbrough, a member of the Butler faculty from 1946 to 1983, led to valuable collaborations. Professor Franklin established this fund in her honor to benefit a deserving student who is majoring in history with a focus on American history. Preference is given to students who demonstrate financial need.

# **Journalism**

Angelo Angelopolous Scholarship. This award was established by friends of Angelo Angelopulous, former *Collegian* editor, a 1940 alumnus and Indianapolis journalist. It is presented to the student who made the most outstanding contribution to campus journalism in the past year.

August and Esther Cooreman Liberal Arts & Sciences Scholarship. Daniel Cooreman, Class of 1976, established this scholarship to honor his parents for their moral and financial support, which enabled him to earn a journalism degree and pursue a successful career at *The New York Times*. Recipients shall be students enrolled in the College of Liberal Arts and Sciences with preference given to journalism majors. They must have a cumulative 3.0 grade point average.

#### John Davies Family Endowed Scholarship.

John D. and Margaret S. Davies have generously underwritten this scholarship for full-time students who maintain a grade point average of at least 2.0, demonstrate financial need and are enrolled in the College of Business or majoring in journalism in the Eugene S. Pulliam School

of Journalism in the College of Liberal Arts and Sciences. The donors hope that a minority student who meets all of the criteria will receive the award at least once every four years; however, they do not wish that the scholarship be awarded exclusively to minority students.

Evelyn R. Stutesman Kovar Memorial Scholarship. This fund was established in 2004 through a bequest from Evelyn Rose Stutesman Kovar, Class of 1945. It is administered by the Office of Financial Aid to provide financial assistance to deserving students majoring in journalism.

Art Levin Journalism Scholarship for the First Amendment. This fund was created by family members, former students, colleagues and friends of Art Levin. In 30 years on the journalism faculty, Mr. Levin inspired many budding journalists, chaired the department and served as adviser to the *Collegian*. This scholarship benefits students in the College of Liberal Arts and Sciences, with preference given to journalism majors who are dedicated to the preservation of First Amendment liberties as demonstrated either through coursework or by work on the editorial staffs of student-run print or electronic publications.

**Robert O. Malcolm Journalism Scholarship.** This fund was established by a bequest from the estate of Robert O. Malcolm to benefit journalism students.

James T. and Georgianne D. Neal Journalism Scholarship. James, 1942, and Georgianne have devoted a lifetime to the field of journalism. At Butler, Jim served as editor of the Butler Collegian. He later served on Butler's Board of Trustees and as interim head of the journalism department. The Neals' professional lives included the Noblesville (Ind.) Daily Ledger and The Indianapolis News. Aware of the need to preserve freedom of the press and the public's right to know, they established a scholarship fund at Butler to encourage entering freshmen to major in journalism, to participate in school publications and to develop the potential to sustain a career in the field of journalism. Recipients may renew for their remaining years at Butler.

Beatrice Waiss Roth & Harry Roth Endowed Scholarship. This scholarship was established by Beatrice Roth, a 1938 graduate in journalism,

and her husband Harry to provide financial assistance to deserving journalism majors. It is awarded annually and can be renewed.

Leon and Alma Stanley Journalism Scholarship. This scholarship honors the Stanleys and Leon Stanley's 40-year career with *The Indianapolis News*. Recipients will be chosen for superior scholarship achievement in journalism and will have a potential for leadership and good moral character. The scholarship may be awarded to a

freshman and can be renewed.

Robert T. and Jean W. Whitcraft Scholarship. This scholarship was established by a bequest from the estate of Robert T. Whitcraft, Class of 1930, with first preference given to students studying journalism, communications or advertising. Jean Wells Whitcraft, Class of 1944, was a dedicated Indianapolis volunteer and avid supporter of Butler University.

# Mathematics and actuarial sciences

Robert B. Annis Student Improvement Endowed Scholarship. This fund benefits students who improve their cumulative grade point average during their sophomore or junior years studying science, mathematics or other closely related subjects. The Office of Financial Aid selects the recipient based solely on the student's scholastic improvement.

Robert B. Annis Endowed Scholarship. As the founder (in 1928) and owner of R.B. Annis Co., a precision instruments and magnetic devices firm, Mr. Annis was recognized worldwide as an expert in his field. This fund provides support to students in science, mathematics or other closely related subjects.

James D. Esamann Scholarship in Mathematics. Mr. Esamann created this fund through a generous gift from his estate. A member of the Class of 1950, he worked for Eli Lilly and Company for 30 years. This scholarship is to be awarded to students pursuing studies in mathematics.

#### Dr. Daisy Marvel Jones Scholarship.

Recipients are selected on the basis of academic excellence and financial need. First preference is given to candidates from the Metropolitan School District of Pike Township, Marion County, Indiana. Preference is also given to students majoring in mathematics education,

FINANCIAL AID

including students in the College of Liberal Arts and Sciences who plan to complete certification requirements to teach or who are education majors with a primary emphasis on mathematics.

Robert O. Whitesell Honor Award. This award is endowed by gifts from friends and business associates of the late Robert O. Whitesell, who provided thoughtful and visionary leadership for more than 40 years in the business community. Mr. Whitesell also was a valued alumnus, Class of 1939. Two students in the Department of Mathematics and Actuarial Science and two students in the Department of Physics will be honored annually.

# Modern languages, literatures and cultures

Karl G. Bottke Endowed Scholarship.

Established by Dr. Karl G. Bottke, Class of 1929, this scholarship is for undergraduate or graduate students enrolled in the College of Liberal Arts and Sciences who are majoring in a Romance language or other foreign language. Recipients other than first year students must have a cumulative grade point average of 3.0 or better.

Funke Memorial Scholarship. This fund honors the memories of Dr. Francis J. Funke, his wife Bertha and son John. Dr. Funke graduated magna cum laude from Butler in 1937. He enjoyed a distinguished teaching career and served several foreign language associations in leadership roles. Scholarships are awarded to students majoring in Spanish or French who maintain a grade point average of 3.5 or greater.

McKenzie Family Scholarship. Stephen E. and Jill McCann McKenzie are both loyal alumni of Butler's College of Business. Jill earned her degree in 1982; Steve, in 1983. The couple established this scholarship in 2003 to assist future generations of Butler students in obtaining an education. It is awarded to a graduate of a public high school who is enrolled full-time at Butler with a double major in business and foreign language. Preference is given to students of color.

Mary Louise Blauvelt Wingenroth Academic Scholarship. This endowed scholarship honors the memory of Mary Louise Blauvelt Wingenroth, Class of 1934, who had a special interest

in literature and languages. It is given to a female English or Spanish major.

**Philosophy** 

Frances A. Nakarai Scholarship. Charles F.T. Nakarai established this fund in 2001 to honor his mother Frances, a 1927 graduate who received her bachelor of arts in philosophy. The endowed fund provides support to an undergraduate student or students. Preference is given to a junior or senior majoring in philosophy who demonstrates financial need and who maintains a 3.0 grade point average. The scholarship is administered by the Office of Financial Aid.

Physics and astronomy

Dr. Brian W. Murphy Astronomy and Astrophysics Scholarship. Dr. Murphy established this scholarship to provide financial assistance to students majoring in astronomy and astrophysics. The recipient may be an incoming first-year student or rising second-, third- or fourth-year student who has a cumulative 3.0 grade point average. The scholarship is renewable. Faculty in the Department of Physics and Astronomy recommend a recipient annually to the Office of Financial Aid.

The Katrina Roch Seitz Science Education Endowed Fund. Dr. Katrina Roch Seitz, Class of 1979, created this fund to support the natural sciences at Butler, including physics, astronomy, chemistry and biology. The fund may be used either as scholarship support for students or to host a scholar in residence at the University who will present lectures, workshops and seminars.

#### The Robert O. Whitesell Honor Award.

This award is endowed by gifts from friends and business associates of the late Robert O. Whitesell, who provided thoughtful and visionary leadership for more than 40 years in the business community. Mr. Whitesell also was a valued alumnus of Butler University, Class of 1939. Two students in the Department of Mathematics and Actuarial Science and two students in the Department of Physics will be honored annually.

# Political science

**James F. Bash Memorial Scholarship.** This scholarship provides support to an undergraduate student or students majoring in history and/ or political science, expressing an interest in

American History or American Studies. Preference is give students who maintain a 3.0 grade point average.

**Dale Hathaway Social Action Endowed Scholarship.** This scholarship provides financial assistance to deserving Butler students, with preference given to those in the College of Liberal Arts and Sciences. The political science department will recommend students who demonstrate a commitment to peace and social justice. This scholarship memorializes the life and convictions of Dale Hathaway, professor of political science from 1990 until his untimely death in 2002. He was a dedicated teacher, scholar activist, husband, mentor and friend, always searching for ways to hasten the arrival of justice and the betterment of the community. His scholarly research focused on the possibilities for ordinary people to improve their lives through participation and organization.

#### Pre-law

Omar S. and Harriet D. Bruner Jr. Scholarship. This endowment, established in 1983 by Omar S. "Buck" Bruner Jr, class of 1948 and his late first wife Harriet, provides scholarships to students majoring in business administration, economics or pre-law who need financial assistance.

#### Omar S. Bruner Sr Memorial Scholarship.

This scholarship was established by Omar S. "Buck" Bruner Jr, class of 1948 and his late first wife Harriet, as a memorial to his father and to benefit Butler students who plan to enter law school, are in high academic standing and need financial assistance. Omar Bruner Sr had a desire to help others obtain the formal education he never had the opportunity to acquire.

#### A.G. Emhardt Family Memorial Scholarship.

The purpose of this fund is to encourage students to utilize Butler's excellent resources in pursuit of studies in preparation for future careers. The award will be made based on financial need as well as the conduct and character of the applicants; preference will be given to students preparing for law careers. This award was established by a bequest from the estate of Ruth Emhardt, an alumna and Indianapolis educator.

**A. Leroy Portteus Scholarship Fund.** This endowment fund was established by the estate of Gene Lois Portteus Branigin to honor the

memory of her father, Dr. A. Leroy Portteus, a physician and Butler graduate, class of 1900. In the early 1900s, Dr. Portteus was president of the Indiana State Medical Association and went on to serve under President Eisenhower on the National House Conference on Children and Youth. Scholarships benefit students enrolled in a pre-law curriculum.

**Gordon E. Tabor Endowed Scholarship Fund.** Stephen Preusse, class of 1987, and family members and friends of attorney
Gordon Tabor established this scholarship in his memory to provide financial assistance to students enrolled in pre-law studies.

# Pre-medicine

Kathryn Bromley Scholarship. Kathryn Bromley received her degree from Butler in 1934 and went on to serve the University in several capacities throughout her career. Margaret M. Grimes, a close friend and former director of student activities at Butler, along with Bromley's nephew, Charles Vogt II, established this endowed scholarship in Bromley's memory. It is to be awarded to a junior pre-medicine student with financial need who has maintained a 3.5 or better GPA.

#### Robert H. Egbert Premedical Scholarship.

This scholarship was established in 1972 by Hazel Springer Ebgert, class of 1906. It honors the memory of her husband Robert. Guidelines stipulate that the recipient must be preparing to be a medical doctor, must have completed three semesters, earned a 3.0 GPA or better and be of good moral character.

Walter Leroy Portteus Scholarship. This endowed fund was established through the estate of Gene Lois Portteus Branigin to honor her brother, Walter Leroy Portteus. These scholarships are for students enrolled in a pre-medicine curriculum.

### Jennifer L. Wetzel Endowed Scholarship.

Friends and family of Jennifer Wetzel endowed this scholarship for juniors or seniors who have declared an interest in pre-medicine studies, with preference given to students who want to study oncology. Successful recipients will have achieved a GPA of 3.0 or better.

Psychology

**Dr. Wesley A. Dunn Scholarship in Psychology.** Florence Goodrich Dunn established this

endowed scholarship to honor her son, Wesley, through a trust she created in 1989. He was a Diplomate of the American Board of Professional Psychology who served as a part-time instructor in psychology at Butler from 1955 to 1965. The scholarship provides tuition support for students majoring in psychology.

Gayle Augustine Olson Scholarship. Dr. Gayle A. Olson, Class of 1966, and her husband Dr. Richard D. Olson helped pioneer the study of the relationship between neuropeptides and behavior. She created this scholarship to be awarded to psychology majors who demonstrate financial need and academic merit and who maintain a 3.0 grade point average or better.

Stuart Prize in Psychology. This fund was established by Stephen K. Stuart, a psychology graduate in the Class of 1974. The Stuart Prize has been awarded annually since 1988 to reward scholarship, innovation and scientific potential in undergraduate research. The funds provide support for psychology majors presenting the results of their own research projects at national and regional professional conferences.

Dr. Burrton Woodruff Undergraduate Research Award. This fund was established by Stephen K. Stuart, Class of 1974, in honor of Professor of Psychology Emeritus Burrton G. Woodruff. Dr. Woodruff joined the Butler faculty in 1968 and served the Butler community for 35 years. Scholarships are awarded to rising juniors and seniors majoring or minoring in psychology. Recipients must be engaged in a research project that demonstrates excellence in methodology, research design or statistical analysis.

Edgar Lee Yeager Memorial Award. This award is a tribute to Edgar Lee Yeager, Butler professor of psychology from 1959 until his death in 1975, when he was named professor emeritus. He loved learning and teaching, and his legacy to his students was a deep appreciation of knowledge and a commitment to honor the highest standards of psychology. This scholarship is awarded to a student in psychology who reflects the tradition of excellence that Edgar Yeager represented, exhibits a love and respect for knowledge, and displays academic proficiency. An engraved plaque accompanies the award.

# Religious studies

Mabel Campbell Religious Studies Scholarship.

This scholarship was established by the estate of Miss Mabel L. Campbell, a friend of the University who died in 1999 at age 104. It is a freshman scholarship renewable for three years after the initial award. Recipients should be full-time freshmen majoring in religion. The fund also provides funding for projects and travel to academic conferences for students majoring in religion; programming at Butler's Center for Faith and Vocation in pre-theological advising for students who go on to seminary or to other graduate programs in theology; and bringing guest speakers to campus from those graduate programs.

### Raymond R. & Margaret E. Miller Scholarship.

This fund was established by annuities that Mr. and Mrs. Miller had with the University. Raymond Miller earned a master's degree in education and theology from Butler in 1920. He was a teacher, principal, superintendent, pastor and professor — always with the support of his wife Margaret Threlkeld Miller. This scholarship provides tuition support to deserving students pursuing studies in the ministry or education.

#### William L. and Ella P. Powell Scholarship.

Ella Powell of Lebanon, Ind., established this scholarship through a bequest in 1952. Butler's share of her bequest was to be kept in a permanent fund to be called the William L. Powell and Ella P. Powell Scholarship Fund, with the income awarded annually to a worthy student in the College of Religion. When Mrs. Powell prepared her will in 1947, the College of Religion was still at Butler; today, this scholarship is awarded to students majoring in religion and religious studies.

### Science

D. J. Angus Scientech Educational Foundation **Scholarship.** This scholarship is for a pharmacy and/or science student in his or her sophomore or junior year and is intended to serve both as an award and as an impetus for continued excellence. The primary criterion for this award is the greatest improvement in grade point average from the previous year by a science and/ or a pharmacy student. The recipient is to be an undergraduate who has displayed good citizenship. The D.J. Angus Scientech Education Foundation and the scholarships they award were established by Robert B. Annis, in whose

name two other endowed scholarships have been established at Butler.

Robert B. Annis Student Improvement **Endowed Scholarship.** This fund benefits students who improve their cumulative grade point average during their sophomore or junior years studying science, mathematics or other closely related subjects. The Office of Financial Aid selects the recipient based solely on the student's scholastic improvement.

Robert B. Annis Endowed Scholarship. As the founder (in 1928) and owner of R.B. Annis Co., a precision instruments and magnetic devices firm, Mr. Annis was recognized worldwide as an expert in his field. This fund provides support to students in science, mathematics or other closely related subjects.

Paul Church Memorial Scholarship. Juanita Bechtold Church, Class of 1939, established this scholarship in memory of her husband Paul V. Church, who completed graduate work at Butler. Preference is given to recipients who major in science and have at least a 3.0 grade point average.

James D. Esamann Scholarship in Science. Mr. Esamann created this fund through a generous gift from his estate. A member of the Class of 1950, he worked for Eli Lilly and Company for 30 years. This scholarship is to be awarded to students pursuing studies in science.

G. Cullen and Margaret Lomax Thomas **Scholarship.** This fund provides scholarship support to students with a keen interest in the sciences, especially chemistry. It was established by Margaret Lomax Thomas, Class of 1918, in honor of her husband G. Cullen Thomas, Class of 1913. Mr. Thomas was a legendary collegiate athlete and former athletic director at Butler. He built a successful career as a food chemist, served on Butler's Board of Directors and was awarded the Butler Medal in 1960.

Sociology and/or criminology Dr. Richard E. Martin Memorial Scholarship.

The family and friends of Dr. Richard E. Martin endowed a scholarship in memory of Martin, a sociologist, professor and administrator at Butler for 31 years. This scholarship will benefit students studying sociology or criminology in their senior year. It is awarded based on academic performance and service to the community.

# College of Business awards

\*The following is a list of the current scholarships. Most are used to underwrite Butler University financial aid programs and cannot be applied for directly unless otherwise indicated.

# General Scholarships

James E. Bettis Endowed Scholarship. This fund was established by the family and many friends of James E. Bettis, Class of 1940. Mr. Bettis was highly respected for his work ethic, integrity and dedication to servicing during a long and distinguished career in insurance, investments and financial services. This scholarship benefits deserving full-time students in the College of Business who have achieved a grade point average of 3.0 or higher.

Omar S. and Harriet D. Bruner Jr. Scholarship. This endowment, established in 1983 by Omar Bruner Jr., Class of 1948 and his late first wife Harriet, provides scholarships to students majoring in business administration, economics or pre-law who need financial assistance.

**Butler Business Scholars Financial Assistance Scholarship.** Endowed by sisters Dr. Karel Updyke, Karen J. Caulkins and Kristine J. Caulkins, this scholarship is awarded and maintained in accordance with the criteria established for the Butler Business Scholars Program. It is awarded in an amount of no less than \$1,000 per year.

Cooke Family Endowed Scholarship. Butler Medal recipient John D. Cooke, Class of 1962, and Judy A. Cooke and their sons, J. Christopher Cooke and Brian F. Cooke, established this fund to salute student potential, measured not by grade point average but through a combination of academic success, contribution to the University and their community, and demonstrated leadership capacity. It is awarded to a College of Business student with preferences given in the following priority order: financial need; academic growth during the first two years at Butler while receiving little or no merit scholarship support during these years; incoming freshmen who exhibit exceptional leadership ability in high school but will not receive academic merit scholarship aid; student athletes; members of Phi Delta Theta fraternity and Kappa Kappa Gamma sorority; and students of parents injured or killed while serving in the military, police or fire department (or students who were injured in similar public service).

William J. Davey Scholarship. As a means of expressing appreciation for his educational experience at Butler University, William J. Davey, Class of 1947, and his wife Bernice Refvem Davey provided for a scholarship fund, stipulating that the recipient be in the College of Business, with special consideration given to those who express a desire to enter the insurance business upon graduation.

Ernest & Belle A. Davidson Endowed Scholarship. Preference will be given to Caucasian undergraduates enrolled in the College of Business. The scholarship is to be awarded to financially needy students, but is limited to one-half or less of tuition cost. The recipient will have a cumulative grade point average of 3.0.

#### John Davies Family Endowed Scholarship.

John D. and Margaret S. Davies have generously underwritten this scholarship for full-time students who maintain a grade point average of at least 2.0, demonstrate financial need and are enrolled in the College of Business or majoring in journalism in the Eugene S. Pulliam School of Journalism in the College of Liberal Arts and Sciences. The donors hope that a minority student who meets all of the criteria will receive the award at least once every four years; however, they do not wish that the scholarship be awarded exclusively to minority students.

Helen F. Dick Memorial Scholarship. Butler Trustee Rollin M. Dick created this scholarship in memory of his wife of 56 years. The couple generously supported the arts, education and many civic organizations with personal gifts as well as gifts from their personal foundation, The Helping Fund. Recipients shall be full-time students in the College of Business in good standing with the University. Preference is given to students with significant financial need.

Jack Engledow Endowed Scholarship. This scholarship will be awarded each year to a business student entering his or her senior year who displays a high potential for entrepreneurial and ethical business leadership. "The student should have demonstrated, in and outside the classroom: a creative mind; a willingness to work hard; a zeal for challenging the conven-

tional and taking intelligent chances; a belief in the importance of ethical behavior and integrity in business and personal life; and an ability to inspire others and urge them down the same path. It may well go to a student who hears a different drummer; the beat of the future may come from an unfamiliar band." No need or academic requirements are attached.

**Dr. Richard E. Fetter Scholarship.** Dr. Richard Fetter has been a professor of marketing since 1994 and was dean of the College of Business from 1999 to 2007. His friends established this scholarship to honor his tireless contributions to the University. It is awarded to students enrolled in the College of Business who exemplify Dr. Fetter's positive qualities and attributes. Recipients should have a grade point average of 3.0 or higher.

Edmund W. and Lucienne Genier Scholarship. Endowed by family and friends of Lucienne and Edmund Genier, this scholarship is administered by the Office of Financial Aid working with the College of Business. Preference is given to sophomores, juniors or seniors who demonstrate financial need and have at least a 3.0 grade point average.

**Thomas W. Genrich Scholarship Award.** Thomas Genrich, Class of 1978, is a retired partner with Price Waterhouse Coopers. He established this award to provide tuition support to worthy and capable students enrolled full time in the College of Business.

Adrian and Teresita Guzman Endowed Business Scholarship. Vivianna Guzman established this scholarship to honor her parents, who sacrificed to provide the best education possible for their children. The recipient shall be a female student of Hispanic descent with preference given to full-time students enrolled in the College of Business and who demonstrate financial need.

John C. Hart Sr. Scholarship. John Hart's career in the building industry combined private and public service. On the occasion of his 75th birthday, friends and family established this scholarship in his honor. Hart was a member of the Class of 1944. Recipients are students in the College of Business who have demonstrated superior achievement, potential for leadership and financial need.

Hart-Logsdon Scholarship. The Builders Association of Greater Indianapolis and Butler alumna Martha Logsdon established this scholarship to honor her nephews, William L. Hart, Class of 1939, and John C. Hart, Class of 1944. This award is in recognition of their many years of outstanding service to the Indianapolis community. It is designated for a student in the College of Business, its purpose being to encourage the study of the free enterprise system.

Humston Award for Scholastic Achievement. Jerry Shultz, Class of 1962 and Patsy Shultz, local supporters of Butler University, created this award to be presented to two outstanding students recommended by the College of Business and confirmed by the Office of Financial Aid. Mr. Shultz is president of the Humston Machinery Co. Inc.

Philip S. Kappes Endowed Business Scholarship. The law firm of Lewis & Kappes established this fund to honor Philip "Skip" Kappes, Class of 1945, for his lifetime of excellence in the practice of law. Skip and his wife Dodie, Class of 1947, have long been staunch Bulldog supporters and have both served on numerous committees for the University. He is a former member of the Butler Board of Trustees. Preference for this scholarship is given to full-time students in the College of Business who have an interest in nonprofit business management.

King Family Scholarship. This fund was established by Richard Nelson "Dick" King, Class of 1960, to honor his father Merlin Henry King, Class of 1931, and two paternal uncles, Donald James King, Class of 1928, and Robert Nelson King (attended 1928 to 1930); and his mother Ethel Mae Akers King, who started her studies in the early 1930s and returned in 1959 to become a member of the Class of 1963. It provides scholarship support to students enrolled in the College of Business.

Krannert Scholarship. Herman C. Krannert, a former member of Butler's Board of Trustees, received an honorary degree from the University in 1960. His wife Ellnora Decker Krannert, who received an honorary doctor of music degree from Butler, assisted him in his business, Inland Container Corporation, and served on the board of the Krannert Charitable Trust. The trust, established to create "centers of excellence" in education, medicine, youth services and the

performing arts, made possible the Krannert Room in Butler's Clowes Memorial Hall and funded the Krannert Scholarship. Freshman students apply through the College of Business dean's office. Four scholarships are awarded each year.

Andre B. Lacy Business Accelerator Scholarship. This fund honors Mr. Lacy's outstanding achievements in business and civic enterprises with the hope that his example will inspire future generations of Butler students to emulate his passion, effort and success. Preference is given to one or more sophomore, junior or senior students in the College of Business who are interns in the Butler Business Accelerator (BBA). If a suitable intern cannot be identified, another student with the BBA may be selected.

McDonald & Cech Financial Strategies Group/Wachovia Securities Award. Larry S. McDonald and the McDonald Financial Strategies Group of Wachovia established this fund to provide financial assistance to Butler students who are enrolled in the College of Business and who maintain average grades.

Charles O. McGaughey Leadership Award. Mr. McGaughey's family established this award in 1990 to honor his life of leadership and community service. It is for students who have completed two academic years in the College of Business or College of Liberal Arts and Sciences and who demonstrate leadership abilities and appreciation of basic American values as evidenced by a record of achievement in service to the community and to the University.

McKenzie Family Scholarship. Stephen E. and Jill McCann McKenzie are both loyal alumni of Butler's College of Business. Jill earned her degree in 1982; Steve, in 1983. The couple established this scholarship in 2003 to assist future generations of Butler students in obtaining an education. It is awarded to a graduate of a public high school who is enrolled full-time at Butler with a double major in business and foreign language. Preference is given to students of color.

**Bert E. Metcalf, Jr. Scholarship.** Mr. Metcalf, Class of 1950, established this fund to benefit students in the College of Business. It was initially an annual scholarship that was later endowed through a gift from his estate. Funds provide scholarships for students from Marion

County or contiguous counties who demonstrate academic qualifications and financial need.

M. Porter Murphy Endowed Business Scholarship. This fund was created by William F. Murphy, Class of 1973, in memory of his father M. Porter Murphy. It provides financial assistance to deserving students enrolled in the College of Business. Preference is given to students who maintain a grade point average of 3.25 or better; are involved in campus activities such as athletics, Greek organizations and academic organizations; and plan to pursue a career in sales and marketing.

Donald Pike & Janet Pike Off Scholarships. Donald H. Pike loved music, flying and Butler. The 1950 graduate devoted much of his time to the marching band; in fact, his tie to the marching Bulldogs was so strong, he played with the band for a year after graduation and announced the band programs at football games for the next 10 years. The Donald Pike award is given to a student in the College of Business, with preference to a member of the Marching Band. Janet Pike Off, a 1958 education graduate who also received her master's degree from the University, taught elementary school for more than 30 years. While at Butler, she played glockenspiel in the Marching Band, and she remained involved through the Alumni Board and other activities. The Janet Pike Off award is given to an education student, with preference to a member of the Marching Band. This double scholarship fund was established by Mr. Pike's son, Darrell, on behalf of the family in memory of his late father and his aunt.

**H. Gene Pruner Scholarship.** This fund honors the late H. Gene Pruner, a Chartered Life Underwriter and co-founder and former president of MarketShare Financial Inc. It benefits capable undergraduate or graduate students in the College of Business. Preference is given to students who have a grade point average 3.0 or better and financial need. Further, recipients will be given the opportunity for an internship at MarketShare Financial Inc. based on openings and candidate qualifications at the time.

# **H. E. Rasmussen Memorial Scholarship.**Made possible by the estate of alumna Ruth Rasmussen Williams, the H.E. Rasmussen Memorial Scholarship is awarded annually to a top student in the College of Business. Ruth

Williams was the wife of Mr. Rasmussen's nephew.

# William T. Rasmussen Memorial Scholarship.

The estate of alumna Ruth Duckwall Rasmussen Williams makes possible this award for a top business student. The scholarship honors the leadership and accomplishments of her husband, also a Butler graduate. Mrs. Williams endowed several scholarships at Butler.

### Marvin and Louis Recht Family Scholarship.

This scholarship is given in honor of Marvin Recht, who mentored many Butler students in their job searches and careers, and in memory of his wife Lois. It is awarded to students from a one-person or a single-parent home, with preference given to an incoming freshman in the College of Business; if a freshman cannot be identified, it can be awarded to a sophomore, junior or senior.

**Midge Rust Award.** Hilbert Rust provided this award in memory of his wife and in support of his interest in the survival of the free enterprise system. It benefits an outstanding student in the College of Business for use during the senior year.

Aaron & Margaret Schamp Endowed Scholarship. Aaron Schamp, Class of 1993, and Margaret Schamp, Class of 1992, both credit their success to mentors at Butler. They wish to express their gratitude by contributing to another Butler student's success. This award is assigned to the same student(s) who receive the PriceWaterhouseCoopers Scholarship. If that is not possible, the award is to go to a qualified student in the College of Business.

Edger C. Sr. and Mabel B. Seitz Memorial Scholarship Fund. In 1948, E. C. Seitz Sr. founded Service Supply Co. in a small storeroom on Virginia Avenue in Indianapolis. The company grew and was incorporated in 1953. In honor of the company's founding and in conjunction with its 40th anniversary, officers and stockholders of Service Supply Co. Inc. established this fund in memory of Edger and his wife Mabel, who passed away in 1963 and 1979, respectively.

Sellick, Deming and Schuler Business Scholarship. Winstan "Bud" and Jacqueline Sellick, both Class of 1944, created this scholarship to honor family members who had ties to Butler.

The Sellick, Deming and Schuler Business Scholarship is named after Mr. Sellick's father and mother, F. Stanley Sellick, Class of 1916 (a former treasurer for the University) and Winifred Sellick, Class of 1921. Ruth Schuler Deming and Thelma Schuler are Mr. Sellick's aunts; Thelma served many years as Butler's assistant librarian. The scholarship is available to full-time College of Business students based on financial need and a grade point average that places them in the upper 50 percent of their class. This is a renewable scholarship.

Winstan R. and Jacqueline B. Sellick Business Scholarship. Winstan "Bud" Sellick and his wife Jacqueline, both Class of 1944, were active participants in campus life and remain loyal Bulldog supporters. They established this scholarship in 2000 for full-time business administration students with a grade point average that places them in the upper 50 percent of their class and who have demonstrated financial need. The scholarship is to be administered by the Office of Financial Aid working with the College of Business. The Sellicks have endowed two other scholarships at Butler.

Winstan R. Sellick, Jacqueline Sellick and Herman W. Blomberg Scholarship. Winstan "Bud" Sellick and his wife Jacqueline, both Class of 1944, established this fund to celebrate their Butler experiences and to honor Mrs. Sellick's late brother, Herman Blomberg, a successful architect who helped design several buildings in Indiana. Because they share a tremendous concern for the well-being of future generations of Butler students, the Sellicks established this scholarship in 1998. The award is given to business students based on financial need and academic ability.

Thomas and Cecelia Slusser Business Scholarship. This annual award is for a deserving young man or woman enrolled in the College of Business who shows an interest in bettering him or herself and who participates in activities that assist others.

Martha H. and W. Thomas Smith Scholarship. This fund was established by the estate of Tom and Martha Smith, both Class of 1946. It provides financial assistance to worthy students majoring in business studies and who have an avowed interest in the free enterprise system.

**Greg Stanley, Class of 1990, and Kim Stanley** 

established this fund to provide a deserving student the opportunity to grow intellectually, socially and physically in the tradition of excellence established by Butler. This award is assigned to the same student(s) who receive the PriceWaterhouseCoopers Scholarship. If that is not possible, the award is to go to a qualified student of accounting.

**Dr. H. Raymond Swenson Endowed Scholarship.** This fund was established in 2003 by Dr. Swenson's family and friends to honor his 35 years of service to Butler, including his tenure as dean of the College of Business. It is designated for a veteran or descendant of a veteran of the U.S. Armed Forces who demonstrates leadership, patriotism and academic excellence. It is based on merit, and preference is given to students enrolled in the College of Business.

Scott Teets Memorial Scholarship. Scott Teets, Butler Class of 1980, went on to earn an M.B.A. from Harvard in 1984 and a law degree from Indiana University School of Law in 1997. After his death in February 2008, his wife Debbi Bullington Teets, Class of 1980, family and friends established this scholarship in his memory. It is open to incoming freshmen with a high school grade point average of 3.25 or better who are Indiana residents. Further preference is given to students who complete their freshman year with a 3.0 grade point average and who live on campus; to business majors; to those with evidence of 12 hours or more of community service and other activities such as band, journalism, speech and debate, Eagle Scouting for boys or Gold Award for girls; and to those with a Greek affiliation. This scholarship is renewable.

#### Robert & Betty Weedon Endowed Scholarship.

The Robert and Betty Weedon Scholarship was established to help worthy and capable students pursue their MBA by assisting them with tuition. Preference is given to College of Business alumni. Recipients should be enrolled with at least 5 hours per semester and maintain an academic achievement of 3.0 or better.

#### Jean T. and Robert E. Wildman Scholarship.

Realizing the great need for scholarship and keenly aware of the substantial benefits to the community of an educated citizenry, these alumni have made it possible to provide financial assistance to students in the College of Business who otherwise would have to forego

a college education. The Wildmans were active in campus life during their Butler years, and remain lifelong advocates for the University. Robert, who died in 2008, served Butler in many ways, including involvement on the alumni board, Commission on the Future of Butler and 18 years on the Board of Trustees. He received the Butler Medal in 1990 and was named trustee emeritus in 1994. The Wildmans have contributed generously to a variety of Butler programs and projects over the years and were co-recipients of the Butler Mortar Award in 1998.

# Accounting

Carl S. Allegretti Scholarship. Established in 1996, this scholarship is awarded to an accounting major. Preference is given to student athletes.

Joseph N. Allegretti Scholarships. These scholarships were established by Joseph N. Allegretti, Class of 1959, to be awarded in both the College of Business and the College of Pharmacy and Health Sciences to students who are residents of Lake or Porter County in Indiana. The COB scholarship is awarded on the basis of merit to a junior (heading into his or her senior year) majoring in accounting or a related field. The student must have a cumulative grade point average of 3.0 and be involved in an extracurricular activity. The COPHS Scholarship is awarded to a deserving fourth-year pharmacy student who has a cumulative 3.0 grade point average and who is involved in an extracurricular activity.

Theodore E. and Elizabeth F. Crook **Scholarship.** This endowed fund was made possible by a bequest from the estates of Elizabeth F. and Theodore E. Crook. Mr. Crook attended Butler in the 1930s and was a guest lecturer at the University in the 1950s. This scholarship is administered by the Office of Financial Aid working with the College of Business scholarship committee. Recipients must be enrolled in the College of Business, have an interest in accounting and/or auditing, and exhibit financial need and good character. It is renewable, and multiple recipients may be selected. The Crooks' daughter, Patricia Crook Bennett, is a 1961 pharmacy graduate and has endowed the Patricia Crook Bennett Scholarship to benefit pharmacy students.

#### Carl H. and Thelma R. Daye Scholarship.

This fund was established by the estate of Carl H. and Thelma R. Daye. Mr. Daye attended Butler on the GI Bill; in 1944, he was badly injured but was the sole survivor of a transport plane crash. He felt his Butler degree in accounting prepared him for his long and distinguished career as director of auditing with the federal government. This award benefits accounting students, with preference given to students who are supporting themselves or who are from a single-parent home.

**Ernst & Young Master of Professional** Accounting Scholarship. This fund provides financial assistance to students enrolled in the master of professional accounting program in the College of Business. Preference is given to a Butler College of Business graduate with an accounting degree; a grade point average of 3.5 in all accounting courses and an overall grade point average of 3.2; commitment to a career in professional services; and demonstrated leadership ability on campus and/or in the community.

#### Hubert F. Fowler Endowed Scholarship.

Hubert Fowler, Class of 1946, distinguished himself as a businessman and public servant during a long and successful career in accounting. Fowler's family and many friends and associates established this scholarship to honor his life. Scholarships are awarded to accounting students based upon need and academic performance.

Joe Marcheggiani/Zotec Partners LLC Scholarship. T. Scott Law, Class of 1985 and president of Zotec Partners LLC, established this scholarship to honor Joe Marcheggiani for his impact on the donor's career and beyond. Professor Marcheggiani taught accounting at Butler from 1981 to 2004, when he was named professor emeritus. Preference is given to sophomore, junior and rising senior accounting majors. If such a student cannot be identified, an award may be made to an incoming freshman.

Rebecca Smith Merlina and Margaret Smith Linden Scholarship. This fund was established by Rebecca Smith Merlina, Class of 1988, and her husband Dominic Merlina, Classes of 1985 and 1986; her sister Margaret Smith Linden and her husband R. Mark Linden, both Class of 1995; and Becky and Meg's parents, J. Stephen and Barbara Smith. It provides

financial assistance to deserving undergraduates, with preference given to female students with a grade point average of 3.5 or higher and who are members of Delta Gamma sorority. Preference is further given to a student majoring in either accounting or pharmacy.

William F. Murphy Endowed Scholarship.

Bill Murphy, Class of 1973, established this fund to benefit students majoring in accounting or finance and to encourage student involvement in community service. Preference is given to a student who is involved in at least 300 hours of community service per year, or a student who works to help pay for his or her college education. Preference is further given to a student with a cumulative grade point average of 3.0 or better. The recipient is encouraged to choose an organization and give several hours of service each week in an effort to give back to the community.

PriceWaterhouseCoopers Endowed Masters of Accounting Scholarship. This is an endowed scholarship for deserving students enrolled in the Master's of accounting program. Preference is given to PWC interns and to students who demonstrate financial need.

# **Economics**

Omar S. and Harriet D. Bruner Jr. Scholarship.

This endowment, established in 1983 by Omar Bruner Jr., Class of 1948 and his late first wife Harriet, provides scholarships to students majoring in business administration, economics or pre-law who need financial assistance.

John Newcomb Wright Memorial Scholarship Fund. John S. Wright, a botanist with Eli Lilly and Company, and Lectania Newcomb Wright, Class of 1892, established this fund in memory of their son, a former Butler student who died at age 25. (There is a scholarship in Lectania Wright's memory as well.) Preference for this scholarship is given to English or economics majors.

# Marketing

Fred & Jane Hurt Annual Scholarship.

Recipients of this scholarship are Butler students who are interested in marketing, with preference given to those who have shown strong leadership ability and notable achievement and promise in marketing studies. The awards are applied toward tuition.

# College of Education Awards

\*The following is a list of the current scholarships. Most are used to underwrite Butler University financial aid programs and cannot be applied for directly unless otherwise indicated.

# General Scholarships

Barnes Family Scholarship in Education.

This scholarship was established by Dorothy K. "Dottie" Barnes, whose late husband Charles A. Barnes was a former member of the Butler Board of Trustees. Mrs. Barnes' daughter, daughter-in-law and granddaughter all earned degrees from the College of Education. This fund benefits students who are enrolled in the college.

Marilyn Glenn Blackmon Minority Scholarship. Marilyn Glenn Blackmon, Class of 1953, M.S. 1959, established this scholarship in 1999 to provide assistance to minority students who have financial need and interest in elementary education. Recipients must also have grade point average of 3.0. "Marilyn had a real appreciation for the need and value of an education," said Neil S. Handley, a friend who helped her create the scholarship. "She persisted and endured difficulties and hardships to secure her sheepskin. This is what motivated her, I think, to assist others who have the drive but perhaps not the means to fulfill a dream."

Eliza A. Blaker Memorial Scholarship. This scholarship honors the life and work of one of Indiana's most forward-looking and energetic educators. Blaker's work began in 1884, when she organized the first kindergarten in Indianapolis. Her efforts rapidly expanded when she established Madame Blaker's Teachers College, the first Normal School for the preparation of teachers in Indiana, which in 1929 merged with the Department of Education at Butler University to become the College of Education. Teachers trained by Blaker formed a society to honor her accomplishments. The scholarship is applied to tuition and/or fees for students enrolled in the College of Education.

Canfield "Bud" Boone Memorial Scholarship for Excellence in Education. Buddy Boone, Class of 1970, was killed in the terrorist attacks on the Pentagon on Sept. 11, 2001. He was promoted to colonel posthumously. His wife Linda Shackleford Boone, Class of 1970 M.S.

Financial Aid

'75 and her family established this scholarship in his memory and honor. It is administered by the financial aid office to benefit an undergraduate student in the College of Education.

#### Anthony and Gertrude Bowen Scholarship.

This fund was established to provide scholarships in the College of Education to recognize outstanding individuals in teacher education. Anthony Bowen, who started one of the first automobile dealerships in Indiana, attended Butler University. His wife, Gertrude Hinson Bowen, was a graduate of Madame Blaker's Teachers College, which merged in 1929 with Butler's education department to become the College of Education. Their foster daughter, Corrine Welling, was a faculty member at Butler for many years; a scholarship in the College of Liberal Arts and Sciences was established in her honor.

Jerry L. Burris Educational Leadership Scholarship. This scholarship provides support to students enrolled in the Experiential Program for Preparing School Principals. (EPPSP). Preference is given to a student who exemplifies the qualities of leadership, community service and professional excellence and who also demonstrates financial need. The student will maintain a 3.0 grade point average.

# Caroldine O. Bussell and Mary Blythe Osborn Memorial Scholarship Fund. A

bequest from the estate of Blythe Osborn M.S. 1943 created this fund in her memory and in memory of her sister Caroldine Osborn Bussell, Class of 1937. The Bussell-Osborn scholarships are awarded annually to undergraduate or graduate students who are preparing for or are advancing their careers in teaching.

#### Comer-Truax Endowed Scholarship.

Established in 1991 through an estate gift from Lewis Truax, this scholarship is for students in the College of Education. It is named for Mr. Truax and his wife, Reva Comer, Class of 1952.

Edith Bigelow Conlin Scholarship. Daniel J. Conlin established this award as a memorial to his wife and her love of education. Edith undertook the study of teacher education and a professional teaching career while sharing family responsibilities. The award is intended to motivate and encourage students who face similar responsibilities in the pursuit of a teaching career. Preference is given to students

enrolled in elementary education and those female students who have dependent children.

### Catherine Hall Naugle Cook Scholarship.

Catherine N. Cook, a 1949 graduate of the College of Education, established this scholarship in loving memory of her family. Preference is given to a woman who is preparing for a teaching career and who is in good standing with the University.

### Alice B. Cunningham Scholarship Fund.

Born in 1902, Miss Cunningham was a 1941 graduate of the College of Education. She established this fund in 1995 to provide scholarships for worthy students in education. The award is intended to encourage students who have demonstrated the capacity to achieve educational and professional goals and the initiative to seek opportunities to further their progress.

Patricia C. Emerson Scholarship in Education. Pat Emerson, Class of 1952, established this scholarship to provide support to a Butler student enrolled in the College of Education.

# Joanna S., Peter John and Carolyn Guss

**Scholarship.** Education was always important to the Guss family; Carolyn and her siblings, Joanna and Peter, lived near the University and attended many events there as they dreamed about one day becoming Butler students. Carolyn and Joanna graduated from Butler in 1929 and 1932, respectively; Joanna received her master's degree in 1933. Carolyn established this scholarship in honor of her departed sister and brother, a World War II veteran who died at a young age in a car accident. The Guss Scholarship is intended to encourage deserving students enrolled in the College of Education who have demonstrated the capacity to achieve education goals and the initiative to seek opportunities to further their progress.

Mabel Garr Helmer Scholarship. Dorothy Garr Helmer, Class of 1928, established this fund in 1990 to honor the memory of her mother, who graduated from Butler in 1930, two years after her daughter. Mabel Helmer was a long-time teacher in the Kokomo and Indianapolis public schools. Scholarships are awarded to encourage deserving students enrolled in the College of Education who have demonstrated the capacity to achieve educational and professional goals and the initiative to seek opportunities to further their progress.

Recipients should also have at least a 3.0 grade point average, be working toward a degree in education and need financial assistance.

Kathleen Brown Hoffa Educational Scholarship. This fund was established as a bequest to the College of Education in 1981 from Kathleen Hoffa, a 1950 education graduate who taught junior high social studies in Marion County for many years. The fund provides undergraduate scholarships in the College of Education.

#### Dr. Daisy Marvel Jones Scholarship.

Recipients are selected on the basis of academic excellence and financial need. First preference is given to candidates from the Metropolitan School District of Pike Township, Marion County, Indiana. Preference is also given to students majoring in mathematics education, including students in the College of Liberal Arts and Sciences who plan to complete certification requirements to teach or who are education majors with a primary emphasis on mathematics.

Vivian L. and Daisy M. Jones Endowed Scholarship. This scholarship is awarded to a graduate student who is pursuing or intends to pursue an advanced degree; who is conducting or intends to conduct a worthwhile academic project or research study; who has achieved previous certification in elementary education or successful teaching experience at the elementary level; and who has formulated a plan of graduate study. The scholarship may be renewed upon application by the student.

Knauff Scholarship in Education. This scholarship was established by Jerry J. and Mitzie Knauff to benefit students who are enrolled in the College of Education. Mr. Knauff attended Butler from fall 1959 to spring 1961; he holds degrees from Southwestern University and the South Texas A&M Law School. Mrs. Knauff is a graduate of Texas Tech University. The fund is administered by the Office of Financial Aid.

Knauff Servant Leadership Award. Jerry J. and Mitzie Knauff, and Marty Moore established this scholarship to recognize students as servant leaders in community service and to promote the ideas of service to the entire educational community. The award benefits full-time students in the College of Education who consistently demonstrate a servant's heart of

leadership. Recipients receive the scholarship in their junior or senior year.

Margaret Cooper Manuzzi Family Elementary Education Scholarship. Darlene C. and Nicola C. Manuzzi, and Timothy B. Manuzzi, Class of 1993, and Margaret Cooper Manuzzi, Class of 1992, established this endowed scholarship to benefit students in the College of Education. Recipients are selected during their sophomore or junior years and must have a minimum 2.75 grade point average, be members of a nationally recognized Greek organization, show financial need and preferably reside in Indiana.

Raymond R. & Margaret E. Miller Scholarship. This fund was established by annuities that Mr. and Mrs. Miller had with the University. Raymond Miller earned a master's degree in education and theology from Butler in 1920. He was a teacher, principal, superintendent, pastor and professor – always with the support of his wife Margaret Threlkeld Miller. This scholarship provides tuition support to deserving students pursuing studies in education or the ministry.

Minority Scholarship Fund for COE. This endowed fund was established in 2006 to provide scholarship support for minority students pursuing a degree in education.

Joseph M. and Edna H. Nygaard Endowed **Scholarship.** This fund was established by Dr. Joseph M. Nygard, former dean of the College of Education, and his late first wife Edna. Nygaard created and was the first director of the Experiential Program for Preparing School Principals (EPPSP). He is widely respected for his expertise in school law and is a recipient of the prestigious Butler Medal. The fund supports the Joseph M. Nygaard Endowed Scholarship and the Joseph M. Nygaard Community Service Award. The scholarship is awarded annually to provide tuition assistance to education students enrolled in EPPSP, and selection is based on recommendations from the College of Education. The Community Service Award is given annually to an education student who has demonstrated scholarship, leadership and service to the University and community.

**Donald Pike & Janet Pike Off Scholarships.** Donald H. Pike loved music, flying and Butler. The 1950 graduate devoted much of his time to the marching band; in fact, his tie to the marching Bulldogs was so strong, he played with the band for a year after graduation and announced the band programs at football games for the next 10 years. The Donald Pike award is given to a student in the College of Business, with preference to a member of the Marching Band. Janet Pike Off, a 1958 education graduate who also received her master's degree from the University, taught elementary school for more than 30 years. While at Butler, she played glockenspiel in the Marching Band, and she remained involved through the Alumni Board and other activities. The Janet Pike Off award is given to an education student, with preference to a member of the Marching Band. This double scholarship fund was established by Mr. Pike's son, Darrell, on behalf of the family in memory of his late father and his aunt.

Helen M. Off Scholarship. Helen Off graduated from Madame Blaker's Teachers College, which in 1929 merged with the Department of Education at Butler to become the College of Education. Based on her deep interest in the education of young people and her love for Butler University, she endowed a scholarship for an outstanding education student who demonstrates need, merit and leadership qualities, with preference given to primary education majors.

Mildred Orr Scholarship. A 1931 Butler graduate of the College of Education, Mildred Bokerman Orr was an educator in Indianapolis for 42 years. She was honored many times by various professional education organizations and associations and gave countless hours in volunteer service to her profession. Many of her articles on teaching were published in the National Quarterly Journal of Educational Law and Administration. This scholarship, established through her estate, is for students enrolled in the College of Education who demonstrate financial need.

# James H. Otto Science Education Scholarship.

James H. Otto, a nationally known figure in biology education textbooks, received a Butler bachelor's degree in 1934, master's degree in 1938 and honorary doctorate in 1968. His wife Eloise Byrkit Otto, Class of 1934, established this scholarship in his memory after he passed away in 1972. In 1973, Mr. Otto received the Butler Medal posthumously. This is an

incentive scholarship awarded to an outstanding biology or science teaching major.

Waneta Rice Memorial Scholarship. This fund was established in 1989 through a gift from the estate of Waneta Rice, who received a bachelor's degree in elementary education from Butler in 1958 at the age of 58. It provides financial assistance for female students who wish to major in education and who demonstrate financial need. The donor retired from teaching in 1964 and passed away in 1988.

Mary E. & Elton T. Ridley Endowed Scholarship. This scholarship provides support to an undergraduate or master's degree student or students majoring in elementary education. Preference is given to sophomore, junior, senior or master's students who maintain a 3.0 grade point average in their major and who are residents of Indiana. Consideration is given to students with financial need.

**Summers Scholarship in Education.** This fund was created in 2006 by Mary Jane Shafer Summers, Class of 1938, to assist students wishing to pursue a career in education.

Dr. Emma Lou Thornbrough Shortridge Scholarship. Inspired by the research and teaching of Dr. Thornbrough, Dr. Paul A. Hanson honored her by creating this scholarship to support Butler minority students from Shortridge High School in Indianapolis. Professor Thornbrough was herself a Shortridge graduate and during her career on the Butler faculty from 1946 to 1983, a pioneer in the writing of African-American history. Recipients should be Shortridge graduates who have completed a strong college preparatory curriculum and who are enrolled in liberal arts or education. The scholarship is renewable.

Lettie Page Trefz Scholarship. To honor the memory of Letti Page Trefz, the Alpha Chapter of Sigma Delta Pi fraternity established this fund in 1986 with a bequest that Lettie Trefz left to the fraternity. She was influential in the education community and devoted many years as an educator in the Indianapolis Public Schools. Scholarships are awarded to undergraduate students who rank in the top 25 percent of their high school graduating classes and are pursuing a degree in education at Butler.

Jean W. Whitcraft Endowed Scholarship.

Alberta Wells established this scholarship in memory of her sister, Jean Whitcraft, an English major in the Class of 1944. Mrs. Whitcraft devoted her career to teaching and retired as head of the English department at Shortridge High School in Indianapolis. This scholarship is to go to a Butler student or students who have expressed an interest in teaching high school English.

Eva Young Wiles Scholarship. Eva Young Wiles received a Butler bachelor's degree in 1926 and a master's degree in 1935. She then served as an educator and administrator in the Indianapolis Public Schools for 45 years. Her professional affiliations throughout her lifetime reflected her strong commitment to elementary education. This fund was established in 1981 through a bequest from her estate. These awards of graduate tuition are restricted to females pursuing graduate degrees in the College of Education.

### Etta A. and Frank C. Wright Scholarship.

As an expression of appreciation for her good experiences at Butler and in memory of her husband, Etta Wright, Class of 1943, established this fund in 1985 with the hope it would help others find the satisfaction in education that she did. She began her teaching career at age 18 in a one-room rural school in Baker, Montana. When she retired at age 70, she was regarded as a master teacher, particularly skilled in storytelling and reading. She loved teaching and felt there was no better way to contribute to one's community and to society. A scholarship is awarded annually to a deserving student majoring in primary education.

Martha Zetzl Memorial Award for Student Teaching. This scholarship was established by the Zetzl family and Butler University to honor the memory of Martha Zetzl, Class of 1968 M.S. '74, an associate professor in the College of Education who devoted her life to teaching and learning. This award is for a student who demonstrates those qualities Dr. Zetzl demonstrated in her own professional life: enthusiasm for teaching, care and concern for students, love of children's literature, and commitment to service and scholarship. This award is to be used during the senior year student-teaching experience, and recipient(s) are selected by a faculty committee in the College of Education.

# Counseling

**Arthur F. Krueger Scholarship.** Mr. Krueger received his master of arts degree from the College of Education in 1945. This fund was established through the College of Education to honor his memory. Preference is given to students who are studying to be guidance counselors.

# Jordan College of Fine Arts awards

\*The following is a list of the current scholarships. Most are used to underwrite Butler University financial aid programs and cannot be applied for directly unless otherwise indicated.

#### Dance

Peggy Dorsey Memorial Ballet Scholarship. Scholarships are awarded to students of dance in Butler's collegiate and special instruction divisions (Jordan Academy of Dance). Peggy Dorsey, a native of Stockholm, Sweden, and a 30-year member of Butler's dance faculty, died in 1984. Before coming to Butler, she danced professionally throughout England and Scotland. The fund was established with memorial gifts from friends and family, and scholarships are awarded in even-numbered years based on auditions.

Eileen Poston Dance Scholarship. A bequest from the estate of Eileen Poston Dollens, Class of 1960, provides assistance to dance majors in the Jordan College of Fine Arts. The highly respected dancer performed with the San Francisco Opera Ballet and the Chicago Opera Ballet before joining the faculty of the Jordan Conservatory (later College) of Music, where she developed a course of instruction in dance.

**Margaret Sear Rosenblith Memorial Scholarship.** This award was established in memory

of Margaret Sear Rosenblith, a distinguished Butler University ballet faculty member in both the collegiate Department of Dance and the Jordan College Special Instruction Division in Dance (now the Jordan Academy of Dance). Funds for the awards are generated by donations from former students and friends and proceeds from an annual benefit concert presented by her husband Eric Rosenblith and friends. This is a biennial dance award given by JCFA. Competition is held during odd-numbered

years, and two awards are given to outstanding dancers in both a junior division (age 14 through high school junior) and senior division (high school senior through age 21). The award is intended to support further studies in dance.

Lynnette Jordan Schisla Scholarship in

Dance. This scholarship honors Lynnette Jordan Schisla, Class of 1960 M.A. '72. She taught in her own studio for 25 years before joining the faculty at Ball State University, when she had great impact on the dance program. Recipients are dance majors in the Jordan College of Fine Arts, with preference given to upperclass students with wide-ranging interests in the performing arts, rather than a particular discipline within dance.

### Media arts

Howard C. Caldwell Jr. Scholarship. Local television station WRTV Channel 6 established this scholarship to honor anchorman Howard Caldwell, Class of 1950. Mr. Caldwell is a former member of Butler's Board of Trustees and comes from a long line of Butler alumni. The scholarship is awarded to rising members of the junior and senior classes who demonstrate high promise in broadcast journalism. Selection is made by the head of the Department of Media Arts and other members of the department as appropriate. Financial need is a consideration.

Jerry Chapman Memorial Scholarship. This fund was established by friends and family of Jerry Chapman, Class of 1950, for junior or senior year media arts majors. Financial need is a consideration. Mr. Chapman enjoyed a distinguished career in broadcasting and community service. He assisted Butler in developing its television curriculum.

Dr. Kenneth Creech Scholarship. Scott Bridge, Class of 1982 M.S. '91, and his wife Maryann Bridge established this fund to honor Kenneth Creech, chair of the media arts department and holder of the Fairbanks Chair in Communications at Butler. Preference is given to sophomores, juniors or seniors majoring in media arts who have a grade point average of 3.0 or better.

William E. Fagan Scholarship. Established by Children's Television International, the Fagan Award honors the late William E. Fagan, an Indiana native, Butler radio and television

graduate, and pioneer in educational broadcasting. It is awarded to an outstanding junior media arts major who should maintain a 3.3 grade point average in the major and a cumulative grade point average of 3.0.

### Marthabel Geisler Memorial Scholarship.

This scholarship is for a student in his or her junior or senior year studying in the Department of Media Arts. The recipient will be a resident of Indiana who has demonstrated an active involvement in the media arts. Candidates are required to write an essay on current events or their career goals. Furthermore, the recipient will successfully complete an internship in either public radio or television.

Charles and Ann Wagner Harper Memorial **Scholarship.** This fund was established by Ann Wagner Harper, Class of 1963 M.S. '68, a radio and television pioneer in Indianapolis. After a 25-year career in radio-TV and teaching, she joined the Butler faculty as professor of radio-TV, and later served as chair of the department and station manager for WAJC-FM. Her late husband Charles Harper was instrumental in creating Central Purchasing and Stores at Butler. This scholarship benefits students majoring in media arts or communication studies with preference given to those who are academically qualified or are in financial need.

James Phillippe Scholarship. James R. "Jim" Phillippe was a highly regarded member of the Butler faculty from 1946 to 1986, chairing first the drama department and then the radio and television department. When he died in 2003, his daughter Jamie Phillippe, Class of 1973, led the effort to create this scholarship in his memory. Recipients should be pursuing a degree in media arts. Preference is given to a second-semester freshman based on an interview/audition screening process.

Frank O. Sharp Memorial Scholarship. Frank Sharp, a native of Anderson, Ind., was instrumental in founding Indiana's first television station. The combined efforts and resources of a number of individuals have made this memorial scholarship available to media arts majors who have a financial need and who have distinguished themselves scholastically.

Matt White Scholarship. This scholarship resulted from the efforts of many friends of Matt White, Class of 1989, who was diagnosed with amyotrophic lateral sclerosis (Lou Gerig's disease) in 2000. Fellow media arts majors,

Delta Tau Delta fraternity brothers, members of the track and cross country teams, and others wanted to honor Matt's enthusiasm and positive attitude. This scholarship provides support to media arts majors who express interest in broadcasting. If possible, recipients should also show an interest and achievement in Butler athletics, with further preference given to participants in track or cross country.

### Music

Mildred Allen Memorial Endowed Piano **Scholarship.** Mildred Allen established this scholarship through a gift from her estate. Recipients will be selected by the dean of the Jordan College of Fine Arts based on merit and financial need. Recipients must be music majors whose principal instrument is the piano. The recipient or recipients will be asked to perform at a meeting of the Irvington Music Study Club as arranged by the dean.

Matthew D. Boughton Memorial Music Scholarship Fund. Family and friends of Matthew D. Boughton endowed a scholarship to honor his memory. Matt Boughton was a 1979 alumnus of the music program in the Jordan College of Fine Arts and successfully pursued his music and his dreams with verve and commitment. This award, to benefit worthy and capable music students during their junior and senior years, is intended to encourage students who have demonstrated the capacity to achieve educational and professional goals. The award is based on financial need and academic ability.

Frances Brockman Music Scholarship. This fund was established by a bequest from Frances Brockman, Class of 1951. While a chemistry major at Butler, she played the trumpet in the Butler Marching Band. This scholarship benefits music majors in the Jordan College of Fine Arts. The same bequest also established the Frances A. Brockman Chemistry scholarship in the College of Liberal Arts and Sciences.

Eddy and Beth Brown Music Fund. A bequest from the estate of Beth Lydy Brown, opera singer and wife of Eddy Brown, along with gifts in memory of Eddy Brown, provides financial assistance to young violinists and singers. Mr. Brown became the Jordan College of Fine Arts' first artist-in-residence in 1971 and was known as one of America's greatest violinists. He made his first concert appearance at age 5. Awards are to be made to artists of exceptional ability, merit and need.

Sylvia Feibelman Budd and Clarence Budd Scholarship Fund. The estates of Sylvia and Clarence Budd endowed this scholarship in memory of his brother, Lester, Class of 1972. Scholarships are awarded to Jordan College of Fine Arts undergraduates in the Department of Music. Recipients must be academically gifted and show financial need.

Ruth E. Comer Music Scholarship. This scholarship was established by a bequest from the estate of Ruth E. Comer, a 1932 graduate of Butler University's School of Music. She went on to a career as a professional musician with several national orchestras. The fund was established to assist deserving and qualified music students.

May Dorsey Music Scholarship. This music scholarship was established in 1989 through a bequest from the estate of May Dorsey, a music performance major at Butler who received her master's degree in 1937.

Iva Eidson Duckwall Memorial Scholarship.

Iva Duckwall was a faculty member of the Jordan Conservatory of Music, which later became part of Butler's Jordan College of Fine Arts. She was also the mother of Ruth Duckwall Rasmussen Williams, a Butler alumna who endowed scholarships at the University in honor of several members of her family. This scholarship provides an award to a top piano student.

Paul Duckwall Memorial Scholarship. Mr. Duckwall served as a clerk on post office mail cars for 43 years. He was the husband of Iva Eidson Duckwall and father of Ruth Duckwall Rasmussen Williams, a Butler alumna who endowed scholarships in memory of several members of her family. This scholarship provides an award to a top violin student in the Jordan College of Fine Arts.

Francis E. Fitzgerald Flutist Scholarship. Francis Fitzgerald, a former flute instructor at

Butler, endowed this scholarship in 2000 for a performing arts major whose primary instrument is the flute and who intends to pursue a career as a performing artist. The scholarship is to be administered by the office of the dean of the Jordan College of Fine Arts. Mr. Fitzgerald also funded the Alma Meyer Fitzgerald Memorial Theatre Award in memory of his wife.

Spencer Fox Memorial Scholarship. A group of close friends and family of Spencer Fox, Class of 1987, began this fund in his honor and memory. A source of inspiration to all around him as he fought cystic fibrosis, Spencer was a saxophonist with the Butler marching and concert bands as well as historian of the honorary band fraternity, Kappa Kappa Psi. The scholarship is awarded annually to a member of the Butler University Marching Band.

### Jeanice Gartin Memorial Scholarship.

Established by family and friends in memory of Jeanice Gartin, Class of 1978, this award is made annually to a member of the Butler University Marching Band who shows qualities of service, spirit and comradeship.

Charles Geyer Music Scholarship. According to Mr. Geyer's will, this scholarship is to be used to "help deserving Hoosier students majoring in public school music in the school of music" (JCFA). It appears that he wanted to assist students who intended to teach music in the Indianapolis Public Schools, as he did. Mr. Geyer, Class of 1930 and master of music 1943, was a charter member of Phi Mu Alpha Sinfonia at Butler. He was still giving private music lessons "on all instruments" into his mid-80s, according to his wife Leone Hankins Geyer, who received a bachelor's degree in 1939 and master's degree in 1947, both from the Butler College of Education. Charles Geyer died in October 1990; Leone died in October 2002.

#### Richard C. Gigax Memorial Scholarship.

Family and friends established this scholarship in memory of Richard Gigax, the owner of Meridian Music, a piano dealership in Indianapolis. He also sponsored many Jordan College of Fine Arts events. The recipient should be an undergraduate piano student of merit who demonstrates financial need.

#### Alice Young Holsclaw Vocal Scholarship.

This scholarship endowed by Alice Holsclaw is designated for talented and deserving students of voice in the Jordan College of Fine Arts. Mrs. Holsclaw, Class of 1926, was a member of Sigma Alpha Iota, an international music fraternity, and a founding member of the Delta Gamma sorority chapter at Butler. She was also active in community service and performed as a singer throughout her life. Sophomore, junior and senior applicants must have a cumulative grade point average of 2.5.

Lucile Jones Scholarship. Lucile Jones had been a distinguished member of the Jordan College of Fine Arts faculty for 23 years when she retired in 1976. In her honor, friends and associates established the Lucile Jones Fund to provide scholarships for Butler music students. Jones died at age 74 in 1985.

#### Arthur W. Lamb Student Assistance Fund.

The estate of Arthur W. Lamb funded this scholarship for deserving and talented students of vocal or instrumental music. Mr. Lamb was a self-employed real estate broker in Indianapolis for 31 years.

Rosemary Lang Honor Award. The award is endowed by a gift from the family of Rosemary Lang, a valued faculty member in the Jordan College of Fine Arts. She received her bachelor's degree in music education in 1947 and her master of music degree in 1952. One or more students in woodwind study will be honored annually. The undergraduate students may be third- or fourth-year, full-time students and should have a minimum grade point average of 2.5 and demonstrate financial need.

#### Elma Jackson Lemley Music Scholarship.

Elma Jackson Lemley was an accomplished violinist and former student in the Jordan College of Fine Arts who contributed to the cultural and civic life of Indianapolis. Her husband Fred C. Lemley, who attended Butler, designated scholarships to be presented to two young women who are violin students.

#### Sophia Ann Rector Magruder Scholarship.

This endowment honors the memory of Sophia Ann Rector Magruder, a student of the marimba at Jordan Conservatory from 1941 to 1942. She also studied with private instructors in New York City. She later became accomplished on the vibes and performed throughout the United States. The recipient should take a serious interest in becoming not only a technically good musician but also one with the ability to play with feeling. Recipients shall be female students studying instrumental music in Jordan College of Fine Arts with preference given to marimba or vibes players who have demonstrated the capacity to achieve educational and professional goals and the initiative to seek opportunities to further their progress.

**Timothy Bryan Manuzzi Family Music Education Scholarship.** Darlene C. and
Nicola C. Manuzzi and Timothy B. Manuzzi,

Class of 1993, and Margaret Cooper Manuzzi, Class of 1992, established this endowed scholarship to benefit JCFA students. Recipients will be selected during their sophomore or junior years. Preference is given to students who have a 2.75 grade point average, are members of a nationally recognized Greek organization, show financial need, reside in Indiana and are members of the Butler University Symphonic Wind Ensemble.

#### Martin Marks Endowed Music Scholarship.

This scholarship was established by Jeffrey Marks, Class of 1974, and Christina Stewart Marks, Class of 1975, to honor Jeffrey's late father. Music educator Martin S. Marks, Class of 1952 and M.M. '54, was a professor of music at Butler for 24 years. The scholarship benefits students in the Jordan College of Fine Arts, with preference given to a music student or students who win JCFA's concerto competition to play with the Butler Symphony Orchestra. If the competition is not held, preference is given to a student majoring in piano, and further preference is given to students from Indiana.

Gloria H. McDaniel Memorial Performance Scholarship in Harp. This award is given through the auspices of Sigma Alpha Iota. The award was established by Gloria's husband Dr. Edwin McDaniel to honor his wife. It is based on an audition. Recipients should be sophomores or higher, have a grade point average of at least 2.5, and be students of the harp who demonstrate talent and potential for exemplary achievement. If no harp student qualifies, the award may be given to another qualified music student.

#### Julie Moser Memorial Endowed Scholarship.

The family and friends of Julie Moser established this scholarship in 1999. Ms. Moser, a vibrant cabaret vocalist, was a 1980 graduate of the Jordan College of Fine Arts who lost her life in an airplane tragedy in 1998. Recipients are selected by the Department of Music with input from the Office of Financial Aid. Preference is given to voice majors, and the scholarship is awarded annually and may be renewed.

Mulholland Choral Scholarship. James Q. Mulholland, one of the most published, performed and commissioned composer/ arrangers of his generation, has provided 43 years of service to Butler. He has served as director

of choral activities and a faculty member for vocal music, music history and composition. This scholarship is awarded to upper-division students in vocal music with preference given to male voices. Recipients are recommended by the music department chair and the director of choral activities in cooperation with the financial aid office. The scholarship may be used for study abroad opportunities.

Edith C. Owings Scholarship in Music. This fund was established through the Frank N. Owings Family Foundation, Inc. to provide financial assistance to deserving music students focusing on performance or composition in the Jordan College of Fine Arts. Recipients must demonstrate financial need. It honors Edith Seitz Owings, a tireless civic volunteer and community leader.

Frank N. & Edith C. Owings Scholarship in Voice. This fund was established through the Frank N. Owings Family Foundation, Inc. to provide financial assistance to deserving music students focusing on voice in the Jordan College of Fine Arts. Recipients must be entering their senior year and must demonstrate financial need. The Owings' son, Frank Owings Jr., earned a master of science degree from Butler, and his wife Patte is a member of the Class of 1982.

#### Mary F. Pearl Memorial Scholarship.

Endowed through the estate of Indianapolis artist Mary Fiel Pearl, this scholarship goes to JCFA students who "compose the best musical composition or compositions in the field of religious choral music or symphonic music principally, but not to the complete exclusion of what is known as 'Bluegrass.'"

# Maurice and Rosalind Pickett Scholarship.

The Picketts, aficionados and collectors of classical music, established this scholarship through an estate gift in 2000, explaining, "We have both been interested in the beauty of the organ. We're afraid it's dying out, and maybe this will help. We're interested in preserving the great organ music of composers like Johann Sebastian Bach." The recipient is selected by the dean of the Jordan College of Fine Arts in consultation with the faculty. The recipient must be a full-time student of the organ in his or her third or fourth year of study, and the award is to be made on the basis of musical achievement and financial need. If no student

of organ qualifies, the scholarship may be awarded to a qualified music major.

Presser Foundation Scholarship. This prestigious award is given solely on the basis of merit to an outstanding music major at or after the end of the student's junior year. The Presser Foundation Scholarship, awarded at Butler since the late 1950s, has been made possible by grants from the Presser Foundation, established by the late Theodore Presser of Pennsylvania.

#### Mary Frances Newhouse Roush Scholarship.

This award was established by the late Robert Roush, Class of 1947 and husband of Mary Frances Newhouse Roush, who graduated from Jordan College in 1939. The award is presented annually to one or more full-time junior or senior violin students. Mrs. Roush was active in community service and in 1976 received the Wilking Distinguished Music Award for her contributions to Indiana as a musician and educator. Recipients should have a cumulative grade point average of at least 2.5, have financial need and demonstrate service to the college in the string area.

#### Saenger-Chor Internship in Vocal Music.

Through this internship, students majoring in vocal music—vocal performance, choral music education or arts administration in applied vocal music-gain hands-on experience with the Indianapolis Saenger-Chor. The Sanger-Chor was one of many organizations established in the city's German-American community to sustain German language and culture. Preference is given to undergraduates entering the junior or senior year and who are residents of Central Indiana counties.

William and Helen Speicher Outstanding Music Performance Award. This endowed award was established in 1990 by Butler graduates William S. Speicher, Class of 1935, Helen Starost Speicher, Class of 1941, M.S. 1948, to encourage students of piano and/or strings who have demonstrated artistic talent and the potential for exemplary achievement.

Anne Starost Memorial Music Award. This award in memory of Anne Starost, a dedicated volunteer and accomplished musician, is endowed by her family — Lillian Starost and William S. Starost, Class of 1935, and Helen Starost-Speicher, Class of 1941, M.S. 1948. The recipient is selected on the basis of

demonstrated artistic talent and potential for exemplary achievement. Memorization skills will be considered, and the scholarship may be used for undergraduate or graduate tuition.

Starost-Speicher Music Memorial Award.

William Speicher, Class of 1935, and Helen Starost Speicher, Class of 1941, M.S. 1948 established this fund in memory of Helen's father John Charles Starost to aid worthy and capable students in the Jordan College of Fine Arts. Recipients are full-time undergraduate students with at least a 2.5 grade point average. They are selected on the basis of demonstrated artistic talent and memorization skills. Applicants must be Sigma Alpha Iota members in good standing.

John and Martha Herrforth Starr Scholarship.

Martha Herrforth Starr, a 1933 graduate of the Arthur Jordan Conservatory of Music, created this scholarship in memory of her husband John, a long-time employee of the Indianapolis Water Company. The award is intended to encourage students who have demonstrated the capacity to achieve educational and professional goals and the initiative to seek opportunities to further their progress. Recipients are to be selected on the basis of financial need. Preference is given to music majors who attended Emmerich Manual High School in Indianapolis; secondary preference is given to students who attended Indianapolis Public Schools. Recipients must maintain a 3.0 grade point average and may renew as long as they enrolled as full-time students. One or more recipients may be selected with the intent that each receive at least \$1,000.

Marilyn Redinger Van Sickle Vocal Music **Scholarship.** This endowed scholarship is from the estate of Marilyn Van Sickle Butler, Class of 1942, in memory of Ivan Roy Redinger, Hazel Reder Redinger and Marcia Redinger Crowley. It is awarded through the Jordan College of Fine Arts.

Ruth Rasmussen Williams Memorial Scholarship. John Antonelli, friend and neighbor of the late Ruth Williams, established this endowed scholarship in 2000 in her memory and honor to commemorate her love of the arts and loyal support of her alma mater. It is awarded to scholastically top students in the Jordan College of Fine Arts with preference given to vocal studies majors. Mrs. Williams,

Class of 1939, established several scholarships at Butler in honor of her family.

Jackson Wiley Scholarship. This award honors Jackson Wiley, who served as conductor of the Butler Symphony Orchestra from 1969 to 1991 and who was an ambassador for Butler through the Greater Indianapolis Youth Symphony Orchestra. Recipients are recommended by the chair of the School of Music in consultation with the director of the Butler Symphony and in cooperation with the Financial Aid Office. Preference is given to upperclass students pursuing an undergraduate degree in music. Students must demonstrate an interest in and participate in the Butler Symphony Orchestra.

Woman's Department Club Music Merit Award. The Woman's Department Club of Indianapolis established a music merit award in 1978 to benefit full-time students in the Jordan College of Fine Arts. The Club and other donors have since supported this fund, which is used to present annual merit awards in School of Music through the Jordan College of Fine Arts.

#### Theatre

Alma Meyer Fitzgerald Memorial Theatre

Award. Francis Fitzgerald established this award in memory of his wife, who received her degree in theatre from Butler in 1936. Francis, also Class of 1936, and Alma were both instructors in the Jordan College of Fine Arts. Alma was active in theatre throughout the Indianapolis community. The couple was married for more than 50 years before her death in 1994. Recipients are selected on the basis of ability and achievement in the Department of Theatre during the junior year; the award will be given during the senior year.

Daniel C. Warrick Outstanding Theatre Major Award. Family and friends of Dr. Daniel C. Warrick have established this award in his memory. Warrick was an associate professor and chairman of the Department of Theatre at the time of his death, in February 1997. Dan believed that the purpose of art was to inspire people to make reasoned moral choices and take appropriate action. The recipient(s) will be selected on a basis of exemplary service to the department of theatre and will have shown cooperation, productivity and initiative as well as qualities of dedication, leadership, and humanity through their junior and senior years.

The cash award is to be used to help graduating seniors establish themselves in an arts profession after graduation from Butler, but not to be used for graduate study.

# College of Pharmacy and Health Sciences awards

\*The following is a list of the current scholarships. Most are used to underwrite Butler University financial aid programs and cannot be applied for directly unless otherwise indicated.

Joseph N. Allegretti Scholarships. Joseph N. Allegretti, Class of 1959, established these scholarship to be awarded in both the College of Business and the College of Pharmacy and Health Sciences. The COB scholarship is awarded on the basis of merit to a junior majoring in accounting or a related field who is a resident of Lake or Porter County in Indiana. In addition, the student must have a cumulative grade point average of 3.0 and be involved in an extracurricular activity. The Pharmacy scholarship is awarded to a deserving pharmacy major who is a resident of Lake or Porter County Indiana (preferably Lake County) who is a current fourth-year pharmacy student with a cumulative 3.0 grade point average who is involved in some type of extracurricular activity.

D. J. Angus Scientech Educational Foundation **Scholarship.** The primary criterion for this award is the greatest improvement in grade point average from the previous year by a science and/or a pharmacy student. The recipient is to be an undergraduate who has displayed a good citizenship record.

Dr. Jennifer L. Ash Memorial Endowed **Scholarship.** The family of Jennifer Ash, Class of 2003, established this scholarship in her memory, and many more friends contributed to it. After a residency at Clarian Hospital and a faculty position at Rutgers University, Dr. Ash returned to Butler as a faculty member. She died in 2008 as the result of a snowboarding accident. Preference is given to a P4 (sixth-year) student who aspires to a career in clinical pharmacy and/or pharmacy education. Further preference is given to a student who exhibits the personal and professional traits that made Dr. Ash greatly respected for her teaching skills, high standards, exuberance for life, allegiance to friends and dedication to her patients.

Patricia Ann Crook Bennett Scholarship. Ms. Bennett established this scholarship in 2000 with a bequest she received from the estate of her mother Elizabeth F. Crook. It is reserved for a P1 (third year) or P2 (fourth year) student studying to be a registered pharmacist in the College of Pharmacy and Health Sciences who has a minimum 3.2 to 3.5 grade point average. One or more scholarships may be awarded annually, and the scholarship is renewable.

#### Francis A. Britt, Sr. Memorial Scholarship.

This scholarship, established in the 1960s, is given to two students from the Evansville area (Posey, Vanderburgh, Warrick, Spencer, Gibson or Davies counties). Originally known as the Southwestern Indiana Pharmaceutical Association Award, the name was changed in 1981 to the Francis A Britt, Sr. Memorial Scholarship Fund to honor the 1916 graduate of the Indiana College of Pharmacy (now Butler's College of Pharmacy and Health Sciences). Mr. Britt was born in 1895 and started his pharmacy career by working in a drugstore at the age of 10. From 1918 to 1959, he owned and operated three pharmacies in Evansville. After selling the last one in 1959, he worked for several other pharmacies in the Evansville area until two weeks before his death in 1980 at age 85. He was one of three pharmacists chosen in 1940 to revise the Pharmacopoeia.

# Ralph E. & June W. Brooks Scholarship.

Established in 1999 by the family of Ralph and June Brooks, this fund assists pharmacy students based on financial need and academic achievement as evidenced by a grade point average of 3.0 or better. Recipients must also be U.S. citizens and residents of Indiana. The scholarship is renewable and may be given to a fourth- or sixth-year student.

#### COPHS Centennial Legacy Scholarship.

The College of Pharmacy and Health Sciences Centennial Legacy Scholarship was established in fiscal year 2005 to commemorate the 100year anniversary of pharmacy education in central Indiana. It was supported by more than 120 alumni and friends of the college, including both individuals and companies. It benefits students enrolled in the professional program (P1, P2, P3, P4) with preference given to students who have a parent, sibling or grandparent who is a graduate of Butler University.

Dean Pat Chase Scholarship. Patricia Chase was appointed dean of the College of Pharmacy and Health Sciences in 2000 and to the Edward & Margaret Rowe Chair for the Dean of COPHS in 2004. James and Patricia Chase, with assistance fro friends and colleagues, established this scholarship for students enrolled in the professional pharmacy and physician's assistant programs (P3, P4, PA1 and PA2).

Dennis M. & Ellen A. Clark Endowed **Scholarship.** Dennis Clark earned an M.B.A. from Butler University in 1977, and his wife Ellen is a longtime staff member who currently serves as executive assistant to the president. The Clarks created this scholarship to provide financial assistance to deserving students enrolled in the Pharm.D./M.B.A. program. Preference is given to a P1 (third-year) or P2 (fourth-year) student who is from the state of Indiana and who has a cumulative grade point average of 3.0 or better.

Community Health Network Pharmacy Scholarship. Community Hospitals of Indiana created this scholarship to provide financial assistance to full-time students majoring in pharmacy in the College of Pharmacy and Health Sciences (P2, P3 or P4). The award takes into account grades, community service, extracurricular leadership and work experience. Preference is given to students with hospital work experience or career goals that include the hospital practice environment.

CVS Charitable Trust Scholarship. CVS has been a strong partner in helping to build the excellent reputation of the College of Pharmacy and Health Sciences. These awards provide ongoing financial support to current COPHS students.

# Delbauve Memorial Scholarship in Pharmacy.

J. Richard Delbauve made a bequest to Butler to honor his parents, Mr. and Mrs. John H. Delbauve. Funds are used to provide scholarships in the College of Pharmacy and Health Sciences.

#### Dale and Mary Doerr Memorial Scholarship.

Dr. Dale Doerr served the University for 31 years in various capacities, including professor and dean in the College of Pharmacy. He invented pill coating for medical tablets and held the first two U.S. patents ever issued for the process. Dr. Doerr and his wife Mary were known for working as a team, and this scholarship was created to recognize their

contributions to Butler. The recipient must be a sophomore or junior pharmacy major.

Dr. William J. Fleming Pharmacy Memorial Scholarship. Several members of Dr. Fleming's family worked diligently to establish a meaningful memorial fund in his name so that assistance can be given to undergraduate pharmacy students of superior ability and character. The family's intent was to develop the best attainable education for the profession of pharmacy in which Dr. Fleming was so intensely interested, to honor the Butler education he enjoyed and to keep his name alive. Dr. Fleming received his bachelor of science degree from Butler in 1953; his wife, Dorothea, also Class of 1953, received her M.S. from Butler in 1967.

Charles V. and Madonna M. Flemming Pharmacy Scholarship. College of Pharmacy and Health Sciences Board of Visitors member Charles V. Flemming and his wife Madonna established this award in 1999 to be given annually to COPHS students. Mr. Flemming received his master's degree in industrial pharmacy from Butler in 1964.

Edward and Maxine Gee Scholarship. This endowed scholarship is awarded to a deserving pharmacy student. Mr. Gee received his pharmacy degree from Butler in 1931 and was president of the Indianapolis Association of Retail Druggists.

James W. Gibson Memorial Endowed Scholarship. Hazel G. Gibson, a friend of Butler University, established this fund in memory of her son, who died in 2002 at age 55. Jim Gibson was an avid golfer who attended Butler before graduating from Franklin College. This fund provides financial assistance to Butler students who play on the men's or women's golf teams and who maintain a 3.0 grade point average. If a qualified golf team member cannot be identified, the scholarship may support a pharmacy major in the College of Pharmacy and Health Sciences.

William R. Gibson Memorial Scholarship Fund. Hazel G. Gibson, a friend of Butler University, established this endowed scholarship in memory of her husband, William R. Gibson, Class of 1948. He was a pharmacologist with Eli Lilly and Company for 35 years. Throughout his life, he was a loyal Butler supporter and

taught graduate-level courses at the University. The scholarship is awarded to pharmacy students based on academic performance and financial need. It is renewable.

Paul A. Holsapple Memorial Scholarship. After Mr. Holsapple's death in 1991, his wife E.

Jane Holsapple established this scholarship in recognition of his commitment to education. He attended the Indiana College of Pharmacy, forerunner of Butler's College of Pharmacy, and worked as a sales representative for Eli Lilly and Company for 34 years. Holsapple Scholarships are intended to encourage students who have demonstrated the capacity to achieve educational and professional goals and the initiative to seek opportunities to further their progress. They are awarded to pharmacy students in their third year or later, with preference given to students from Indianapolis and Marion County. One or more scholarships may be awarded annually and may be renewed.

James M. & Cheryl L. Hussey Endowed **Scholarship.** This scholarship provides financial assistance to deserving Butler students in the College of Pharmacy and Health Sciences, with preference given to those in their P4 (sixth) year. Preference will be given to a student who plans to pursue a residency program after graduation.

Virginia Mae McIntire Kirkpatrick Memorial Scholarship. Mr. Kirkpatrick established this endowed fund as a memorial to his wife, Class of 1926. He also wished to help maintain the superiority of Butler's College of Pharmacy and Health Sciences. The fund provides scholarships for students majoring in pharmacy.

A.J.W. LeBien Scholarship Fund. This scholarship was created as a tribute to A.J.W. LeBien by his children, all of whom are Butler graduates. Mr. LeBien's career exemplified the highest standards of integrity and service in the pharmaceutical industry. In his personal and business life, he was respected by all who knew him. This award is intended to encourage students who have demonstrated the capacity to achieve educational and professional goals and the initiative to seek opportunities to further their progress.

Lobraico Family Endowed Scholarship. This fund was established in memory of alumnus Frank Lobraico, former owner of Clifton

Pharmacy and a dedicated servant to and advocate of his profession. The scholarship, based on merit, is awarded to a third-year pharmacy student who is interested in pursuing a career in community pharmacy.

Charles W. Magness Endowed Scholarship. Endowed by a gift from the estate of Charles Magness, this scholarship is administered by the Office of Financial Aid. Preference is given to students in the College of Pharmacy and Health Sciences.

Meijer Inc. Endowed Pharmacy Scholarship. Through the Meijer Inc. Endowed Pharmacy Scholarship Fund, a student in the College of Pharmacy and Health Sciences will be recognized with a scholarship based on financial need and the student's interest in community pharmacy practice.

Rebecca Smith Merlina and Margaret Smith Linden Scholarship. This fund was established by Rebecca Smith Merlina, Class of 1988, and her husband Dominic Merlina, Classes of 1985 and 1986; her sister Margaret Smith Linden and her husband R. Mark Linden, both Class of 1995; and Becky and Meg's parents, J. Stephen and Barbara Smith. It provides financial assistance to deserving undergraduates, with preference given to female students with a grade point average of 3.5 or higher and who are members of Delta Gamma sorority. Preference is further given to a student majoring in either pharmacy or accounting.

Russell D. Mesalam Memorial Pharmacy Scholarship. Russell Mesalam, Class of 1961, was a loyal and active alumnus who served on Butler's alumni board. He had a distinguished 33-year career with Hook Drugs Inc. and its successor. This scholarship to honor his memory was established by his wife, Barbara Mesalam Gregory, Class of 1988, and the Hook Drug Foundation. It is intended for a sophomore pharmacy student. The recipient must be a permanent resident of Indiana with a 2.8 grade point average. The award can be given for up to four years.

NACDS Education Foundation Scholarship. Established in 1977 by the National Association of Chain Drug Stores, this scholarship is to go to a pharmacy student in his or her third or fourth year who has expressed an interest in community pharmacy.

Northeast Indiana Pharmacist Association **Scholarship.** Funds from the Northeast Indiana Pharmacist Association provide annual awards that benefit students in the College of Pharmacy and Health Sciences.

John L. Petranek Memorial Scholarship. Irene Petranek established this fund through her estate in memory of her husband John L. Petranek, Class of 1932, a pharmacist and business owner. It provides tuition assistance for deserving students in the College of Pharmacy and Health Sciences.

Pharmacists Mutual Insurance Co. Scholarship. Underwritten by Pharmacists Mutual Insurance Companies, this scholarship is given to students who demonstrate high scholarship in beginning pharmaceutics courses.

Richard R. Powis Endowed Scholarship. This scholarship was established by Richard Powis, Class of 1974, a former member of the College of Pharmacy's Board of Visitors and an active supporter of the profession. The recipient will be chosen based on merit by the College of Pharmacy and Health Sciences. In addition, the recipient should indicate an interest in a career in community pharmacy.

James W. Pyles Pharmacy Scholarship. This is an annual award to a minority student studying pharmacy in need of or deserving assistance.

Ratliff Scholarship. In their desire to encourage students to pursue a pharmacy career, Mr. and Mrs. Eugene Ratliff established this scholarship for the benefit of students who meet the scholastic criteria of the University. Full consideration also is given to financial need and the conduct and character of the recipients. The scholarship is renewable.

Ralph M. Reahard Endowed Scholarship.

This fund was endowed by a gift from the estate of civic leader and philanthropist Sally Reahard in honor of her father. Ralph Reahard was a personal friend and classmate of Eli Lilly at the Philadelphia College of Pharmacy and a vice president at Eli Lilly and Company. This scholarship provides support to students in the professional pharmacy program with preference given to students who have financial need.

Norman P. Reeves Scholarship. Norman Pennington Reeves graduated from the

Indianapolis College of Pharmacy in 1936 and received an honorary degree from Butler University in 1979. In 1982, the Hook Drug Foundation established this scholarship in honor of the former CEO of Hook Drugs Inc. The scholarship provides full tuition to qualifying students. At Butler, these students must have completed the two-year pre-pharmacy program. Students must also demonstrate academic achievement and qualities of citizenship and leadership as well as an interest in a career in retail pharmacy.

Denis E. Ribordy Endowed Scholarship.

This fund was established in 2002 by Denis E. Ribordy, Class of 1952, and Carolyn McClurg Ribordy, Class of 1954. Mr. Ribordy is the founder and former president of Ribordy Drugs, Inc., a 26-store retail chain; and the former CEO of Ribordy Enterprises. He is a trustee emeritus of the Butler Board of Trustees. This scholarship provides financial assistance to deserving students enrolled in the College of Pharmacy and Health Sciences, with preference given to a P3 (fifth-year) or P4 (sixth-year) student who is interested in community pharmacy.

Carolyn McClurg Ribordy Endowed Schol**arship.** This fund was established in 2002 by Denis E. Ribordy, Class of 1952, and Carolyn McClurg Ribordy, Class of 1954. Mrs. Ribordy is a retired registered pharmacist who with her husband built Ribordy Drugs, Inc., a 26-store retail chain. The Ribordys have been loyal, generous and active Butler alumni. This scholarship provides financial assistance to deserving students enrolled in the College of Pharmacy and Health Sciences, with preference given to a P3 (sixth-year) student who is interested in community pharmacy in a retail or local pharmacy setting in which the pharmacist has direct daily contact with customers.

Rudolph J. Roehl Scholarship. Mildred A. Roehl, through a bequest in her will, established an endowed scholarship fund in memory of her husband Rudolph J. Roehl, Class of 1938. Worthy students in the College of Pharmacy and Health Sciences will benefit from this scholarship.

William Rollings College of Pharmacy Scholarship. Mr. Rollings, Class of 1953, made provisions in his will for Butler University, with the funds to be used for scholarships "for bright students who are unable to afford their

educational costs..." His bequest was directed to the College of Pharmacy and Health Sciences and was divided between this scholarship and an equipment fund.

Endowed Salerni Award. Supported by gifts in honor of Dr. O. Leroy Salerni and from Dr. Salerni himself, this scholarship is administered by the Office of Financial Aid working with the College of Pharmacy and Health Sciences. It is given after the fall semester to the students with the highest grade in the Principles of Drug Action 1 course and the Principles of Drug Action 3 course; and again after the spring semester to the students with the highest grade in the Principles of Drug Action 2 course and the Introduction to Principles of Drug Action course. This is a merit-based award for worthy and capable students enrolled in the College of Pharmacy and Health Sciences and in good academic standing with the University. Students will be recognized with a financial award of no less than \$1,000 to be applied toward tuition.

Joshua J. and Dr. Megan E. Schoenherr Scholarship. Megan Schoenherr received a Pharm.D. degree from Butler in 2006; her husband is a Purdue graduate. The couple established this scholarship to provide tuition assistance to students in the College of Pharmacy and Health Sciences, with preference given to pharmacy majors who are in the professional phase of the program, P1, P2, P3 or P4.

St. Joseph County Pharmaceutical Corp. Award. Several COPHS graduates are members of the St. Joseph County Pharmaceutical Association. These graduates have donated funds to be used toward a scholarship to a COPHS student from St. Joseph County, Indiana. Recipients are pharmacy majors in their professional phase of the program. In the past, members of the Association have made recipient recommendations.

Supervalu Pharmacies Scholars Award.

Recipients are selected jointly by the dean of the College of Pharmacy and Health Sciences in consultation with the Office of Financial Aid and a representative from Albertsons/Osco/ Supervalu Pharmacies. Recipients are to be entering P1 or P2 students in good standing with the University. Further, they must be willing to work at Supervalu during the summer of their entering P1 or P2 year. Previous Albertsons/Osco/Supervalu Scholars are allowed

to reapply but are not guaranteed an award. To be eligible for the award, the recipient must meet all employment requirements of the donor and must remain in good academic standing with the University.

**Dr. Howard A. Swartz Memorial Fund.** This endowed scholarship was begun by family and friends to honor the memory of Dr. Howard A. Swartz, a professor of bionucleonics in Butler's College of Pharmacy and Health Sciences. The College recommends recipients.

**Torch Award.** The anonymous donor of this fund wishes to assist nontraditional Butler P1, P2 or P3 pharmacy students. The renewable award provides financial assistance for the purchase of books to students over 22 years of age.

**David Trotter Memorial Scholarship in Pharmacy.** Carroll and Betty Trotter established this scholarship in memory of their son, David

this scholarship in memory of their son, David Trotter, Class of 1980 and a member of Rho Chi. It awarded to pharmacy majors in good academic standing with the College of Pharmacy and Health Sciences.

John J. Vasko Memorial Pharmacy Scholarship. Lois K. Vasko established this scholarship to honor the memory of her husband John J. Vasko, Class of 1956, who owned a drug store in Chicago for 15 years and later worked 24 years for American Drug Stores and Osco Pharmacy. This scholarship is based on financial need, good academic standing, and high standards of ethics and integrity with letters from faculty to support this. Preference will be given to candidates who hold full-time jobs while in COPHS and/or students with families to support.

**Wal-Mart Pharmacy Scholarship.** The College of Pharmacy and Health Sciences appreciates the generous support of Wal-Mart Stores Inc. in providing financial assistance to pharmacy students. Recipients have high academic standing, financial need, strong leadership qualities and a desire to enter community practice upon graduation.

Rhea & Henry West Scholarship. This scholarship is given exclusively to students who are majoring in pharmacy and who graduated from Terre Haute North Vigo High School.

Loren & Sue Woerner Pharmacy Scholarship.

Loren Woerner, Class of 1951, began his career in local pharmacies in Indianapolis before becoming a pharmaceutical manufacturer's rep with Sharp & Dohme in late 1954, just as the company merged with Merck. He retired from Merck in 1990 as executive director of field operations. The Woerners created this scholarship to provide support to students in the professional program (P1, P2, P3 and P4) in the College of Pharmacy and Health Sciences.

Yeager Award in Pharmacy. This is a merit scholarship for a deserving student in the College of Pharmacy and Health Sciences. Donors are Richard and Paula Yeager and Sarah (Yeager) and Blair McKee.

# Athletic awards

\*The following is a list of the current scholarships. Most are used to underwrite Butler University financial aid programs and cannot be applied for directly unless otherwise indicated.

**B-Association Scholarship.** The B-Association is a dues-paying organization of former Butler University athletic letter winners. This scholarship assists student athletes in good standing with the University, with preference given to

qualified fifth-year student athletes who have used up their athletic eligibility and wish to complete their Butler degrees.

Ike and Sarah Batalis Football Student Assistant/Manager Award. Ike Batalis and his wife Sarah, a 1987 College of Education graduate, established this endowed scholarship to benefit worthy and capable Butler students who also work as assistants/managers in the Butler football program. Recipients shall be enrolled in a degree-seeking program and be in good academic standing with the University.

Robert C. Blessing Memorial Scholarship. Students chosen for this scholarship will demonstrate academic achievement, potential for leadership and financial need. Preference is given to students from the Midwest as well as members of Butler's baseball team.

**Hilton U. Brown Athletic Award.** David W. Konold Sr., Class of 1929, excelled in basketball, football and track. His first wife, Julia Atherton Brown (who died in 1979) was a daughter of

Hilton U. Brown, who received his bachelor's degree in 1880 and a master's in 1882, both from Butler. At age 25, Mr. Brown became the youngest member ever elected to the Butler University Board of Trustees. He served on that board for 70 years, including 52 years as president. Brown was born in 1859 and died one year shy of his 100th birthday. Mr. Konold honored his memory by providing in his will the funds to perpetuate the Hilton U. Brown Athletic Award as an endowed scholarship. It is for an outstanding athletic graduate student with a good mental attitude.

**Burger King Scholarship.** The Burger King Corporation created this award to honor the scholastic and athletic achievements of Butler student-athletes. The scholarship is awarded annually.

Carrie Colglazier Scholarship. Carrie Colglazier had just completed her freshman year when she was killed by a drunk driver in June 2003 at age 19. She was a student athlete on the Butler women's soccer team and a member of Alpha Chi Omega. Her parents John "Bud" and Karen Dietz Colglazier, Class of 1970, established this scholarship to keep her spirit alive and to perpetuate her legacy of commitment and service to family, friends, teammates, school and community. The recipient will be a rising sophomore, junior or senior on the Butler women's soccer team who exemplifies the Butler Way.

#### Catherine Sabrina DeBrosse Book Fund.

This fund honors the memory of Cat DeBrosse, infant daughter of JJ DeBrosse, Class of 1995, and Emily DeBrosse, Class of 1996. It assists a female athlete in good standing with the University and the athletic department. The recipient should be a student athlete who truly plays for the love of the game as a member of the women's basketball or soccer team; who helps those around her rise to their potential; and who shows dedication, teamwork and unselfishness.

Joseph Dezelan Scholarship. James P. Lill, Class of 1970, established this scholarship to honor the memory of his football coach at Cathedral High School in Indianapolis, Joe Dezelan, Butler Class of 1945. Lill was one of more than a hundred of Coach Dezelan's players who went on to play at Butler during the coach's 26-year career at Cathedral. This

scholarship supports a student enrolled in a degree-seeking program, with preference given to a Cathedral High School graduate who participates, or who plans to participate, in a men's or women's varsity athletic program at Butler.

**Timothy J. Gerend Men's Golf Scholarship.** Mr. Gerend, Class of 1993, graduated magna cum laude and was a member of the men's golf team. The recipient of this scholarship shall be a full-time student participating on the men's golf team.

James W. Gibson Memorial Endowed Scholarship. Hazel G. Gibson, a friend of Butler University, established this fund in memory of her son, who died in 2002 at age 55. Jim Gibson was an avid golfer who attended Butler before graduating from Franklin College. This fund provides financial assistance to Butler students who play on the men's or women's golf teams and who maintain a 3.0 grade point average. If a qualified golf team member cannot be identified, the scholarship may support a pharmacy major in the College of Pharmacy and Health Sciences.

Paul D. "Tony" Hinkle Scholarship Fund for Athletics. Friends and former students established this fund in 1969 to honor Butler legend Paul D. "Tony" Hinkle. Under his direction, Butler football, basketball and baseball teams posted more than 1,000 victories, placing him among the nation's all-time winningest coaches. Coach Hinkle's career with Butler athletics had spanned nearly a half-century when he retired in 1970. He passed away in 1992.

**Lake Trust Book Fund.** Thomas H. and Marjorie Lytle Lake were longtime friends and supporters of Butler University. A generous bequest from their estate has funded a wide range of important initiatives at Butler. This endowed fund provides a book stipend for female athletes.

# David M. Lautner Memorial Golf Scholarship.

This fund was established, with support from family and many friends, by Carolyn Pickering Lautner, Class of 1945, in memory of her son David Lautner, Class of 1974 David was a three-sport athlete who came to Butler on a football scholarship and threw the shot put and javelin on the Bulldogs track team. Like his mother, he was a talented golfer. This scholar-

ship, which is also supported by an annual golf tournament, provides scholarships to members of both the men's and women's golf teams.

Lance E. Middlekauff Annual Fifth Year Senior Football Scholarship Award. This fund was established in 2000 by Lance Middlekauff, Class of 1962. The recipient must be a past member of Butler's football team, a fifth-year senior returning to complete his or her degree, and in good academic standing. The recipient will be selected by the football coach or members of the athletic staff in consultation with the athletic director.

#### Jim Mallers Scholarship for Men's Baseball.

Thomas D. Ehrsam, Class of 1961 and a three-year baseball letter winner at Butler, established this scholarship in honor of fellow varsity player and baseball coach James C. Mallers, Class of 1958. The financial aid office administers this fund to provide scholarship support to degree-seeking students who currently participate in the men's baseball program.

Richard McIntyre, Sr. Scholarship. William and Emily Turner, both Class of 2006, established this fund to honor Emily's late father, a proud supporter of Butler and the athletics department. Recipients are full-time students who are selected in alternate years from the men's golf team and from the cheerleading squad.

Lance E. Middlekauff Annual Golf Scholarship Award. Created in 1999 by Lance E. Middlekauff, Class of 1962, this scholarship is awarded annually to a member of the men's golf team who is in good academic standing. Recipients are selected by the men's golf coach or members of the athletic staff in consultation with the athletic director.

John C. Parry Athletic Scholarship. John Parry served as Butler's athletic director from 1990 to 2006, the longest tenure at one school of any NCAA Division I athletic director in Indiana. The University established this scholarship upon his retirement. It provides financial support to a full-time student who competes in a Butler varsity sport. Consistent with NCAA and Butler policy, the recipient shall receive this scholarship based on his or her athletic ability.

Dean Herbert F. Schwomeyer Scholarship.

Dr. Stephen Hardin, Class of 1969, established this scholarship fund to honor Dr. Herbert F. Schwomeyer, retired professor of physical education and former dean of men at Butler. It is given annually to a deserving student selected by the athletics department.

Section 12 Athletics Annual Award. The holders of Section 12, Row E in Hinkle Fieldhouse established this annual award to benefit a student athlete. The recipient will be a fulltime student in good academic standing who is a member of a Butler athletic team. Financial need will be used as a consideration. The donors prefer that the recipient has demonstrated an interest in organized social activities at Butler (Greek house). The award is to be applied toward tuition for the academic year in which it is granted, and the donors request that the recipient visit Section 12 Row E during a home Butler basketball game.

#### Lon D. Showley Athletic Scholarship Fund.

Lon Showley, Class of 1966, has a long record of support and involvement in the life of the University. Through this scholarship, he wishes to encourage and support a Butler basketball player who has demonstrated athletic talent and who has the potential for exemplary achievement. Consistent with NCAA and Butler policy, recipients receive this scholarship for athletic ability, are enrolled full time and compete full time in the Butler basketball program.

#### Shultz Family Scholarship for Men's Basketball.

Jerry Shultz, Class of 1962, and his wife Patsy Bymester Shultz established this fund to provide financial assistance to deserving Butler students who are members of the men's basketball team. Jerry Shultz received a scholarship to Butler that allowed him to play football and basketball for legendary coach Tony Hinkle. The couple has three sons, two of whom are also Butler alumni: Jeff, Jay, Class of 1990, and Jim, Class of 1992.

Helen Tewksbury Memorial Scholarship

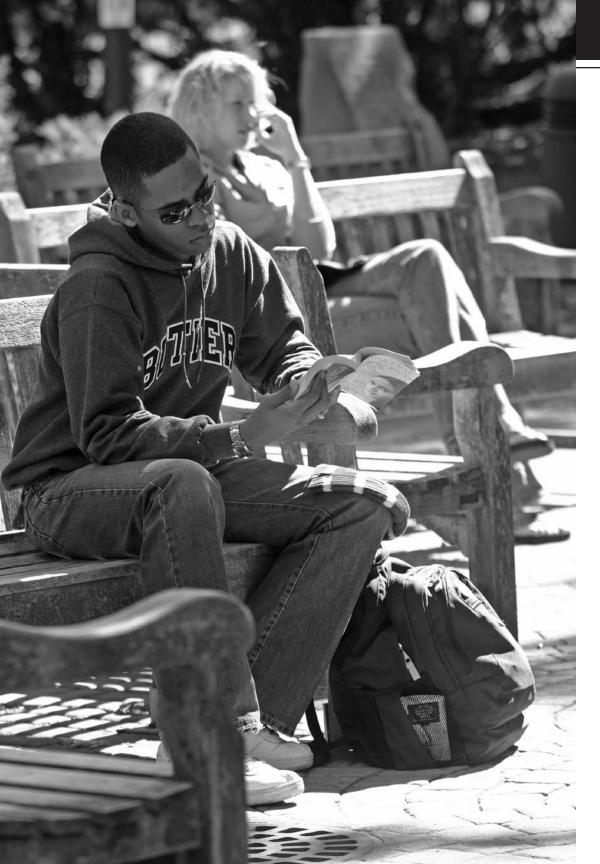
Award. Helen Katterhenry Tewksbury holds a special place in the hearts of many members of the Butler family. During her 16 years of employment at the University, she worked in many offices and had an impact on many lives. Her qualities made her a vital force for good in the lives of bewildered new freshmen, anxious seniors, or faculty and staff needing direction

and assurance...even a university president facing potential chaos. Her lifelong love of athletics grew into a passion for sports at Butler. This award was established by her husband Richard L. Tewksbury Sr., family and friends in her loving memory. It is awarded annually to one male and one female student who meet academic requirements and who have established themselves as leaders in at least one varsity sport.

Phillip & Carolyn White Scholarship for Men's Basketball. This fund was established by Phillip White, Class of 1961 M.S. '64, and his late wife Carolyn, who have been loyal supporters of Butler athletics. Phil White was a 30-year high school athletic director. This scholarship assists deserving Butler students who are members of the men's basketball team. Recipients are to be current scholarship players who are in good academic standing in a degree-seeking program at Butler.

Robert E. & Jean T. Wildman Athletic **Director's Scholarship.** This scholarship was created by Robert and Jean Thomas Wildman, both Class of 1944, who have supported an amazing range of activities and programs at Butler over several decades. The late Mr. Wildman served on the Butler Board of Trustees for 18 years and received the Butler Medal in 1990. He and Mrs. Wildman were co-recipients of the Butler Mortar Award in 1998. This fund provides financial assistance to full-time students who are also athletes. The recipients - one male and one female athlete per academic year — are chosen by the athletic director in cooperation with the Office of Financial Aid.

96 Butler University Financial Aid



# 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 procedure 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 may therefore affect the final grade assigned for the course. Butler is on a 4.00 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
- A- 3.67 grade points
- B+ 3.33 grade points

- B 3.00 grade points
- B- 2.67 grade points
- C+ 2.33 grade points
- C 2.00 grade points
- C- 1.67 grade points
- D+ 1.33 grade points
- D 1.00 grade points
- D- 0.67 grade points
- F 0.00 grade points

The following grades are not computed in the grade point average:

W — Official withdrawal. Permitted until the 10th week of a regular 14-week semester or the fourth week of a 6-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.

**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.

N/C — Enrollment in a course on a noncredit basis. A student may change from credit to non-credit in a course until the 10th week of a regular semester, fourth week of the summer session. The instructor's signature is required. The non-credit grade may be changed to withdrawal by an instructor 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 2.00, he or she is placed on academic probation. Excessive probation, or continued probation without improvement, can lead to a student's 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.

# 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 hours.

LAS, COE, CBA, JCFA		COPHS
Freshman	0-28 hours	0-28 hours
Sophomore	29-58 hours	29-58 hours
Junior	59-90 hours	59-90 hours
Senior	91+ hours	91-132 hours
5th year Pharmacy		133-170 hours
6th year Pharmacy		171+ hours

# Registration

100

An early registration is held during each

semester. A final period of registration also is held before the beginning of each term. 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" or a "special reading" course with permission of the department head or dean concerned.

# Pass/fail option

The university permits students to elect up to four courses from their total undergraduate degree for pass/fail credit. 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 pass/fail. 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 Fine 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 head or dean whose subject matter is involved and if resources are available, register for a maximum of two courses per semester on a non-credit basis without additional tuition, with the exception of independent study and applied music (individual instruction) classes. Students should register for special non-credit courses at the end of the registration period.

# Grade reports and transcripts

After the close of each semester or session, grade reports are posted on MyButler.edu for each student providing the student has met his or her financial obligations to the University.

Transcripts of the student's academic record will be released by the university only upon the written request of the student. A fee is charged for each official transcript.

# Student Social Security numbers

New students will receive a random student identifier when they are admitted. 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 this 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 2.00.

# Graduation

A degree application must be filed by the student in the registration and records office 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, 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 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 and 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 bachelors 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. Candidates for graduate degrees must have at least a 3.0 G.P.A.

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 the Jordan College of Fine Arts must pass a minimum of 124 semester hours. Candidates in the College of Business must pass a minimum of 127. Candidates for the bachelor of science in health sciences must pass a minimum of 137 semester hours; master of physician assistant studies candidates will complete an additional year (54 semester hours) of coursework. Candidates for the doctor of pharmacy degree must pass a minimum of 210 semester hours.

Candidates who hold a bachelor's degree from Butler University may earn a second baccalaureate 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.

# Computer literacy requirement

Students may fulfill the computer literacy requirement in many ways. The college from which the student plans to earn a degree determines the appropriate course or courses to fulfill this requirement.

# Writing intensive requirement

Undergraduates must, in their junior or senior year or after completing 63 credits, take at least one regular Butler course that is designated "Writing Intensive." Courses taken to satisfy the "W" requirement cannot be taken pass/fail. Courses that meet this requirement are indicated in the class schedule.



# THE LEARNING RESOURCE CENTER

The Learning Resource Center (LRC) is a coordination site for services, programs and resources that promote academic success. LRC 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 Success Academic Success Workshops

The Learning Resource Center staff is available to assist all Butler students in developing and enhancing skills that promote academic success. Staff work with students on skill development both individually and in a group workshop format. Workshop topics may vary from semester to semester, but generally include the following:

- Take Charge of Your Time!
- Study Habits that Work!
- Prepare for Exams!
- Enhance Your Memory!
- Read Effectively!
- Review Notes Effectively!
- Finals...Have a Plan!

The workshops provide students with a comprehensive battery of strategies and techniques that can assist in meeting the demands of college-level academics.

# **Academic Success Coaching**

Academic Success Coaching sessions are available to any Butler student interested in enhancing academic skills. The Academic Success Coaching process includes the completion of an Academic Performance Self-Assessment. Students will gain insight into areas of academic strength and will identify strategies to address academic concerns. Students will work collaboratively with their Academic Success Coach to develop a plan of action to improve academic performance. Students will learn techniques to aid in approaching their coursework in an active and engaged manner.

# **Tutoring**

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

Study Tables are essentially group walk-in tutoring sessions that meet at a specified time and place on a regular basis. Study Tables are coordinated by each respective department, 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 136).

Individualized peer tutoring is coordinated through the Learning Resource Center and requires the recommendation 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:

- A recommendation from the instructor of the course is required.
- Student must be attending all classes and labs.
- 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 Learning Resource Center will pay for the service. In most cases, individualized tutoring is limited to 1-2 sessions per week for a limited number of weeks, depending on individual circumstances.

#### Courses

**LC 100.** Becoming a Master Student: This course is designed to offer students tools and techniques that will enhance academic success at the college level. Topics will vary according to section but may include organization and time management, effective reading, memory enhancement, effective note taking, and exam preparation. Pass/Fail. (U)(0)

LC 103. Exploratory Studies: Specifically designed for first year Exploratory Studies majors. Decision making, self-assessment, academic exploration, and career planning are foundational components. 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)

LC 200. 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. Only offered in the spring semester. Enrollment by permission of the Coordinator for Health Education only. Pass/Fail. (U)(1)

**LC 201. 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. Pass/Fail. (U)(1)

# **Enrollment**

Any student admitted to Butler as a degreeseeking undergraduate or converting from non-degree to degree-seeking undergraduate status will be enrolled in the college offering the student's academic program of study. Students who are undeclared in their intended program of study will be enrolled in the College of Liberal Arts and Sciences. A transfer student will be enrolled directly in a college of the university. Transcripts of all undergraduate degree-seeking transfer students will be reviewed for certification of university core requirements. All petitions for variances or equivalencies in the core curriculum should be addressed to the dean of the College of Liberal Arts and Sciences.

# **Advising Program**

Butler University views academic advising as a significant aspect of the partnership in the education of students. The Butler student is responsible for seeking adequate academic advice, knowing and meeting degree requirements, enrolling in appropriate courses to ensure timely progress toward a degree and using resources of the university provided in the advising process such as consulting with an advisor on early term grades, and establishing appointments with their academic advisors to register for classes.

Each student is assigned a faculty advisor with special knowledge in the area of the major. The advisor explains and enforces regulations established by the university faculty and administration, especially with regard to curricular issues. In working with a student to create his/her academic schedule, the advisor guides the student in choosing those courses that best fit the student's individual inclinations and needs. Each student should work closely with his or her advisor to ensure that program requirements are met.

Students are encouraged to consult their advisors not only during registration periods, but also throughout the year. A student who is having academic difficulty or is uncertain about procedures and regulations will find the academic advisor ready to help. If at any time a student is unable to get in touch with the advisor on a matter that requires immediate action, the student should contact the office of the appropriate academic dean for assistance. Students who wish to change advisors should consult the dean of the appropriate college.

# **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 (LC 103)
- 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

# Advanced placement

Students qualifying for advanced placement credit in any of the subjects in the core curriculum of the university may count such credit toward the curricular requirements.

Students who do not qualify for advanced placement credit but whose backgrounds indicate that they are qualified to do so may be allowed to omit elementary courses and enter higher-level courses for which they are properly prepared. The higher-level courses may be substituted for courses in the core curriculum upon the recommendation of the dean of liberal arts and sciences and with the approval of the head of the department in which the courses are offered. All questions concerning advanced placement credit should be directed to the Office of Registration and Records.

# Transfer of credit

Butler students may apply courses completed at other institutions toward core curricular requirements only with the written permission, secured in advance, of the dean of liberal arts and sciences. This rule applies to courses taken in the summer as well as during the regular academic year.

Transfer students will be advised by the Office of Registration and Records of the credit for which they are eligible on the basis of work completed at other institutions.

# Advancement to degree status

Professional colleges may set requirements for advancement to full degree status above the minimum standards established by the university. Students will be bound by the requirements published in the Bulletin at the time they enter the university. See the college section of this Bulletin for more information.

# College requirements

In choosing courses to fulfill the core curricular requirements of the University and in choosing electives, a student should be aware of requirements established by the college in which he or she plans to take a degree. Requirements for each college are outlined in the appropriate section of this Bulletin.

# Preparation for teacher certification

Students in the university who intend to teach should announce that intention to their advisors and to the University. Their program of study will be directed to meet state certification requirements.

# Associate's degree

To earn a general associate's degree, students will be required to complete a minimum of 63 semester hours, including all core curriculum requirements, with a cumulative grade point average of at least 2.0. The elective hours taken as part of the associate degree program may be taken in a particular field or major. Students should consult the dean of liberal arts and sciences for further information concerning this program.

The final 21 semester hours of work toward the associate's degree must be taken at Butler University unless a petition to include transfer work in the final 21 semester hours has been approved.



# Interdisciplinary Programs

#### Administration:

Laura Behling, Associate Provost, Faculty Affairs, Interdisciplinary Programs Paul Hanson, Ph.D., faculty coordinator, Global and Historical Studies/ formerly Change and Tradition; Rebecca Ries, coordinator, First-Year Seminar/formerly Freshman Writing Program

#### FYS 101-102 (Was EN 102 and ID 103).

Students may fulfill the former Freshman English requirement (EN 102 Freshman Writing Seminar and ID 103 Humanities Colloquium) with the new First-Year Seminar requirement by completing FY S101 (3 hours) and FYS 102 (3 hours). The First-Year Seminar is a topics-based, two-semester sequenced course that serves as an introduction to the vitality of the liberal arts. Students will develop, practice, and advance their abilities with critical reading and thinking, effective oral communication and academic writing, and information literacy and retrieval. All students are expected to complete the First-Year Seminar during their first year at Butler.

**ID 111. The Arts in Performance:** Study of selected works in dance, music and theatre performed on campus. After introduction to common aesthetic ideas and concepts, members will investigate the works presented, meet with artists, directors and designers, observe rehearsals, attend performances, and evaluate them critically. A \$30 fee will be assessed for tickets. (U)(3)

GHS 201-209 (WAS ID 201-202). Students may fulfill the former Change and Tradition (ID 201-202) requirements with any two Global and Historical Studies courses from the new core. Global and Historical Studies (GHS 201-209) is an array of interdisciplinary courses that allow students to engage in 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 Seminars.

All students are required to complete two semesters of GHS 201-209 (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 coordinator of Global and Historical Studies.

**ID 400. Seminar in Culture:** Study of the culture of a historical period from the perspective of selected disciplines in the humanities and fine arts. (U/G)(3)

#### ID 492, 493. Seminar in Arts and Humanities:

Offered in cooperation with the Indianapolis Museum of Art and taught jointly by Butler faculty and IMA staff, this interdisciplinary course centers upon each year's IMA special exhibition and sets a context for better understanding the art through analysis of the history, music, literature and animating ideas of the period. (U/G)(2, 3)

# Gender Studies minor

Ann Savage, PhD., Director of Gender Studies

The purpose of the gender studies minor is to provide a formalized setting in which students can examine issues that affect our understanding of gender in our own and other cultures. Its emphasis is interdisciplinary, drawing from the humanities and social sciences as well as other disciplines within and beyond the College of Liberal Arts and Sciences.

In the required courses, students will be introduced to opportunities for addressing gender issues in academic fields, and they will explore the theoretical and historical basis of such study. Upper-division electives are chosen from at least three disciplines, allowing students to pursue their inquiries in more depth without narrowing their focus to a single field. Internships provide students with the option to apply theoretical knowledge to work and/or community-based learning opportunities.

Gender Studies is an excellent compliment to all majors Butler University has to offer, regardless of whether the student plans to attend graduate school or seek out employment immediately after graduation. For students interested in graduate school, the gender studies minor provides students with a 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 Studies students are well equipped to work in a diverse and multicultural world; an attribute today's employers are looking for in a variety of professions and occupations, including public administration, social services, business, the arts, law, medicine, social work, anthropology, journalism, media, criminology.

# Requirements for the Gender Studies minor:

Minimum of 19 hours, distributed as follows:

- GS 100 Introduction to Gender Studies
- •GS 300 Philosophy of Feminism
- •Choose one of the following:
- GS 301 Theory & Method
- AN 320 Gender in Cross-Cult Pers
- PS 305 Psychology of Gender
- Four three-hour elective courses, of which nine hours must be upper-division electives chosen from at least three disciplines. A maximum of nine of the minor's 20 hours may be taken in a single discipline. A list of approved courses will be published in the schedule of classes each semester.

# Courses

**GS 100.** Introduction to Gender Studies: A series of lectures by faculty in gender studies, designed to introduce students to the wide range of topics addressed in this field. Presentations will range from gender in cross-cultural perspective, to biological and social debates over nature vs. nurture, to images of women in film. Required for the minor; prerequisites for GS 201 and 301. Open to non-minors. Pass-fail credit. (U)(1)

**GS 201. 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 first- and second-year students. Prerequisite: GS 200. Open to non-minors. (U)(3)

**GS 300.** Philosophy of Feminism: Introduces students to the philosophical method of thinking out issues that confront women in contemporary American society and which challenge all of us. The course's primary focus is the study of feminist responses to issues such as gender socialization, reproductive rights, affirmative action, pornography, beauty, ecofeminism, alternative families and others. (U)(3)

**GS 301. Gender Studies:** 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 non-minors. (U)(3)

**GS 302/303. Topics in Gender Studies:** Selected topics of significance in gender studies. (U)(2/3)

GS 398. 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)

GS 399. 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)(2)

**GS 400.** 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)

**GS 401/02/03. 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, 2, 3)

# The International Studies Program

Administration:

Antonio V. Menendez, Ph.D., director

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 major cuts across traditional barriers between intellectual disciplines and draws on the resources of the Departments and programs of English, History, Geography, Anthropology, Modern Languages Literatures and Cultures, Philosophy and Religion, Political Science, and Sociology in the College of Liberal Arts and Sciences, and the Department of Economics, Finances, and Management in the College of Business. The curriculum is flexible; it can be adapted to meet the student's individual interests and needs. Students are encouraged to pursue a second major or minor in a complementary discipline. Studying abroad, although not required, is an important component of the program.

The International Studies Major offers students the cultural competency necessary to be successful in an increasingly complex and global job market. It prepares students for careers in government, international organizations, journalism, international consulting, business, education, community development, and human rights work with nongovernmental organizations. It also provides a foundation for graduate work in such disciplines and programs of study as law, international studies, international relations, area studies, social sciences (anthropology, history, political science, sociology, etc.), comparative literature, religion studies, public policy and public administration.

# Major requirements

Majors in International Studies must complete 39 credit hours as specified in the following groups of requirements. Twenty-seven of these credits must be fulfilled at the 300 level or above. The prerequisites for most of the 300 and 400 level classes listed below are satisfied by taking the corresponding 100 level classes. However, some courses require additional prerequisites. Consult with your advisor on those cases.

- I. International studies core requirements (18 hours)
- A. IS 101 Introduction to International Studies
- B. One of the following courses:
  - EC 101 Economics in the Modern World
  - GE 109 Cultural Geography: Regions of the World
  - PO 141 Introduction to International Politics
  - PO 151 Introduction to Comparative Politics
  - RL 101 Religions of the World
- C. Two of the following courses
  Two disciplines must be represented.
  - AN 316 Economic Anthropology
  - AN 317 Third World Development
  - EC 336 Comparative Economic Systems (additional pre-requisite: permission of the instructor)
  - EC 433 International Economics (additional pre-requisites: EC 231 and EC 232 or permission of the instructor)
  - GE 350 Global Political Geography
  - HS 381 U.S. Diplomacy in the Twentieth Century
  - IS390 United Nations and Other International Organizations
  - JR 417 International Communications
  - IB 320 International Business Environment (additional pre-requisite: permission of the instructor)
  - IB321The North American Business Environment (additional prerequisite: permission of the instructor)
  - PL 375 Global Justice and International Ethics
  - PO 355 United States Foreign Policy
  - PO 320 International Relations
- PO 322 International Conflict and Peace Building
- SO 355 International Crime

- D. Research Methods Course
  One of the following research methods course:
  - AN 350 Anthropological Methods
  - COM 356 Communication Research Methods
  - HS 357 Historical Method and Historiography
  - SO 393 Research Methods Seminar
  - PO 201 Research and Analysis
- E. Capstone Course
  - IS 410 W The Global Society (Writing Intensive)
  - Pre-requisites: IS 101 and a course from B. (This course is cross-listed with SO 335 and AN 335)
- II. International Studies courses (21 hours)
- A. Eighteen hours from two of the following areas (9 hours in each area). At least two disciplines in each area must be represented, and no more than one 300 level language course may be counted toward fulfilling the nine hours in areas 1-4. It is recommended that students choose language as one of the concentration areas.
  - 1. Africa
    - AN 360 Peoples and Cultures of Africa
    - HS 320 History of Africa
    - HS 425 Modern Africa
  - FR 485 Topics in Francophone Studies (when it focuses on Africa)
  - PO 350 African Politics
  - 2. Asia
  - AN 329 Japanese Popular Culture
  - AN 365 Peoples and Cultures of China
  - AN 366 Peoples and Cultures of Asia
  - AN 372 History and Vietnam
  - FL 320 Chinese Civilization
  - HS 358 Modern Middle East History
  - HS 369 Peoples and Cultures of China
  - HS 370 China and the World
  - HS 372 History of Vietnam
  - HS 374 Asian Revolutions in Fiction and Film
  - HS 385 Pacific War
  - IB 323 Contemporary Business Issues in East Asia (additional prerequisite: permission of the instructor)
  - RL 353 Buddhism
  - RL 354 Islam: Religion, Culture, Society
  - 3. Europe

110

- EC 438 Economic History of Europe
- EN 381 Modern British Literature
- FR 320 Topics in French and Francophone Cultures

- FR 345 France and the Francophone World: 1900 to present
- FR 465 20th Century French Novel
- FR 475 20th Century French Drama
- GR 340 Germany 1871 to the present
- GR 342 Major Trends in Modern German Literature
- GR 475 Seminar in 20th Century German Literature
- HS 308 England Since 1714
- HS 317 Russian Revolution and Soviet Russia
- HS 318 Modern Germany
- HS 319 Contemporary Germany: Division and Reunification
- HS 329/330 20th Century European History
- HS 362 European Ideas since the Enlightenment
- PO 370 Governments of Europe
- PO 391 Russian Politics
- SO 333 European Societies
- SP 440 Contemporary Spanish Studies
- SP 340 Spain: 1700 to the Present
- IS 301 Model European Union
- 4. Latin America
- AN 362 Peoples and Cultures of Latin America
- MG 321 The North American Business Environment
- PO 360 Political Regimes in Latin America
- PO 362 Popular Participation in Latin America
- PO 364 United States—Latin American Relations
- SO 331 Latin American Societies
- SP 345 Hispanic Master Pieces
- SP 355 Spanish-American Culture: 1898 to the present.
- SP 365 Hispanic Short Story
- SP 360 Hispanic Film (will count for this area when at least half of the content focuses on Latin America)
- SP 370 Topics in Contemporary Hispanic Societies
- SP 450 Topics in Spanish-American Studies
- SP 460 Topics in 20th Century Spanish-American Studies
- Foreign Languages
   Nine hours at the 300/400 level of one modern foreign language. These must be different classes from the ones taken to fulfill the requirements in 1-4 above.

Classes in French, German, Spanish and Chinese are offered at Butler University. Classes in other languages can be taken at other universities, members of the Indiana Consortium of Urban Education, and will be accepted as Butler credits.

- B. One elective (3 hours) to be chosen from the following or any of the courses in I or II-A above:
  - AN 302 The Body and Society
  - AN 320 Gender in Cross-Cultural Perspective
  - AN 340 Ethnographic Arts
  - AN 310 Family, Household, and Other Social Relationships
  - EN 321, 322/421, 422 Comparative World Literature
  - FN 451 International Financial Management (additional pre-requisites: FN 340 and permission of the instructor)
  - IB 367 International Business Law (additional pre-requisite: permission of the instructor)
  - IB 460 Cross-Cultural Management and Multinational Communication (additional pre-requisite: permission of the instructor)
  - IB 491 International Marketing (additional pre-requisite: permission of the instructor)
  - PO 302 Third World Politics
  - RL 360 Religious Movements of the 20th Century
  - RL 375 World Peace and Religion
  - SO 323 Racial and Ethnic Relations: A Comparative perspective
  - SO 343 Popular Culture: A Comparative Perspective
  - SO 349 Recent Social Movements: A Comparative perspective

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.

Any Special International Studies Course (see below)

- III. Special International Studies courses

  The offerings below could replace any of
  the requirements above providing that
  they have been approved by the director of
  the International Studies program.
  - IS 401, 402, 403 Independent Study in International Studies (1, 2, or 3 hours). 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.
- IS 404, 405 Internship in International Studies (3, 6 hours). Offers the qualified student the opportunity for supervised experience in internationally oriented jobs in U.S. or foreign governments, business, or international organizations. A popular and very useful internship for International Studies major is the Washington internship.
- IS 470 Selected Topics in International Studies (3 hours). In-depth study of selected topics not covered in traditional courses. Prerequisite: consent of instructor.
- IS 499 Honors Thesis (3 hours)
- IV. Internship in International Studies
  - IS 404, 405, 406 Internship in International Studies (3, 6, or 9 hours). Offers the qualified student the opportunity for supervised experience in internationally oriented jobs in U.S. or foreign governments, business, or international organizations. A popular and very useful internship for International Studies major is the Washington internship.
- V. Studying 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.

VI. Model United Nations and Model European Union

International Studies majors can participate in the Model United Nations and the Model European Union. There is a Model United Nations held in Indianapolis in the fall, and another in Canada and Boston in the Spring. Traditionally we have participated in both events. The Model European Union is held in Indianapolis. The cost for participating in these events (airfare and lodging) is covered by the International Studies budget.

# Minor requirements

Students may elect to minor in international studies by earning 24 credit hours as specified in the following groups of requirements. Twelve credits must be fulfilled at the 300 level or above. I. International Studies core (12 hours)

A. IS 101 Introduction to International Studies B. One of the following courses :

- AN 202 Encounters with other cultures
- EC 101 Economics in the Modern World
- GE 109 Cultural Geography: Regions of the World
- PO 141 Introduction to International Politics
- PO 151 Introduction to Comparative Politics
- RL 101 Religions of the World
- C. One of the following courses
  - AN 316 Economic Anthropology
  - AN 317 Third World Development
  - EC 336 Comparative Economic Systems (additional pre-requisite: permission of the instructor)
  - EC 433 International Economics (additional pre-requisites: EC 231 and EC 232 or permission of the instructor)
  - GE 350 Global Political Geography
  - HS 381 U.S. Diplomacy in the Twentieth Century
  - IB 320 International Business Environment (additional pre-requisite: permission of the instructor)
  - IS 390 United Nations and Other International Organizations
  - JR 417 International Communications
  - PL 375 Global Justice and International Ethics
  - PO 355 United States Foreign Policy
  - PO 320 International Relations
  - PO 322 International Conflict and Peace Building
  - SO 355 International Crime
- D. Capstone Course
  - IS 410 The Global Society Pre-requisites: IS 101 and a course from B. (This course is cross-listed with SO 335 and AN 330)
- II. International Studies-Area Courses, (12 hours) 12 hours of additional courses as listed in part II in the major, with at least one course in each of two different areas (Africa, Asia, Europe, Latin America, or Foreign Languages). Any Special International Studies Course (see description in major).

### Minor in Peace Studies

The Peace Studies minor seeks to promote a critical understanding of the nature and dynamics of violent conflict 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 and peace more central to their university education. Contemporary peace studies is an arena of interdisciplinary research, study, dialogue, reflection and action which 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 interdisciplinary study and practice, Minors in Peace Studies prepare for graduate study and a variety of careers in policy analysis, government, non-governmental organizations, journalism, teaching, law and business.

The program in Peace Studies is designed to enable students to pursue the following objectives:

- To acquire a complex understanding of the nature and origins of violence, its dynamics and different manifestations and modes of expression.
- To better understand why conflict occurs, when and how conflicts become violent, and the different means by which conflicts are resolved.
- To critically evaluate and devise strategies for peace through reflection on different ethical, religious, philosophical, and cultural approaches to peace, the work of the major thinkers and activists, and public policy.
- To 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 resolution skills, selected internships and study abroad experiences.

# **Peace Minor Requirements**

The minor in Peace Studies consists of 18 hours of Peace Studies courses. Students must complete 12 hours of required courses (see below) plus 6 hours of electives.

#### Peace Studies Required Courses (12 hours)

- 1. PO 102 Introduction to Peace Studies
- 2. **ONE** of the following courses:\*
  - PO 220: Community Mediation

- PO 322: International Conflict and Peace Building
- PO 335: Racial and Ethnic Politics
- RL 362: War, Peace and Religion
- PL 375: Topics: International Ethics and Global Justice
- IS 410: Global Society
- 3. Internship or service learning (x 1 for three credits)
  Internship and service learning requirements will typically be fulfilled at locations in Indianapolis such as Exodus, Peace Learning Center, Indianapolis Peace and Justice Center, Noah (Neighbors Organized to Assist Humanity) or through SP 300 Service Learning in Spanish. Occasionally they may be fulfilled as part of a Washington D.C. Semester internships or as a component of study abroad.
- PO 490: Senior Seminar: Special Topics in Peace Studies (such as Cultures of Peace in Latin America; Youth, Violence and Peace; War in Iraq)

# **Electives (Six Hours)**

A separate list of electives that may be taken for peace studies credit will be published each semester. but examples of courses students might take are: AN 380 Youth and Conflict in Global Cinema; S0 355 International Crime; PO 380 Understanding Conflict; Northern Ireland; GS 303 Gender, Race and Nature; EN 386 Changing Attitudes, Behaviors and Policies to Save the Planet; PO 380 Popular Participation in Latin America; PO 380: Topics: Understanding the Israel-Palestine Conflict; HS 390 War and Peace in the Middle Ages; RL 363/563: Religion, Politics, and Conflict in South Asia. Students may also choose from the list of required courses for elective credit: PO 220: Community Mediation; PO 322: International Conflict and Peace Building; PO 335: Racial and Ethnic Politics; RL 362: War, Peace and Religion; PL 375:Topics: International Ethics and Global Justice or Ethics of War and Peace; IS 410: Global Society; PO 490 Cultures of Peace in Latin America: PO 490 Youth, Violence and Peace.

In some situations students may also earn elective credit for a minor in Peace Studies through study abroad.

# Science, Technology and Society Administration:

Carol Reeves, Ph.D., director

The Science, Technology and Society (STS) Program seeks to promote a critical understanding of the nature of science and technology and of the influence of science and technology on human society and culture. Through an interdisciplinary approach that grounds students in a wide range of methodological approaches, the STS Program is designed to prepare students for graduate study or for a wide variety of career opportunities including policy analysis, planning, reporting or community relations with public and private organizations involved in scientific and technological research and education.

The STS major and minor are designed to enable undergraduates to pursue three objectives:

- To acquire a multidimensional understanding of the nature of science and technology from the perspectives of the natural and social sciences, and the humanities.
- To better understand and communicate the critical role of science and technology in contemporary modern society.
- To consider the ethical, political, philosophical and cultural implications of scientific and technological pursuits on human experiences.

# Major requirements:

The major in science, technology and society consists of 30 hours of STS courses, plus 15 hours of courses in science or technology disciplines. In addition, students in the STS major are required to participate in six designated co-curricular activities. For purposes of meeting core requirements, the STS major is considered a Division 3 major.

Science/Technology Courses: For their 15 hours of science or technology courses, students may select from any of the following disciplines: biology, chemistry, physics, astronomy, computer science and engineering. It is recommended but not required that students concentrate their coursework in a single discipline. Certain courses, principally those designed as terminal courses to satisfy core requirements for nonmajors, cannot be used to satisfy this requirement. The list of excluded courses is: AS 100, AS 101, BI 100, BI 101, BI103, BI 104, BI

105, CH 101, CS 101, CS 241, PH 105, PH 152, PH 200.

The 15 hours of science or technology courses are not understood to be part of the STS major, and as such they may be counted toward other requirements — either toward Division IV or V core or toward a minor or major in a science and technology discipline.

STS Courses: A major in science, technology and society must complete 30 hours of STS courses. The following two courses are required:

- ST 320: Philosophy of Science
- ST 330: The Social & Rhetorical Study of Science & Technology

The remaining 24 hours may be chosen from a list of STS courses in various disciplines. One of these courses must be a course examining the history of science or technology. A course fulfilling this requirement would explore the historical contexts and impact of a scientific or technological discovery, controversy, or innovation. The course may focus on helping students do historical research, and it could cover a narrow or broad period of time.

Co-curricular requirements: Students must participate in at least six designated co-curricular activities — typically public lectures or other events concerned with STS issues. The director of STS will publish 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.

# Minor requirements:

The minor in science, technology and society consists of 18 hours of STS courses, plus 10 hours of courses in science or technology disciplines. In addition, students in the STS minor are required to participate in three designated co-curricular activities.

Science/Technology Courses: For their 10 hours of science or technology courses, students may select from any of the following disciplines: biology, chemistry, physics, astronomy, computer science or engineering. It is recommended but not required that students concentrate their coursework in a single discipline. Certain courses, principally those designed as terminal courses to satisfy core requirements for nonmajors, cannot be used to satisfy this requirement. The list of excluded courses is: AS 100, AS 101, BI 100, BI 101, BI 103, BI 104, CH 101, CS 101, CS 241, PH 105, PH 152, PH 200.

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 towards other requirements-either towards Division IV or V core or towards a minor or major in a science and technology discipline.

STS Courses: A minor in Science, Technology and Society must complete 18 hours of STS courses. The following two courses are required:

- ST 320: Philosophy of Science
- ST 330: The Social & Rhetorical Study of Science & Technology

The remaining 12 hours may be chosen from a list of STS courses in various disciplines. One of these courses must be one examining the history of science or technology. A course fulfilling this requirement would explore the historical contexts and impact of a scientific or technological discovery, controversy, or innovation. The course may focus on helping students do historical research, and it could cover a narrow or broad period of time.

Co-curricular requirements: Students must participate in at least three designated co-curricular activities-typically public lectures or other events concerned with STS issues. The director of STS will publish 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.

#### Courses

#### ST 310. Social Studies of Science and

Technology: This course investigates questions about the production and cultural meanings of scientific knowledge and technological change. We compare the production of scientific truths to religious and other modes of truth production and consider the ways in which science influences and is influenced by Western culture. (U/G)(3)

ST 320. 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)

ST 330. The Social & Rhetorical Study of Science & 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)

ST 390. Topics in Science, Technology and **Society:** An investigation of a topic in the study of science, technology and society. (U/G)(3)

ST 391. Topics in Science, Technology and **Society:** An investigation of a topic in the study of science, technology and society. (U/G)(1)

ST 392. Topics in Science, Technology and **Society:** An investigation of a topic in the study of science, technology and society. (U/G)(2)

ST 401, 402, 403. Independent Study in Science, Technology and Society: 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) (1,2,3)

ST 405, 406. Internship in Science, Technology and society: 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)(3,6)

**ST 499. Honors Thesis:** (U)(3)

**Disciplinary STS Courses:** The following regularly taught courses will be available for STS credit. A complete list of STS courses will be published in the Schedule of Classes each year, taking advantage of new and special topic courses.

AN 302 The Body and Society

AN 350 Anthropological Methods

AN 354 The American City: Urban Anthropology

**AN 356 Life Histories** 

**CS 485 Computer Ethics** 

EC 391 Environmental and Natural Resources

EN 393 Sp Topics: Literature and Medicine

**GE 350 Global Political Geography** 

**HS 323 History of Modern Science** 

HS 383 American Military History

HS 390 Topics: History of Technology in the U.S.

PL 346 Philosophy of Mind

PL 349 Philosophy of Biology

PL 363 Biomedical Ethics

**RL 371 Religion and Science** 

PO 380 Topics: Environmental Politics and Policy

RX 325 Ethical Issue in Health Care

SO 393 Seminar in Sociological Research Methods



# THE COLLEGE OF LIBERAL ARTS AND SCIENCES

The power, importance and centrality of the liberal arts are affirmed daily in the College of Liberal Arts and Sciences. Regardless of the major or minor – 33 majors and 31 minors across 14 departments and over 35 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 class-room. 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.

The faculty of the College has adopted a statement outlining the core value sassociated with a liberal arts education.

# Core Values of the College of Liberal Arts and Sciences

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

continued

regard one's own words through the eyes and ears of others; to learn proper ways of integrating and citing the words and thoughts of others into one's own work; to do these things reasonably well in languages and worldviews other than our own.

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

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

A liberal arts education sees the cultivation of these skills not only as an end in itself but also as a preparation for the pursuit of knowledge and the other purposes of human life. The Chinese 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.

#### Administration:

Judith Harper Morrel, Interim Dean; Stuart Glennan, Associate Dean; Jennifer L. Poor, Associate Dean for Student Affairs

#### Admission

A student may be admitted to the College of Liberal Arts and Sciences by meeting the university's admission criteria or upon recommendation of the dean of another Butler college or the Office of Admission in the case of transfer students or conversion from non-degree status.

# College graduation requirements

Students may be graduated upon completion of 120 semester hours, including the core curriculum, 40 hours of upper-division work, foreign language, writing intensive, and computer competency requirements, and a major in the college.

# Foreign language and computer competency 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 freshmen must take a placement examination. Further information is available in the Department of Modern Languages, Literatures, & Cultures. American Sign Language also fulfills the language study requirement in LAS. Students should contact the Communication Disorders Program for more information.

Students in the college also must fulfill a computer competency requirement determined by the department of their major. Computer laboratories are located in the Eugene S. Pulliam School of Journalism and the departments of mathematics and actuarial science, computer science and software engineering, modern languages, literatures, and cultures, psychology, and in the Writers' Studio.

# **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; biological sciences; chemistry; classics, communication disorders; communication studies; computer science; economics; English; French; French and business studies; German; German and business studies; history; individualized major; international studies; journalism; mathematics; philosophy; philosophy and religion; physics; political science; psychology; public and corporate communication; religion; science, technology and society; sociology; criminology; software engineering; Spanish; Spanish and business studies; urban affairs.

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. 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 consist of 40 hours in closely related fields, with 20 hours of upperdivision courses, and must have the approval of the head of each department concerned. Grades below C- and courses taken pass/fail do not count toward a major.

# **Minors**

The college offers minors in African studies; anthropology; astronomy; biology; classics; chemistry; Chinese; communication science; communication studies; computer science; economics; English literature; English writing; French; gender studies; geography; German; history; international studies; Italian; journalism; mathematics; peace studies; philosophy; physics; political science; psychology; religion; science, technology and society; sociology; and Spanish. 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 head of the department for advising. 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.

# Requirements for the bachelor of science degree

In addition to college and university requirements, a student 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.

# 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

Preparation for teaching is a formal program administered under the supervision of the Teacher Education Advisory Council of the university. Students in the College of Liberal Arts and Sciences who intend to teach should announce that intention to their advisors and to the Office of the Dean. Their programs will be directed to meet state licensure requirements.

# Graduate programs

The College of Liberal Arts and Sciences offers graduate programs that provide professional training for a variety of career objectives. Degrees are offered in English and history. 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 departments offering these programs should be consulted for additional information. Specific requirements are described under the entry for the graduate program.

# Departments and programs of instruction

# African Studies minor

Administration:

Terri Jett, Ph.D., program coordinator IH 347B, 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 non-governmental 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):

AN 340 Ethnographic Arts

AN 360 People and Cultures of Africa

GE 317 Geography of Tropical Africa

HS 320 History of Africa

HS 325 Modern Africa

HS 390 Topic: Old and New South Africa

PO 350 African Politics

PO 386 Black Political Thought

RL 354 Islam: Religion, Culture, Society

RL 356 African and Afro-Caribbean Religion

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 (Dr. Jett, JH347B).

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).

# Anthropology

Administration:

Scott Swanson, Ph.D., department head **Assistant Professors:** 

Elise Edwards, Ph.D. Sholeh Shahrokhi, Ph.D.

The academic discipline of Anthropology strives to promote a critical understanding of similarities and differences in human societies and cultures on a global scale. Through cross-cultural comparison, it offers unique perspectives on the problematics of life in the contemporary world, as well as in the past. The primary focus of the program is Socio-cultural Anthropology, where engagement in original, empirical-field research is emphasized. Local communities, including Indianapolis, serve as an appropriate arena for beginning to explore cultural diversity and, in turn, for gaining a deeper understanding of ourselves as members of our respective cultures. Anthropological methods and theoretical perspectives in the course offerings are designed to prepare students for advanced graduate study in Anthropology and other social sciences, and for careers in such fields as health, business, museums, education, and international relations.

The minor in Anthropology consists of 18 hours coursework, with at least 12 hours at the upper-division level as well as AN 102 and AN 101, GE 102, or "subfield" course.

All Anthropology majors are required to complete:

- 36 credits
- AN 101, AN 102, GE 109
- 3 hours in a subfield of anthropology (200-400 level)
- 3 hours of methodology (AN 350, AN 354, AN 356, or course approved by advisor)
- 3 hours of theory (AN 390)
- 12 hours of elective courses, at least 3 hours in area courses, and 3 hours in topics courses
- 3 hours capstone: AN 460 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.

Students may also choose a combined major in the following: History and Anthropology; or Psychology and Anthropology

All History/Anthropology majors are required to complete:

- 49 hours, 21 in history, 21 in anthropology, 3 in geography, 4 in methodology
- 6 hours of lower-level history courses (HS 124, HS 223, HS 226, HS 228) from two distinct geographical areas

- 3 hours of Historiography (HS 357)
- 9 hours of upper-level history courses from at least two distinct geographical areas
- 3 hours of 400-level history research seminars (HS 475, HS 480, HS 486, or HS 490)
- 3 hours of Introductory Anthropology (AN 102)
- 3 hours of Development of Anthropological Thought (AN 390)
- 3 hours of anthropological methods courses (AN 350-359)
- 6 hours of anthropology area courses (AN 360-389)
- 6 hours of anthropology topics courses (AN 300-349)

All Psychology/Anthropology majors are required to complete [check credits]:

- 57 hours, 27 hours in psychology, 24 hours in anthropology, 6 elective hours
- PS 101, PS 210, PS 211
- two of three courses PS 202, PS 235, PS 385
- PS 310, PS 320, PS 350, PS 440
- AN 102
- 3 hours of anthropological methods courses (AN 350-359)
- AN 390
- 6 hours of anthropology area courses (AN 360-389)
- 9 hours of anthropology topics courses (AN 300-349)
- 6 elective hours of 300-400 level courses in either psychology or anthropology

# **Anthropology courses**

AN 101. First Year Seminar: This course will introduce students to basic theories and methods in the disciplines of anthropology and history though 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 interaction. (U)(3)

AN 102. Introductory Anthropology: The study of human behavior from a comparative, cross-cultural perspective. Explores theoretical, methodological and ethical issues; the focus is primarily socio-cultural anthropology, while addressing archaeology, physical anthropology and linguistics. (U)(3)

GE 109. Cultural Geography: Regions of the World: A survey of 11 cultural regions of the world. Course includes study of the ecological base, history, economy, politics and ethnic relations. Emphasis is on conflict between Western and non-Western societies since 1500. (U)(3)

AN 202. Encounters with Other Cultures: A survey of writings by anthropologists and others which tell of their experiences as travelers to other societies and as interpreters of other cultures. Students discuss and write about ways of playing the outsider's role and changes in the writers' own outlooks, as well as consider the cultural contexts of the readings. (U)(3)

AN 204. 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)

AN 280. Sub-Fields in Anthropology: Introductory courses in the various sub-fields of anthropology such as biological anthropology, archaeology, primate behavior, language and culture are offered on an occasional basis. This may be repeated for credit if subject matter is different. (U)(3)

AN 300. 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)

AN 301. Popular Religion: This course examines the variety of religious practices that are part of both world and indigenous religions traditions. Topics include: new religious movements and popular culture; religious devotion, icons, and iconography; gender and popular religion; pilgrimage; the transmission of popular religious practices; and science, pseudo-science, and popular beliefs and practices. (U/G)(3)

AN 302. 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)

AN 304. Medical Anthropology: An introduction to the field of medical anthropology, which explores the links between culture, society, disease and illness. Topics include discussion of biomedical, epidemiological, and other models of disease; knowledge and practice of healers cross-culturally; the relationship between religion and healing; and occupational health issues. (U/G)(3)

AN 312. 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)

#### AN 313. Nation-States and Nationalisms:

This course looks at nation-making projects and nationalist movements in a variety of historical and geographical contexts. Students study and then work to apply theories of nationalism to a range of case studies from Asia, the Middle East, Latin America, and Europe. (U/G)(3)

AN 320. Gender in Cross-Cultural Perspective: 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)

AN 328. Popular Culture: This course examines the role and function of popular culture in different social and cultural settings throughout the world. Students will compare the impact of popular culture in different regions, examining the cultural importance of such media as films, televisions, sporting events, music, and the internet. (U/G)(3)

AN 329. 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 these 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)

AN 335. 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) \*WAS AN 330\*

AN 338. Language & Culture: The course will consider the topic of human language and its use in society. Current linguistic and socio-linguistic assumptions, language differences and similarities, and the influence of cultural factors will be discussed. (U/G)(3)

AN 339. 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/G)(3)

# AN 342. 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)

AN 344. Foodways: Anthropological Perspectives of Food, Nutrition and Famine: This course approaches habits of eating from a cross-cultural, anthropological perspective, and considers topics such as the cultural construction of food eating, and food taboos; subsistence strategies; food and ritual; food and gender, food and identity and world food problems. (U/G)(3)

AN 346. 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)

AN 347. Asian Musics: This course provides an ethnomusicological examination of traditional and contemporary Asian musics. Topics include the history of Asian musics, the analysis of music as sound and behavior, and the role of music in daily life. The course includes hands-on drumming and playing; non-musicians are welcome. (U/G)(3)

### AN 348. Introduction to Ethnomusicology:

The Anthropology of Music: Ethnomusicology is the study of music as sound and behavior within a cultural context. Using an interdisciplinary approach, the course examines ethnomusicology's intellectual history; theory and method; research and fieldwork skills; tools for musical and behavioral analysis; and universal and unique aspects of music in people's everyday lives. Non-musicians welcome. (U/G)(3)

AN 349. African Musics: This course provides an ethnomusicological examination of traditional and contemporary African musics. Topics include the history of the musics of Africa and the Diaspora, the analysis of music as sound and behavior, and the role of music in daily life. The course includes hands-on drumming; non-musicians are welcome. (U/G)(3)

AN 350. 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)

AN 352. 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)

AN 354. 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

The College of Liberal Arts and Sciences

neighborhood. Fieldwork and service learning are highlighted. (U/G)(3)

AN 360. 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)

#### AN 362. 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)

AN 366. Peoples and Cultures of Asia: An introduction to selected topics in the society and cultures of East Asia (China, Japan, and Korea), Southeast Asia (Indonesia, Malaysia, Thailand, and the Philippines), and South Asia (the Indian sub-continent). Topics include post-colonialism, transnational processes, family and kinship, world and local religious traditions and ritual practices, economic development, and gender issues. (U/G)(3)

AN 368. Peoples and Cultures of the Muslim **World:** An introduction to peoples and cultures of the contemporary Muslim World. Social, economic and cultural diversity are approached from the comparative viewpoint of anthropology and the role of Islam, sometimes unifying, sometimes divisive, is considered in various local contexts as well as from the formal, historical perspective. (U/G)(3)

AN 370. 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)

AN 372. Vietnam: This seminar course will examine the different perspectives of Vietnamese history and the diverse cultures of Vietnam, with a focus on the modern period. It will locate the Vietnam War in a broad historical and cultural context and will explore such themes as Chinese and French colonialism in Vietnam,

Nationalism and Communism, tradition and revolution, peasants and revolutionaries. (U/G)

AN 380. 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)

### AN 390. 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: AN 102 and junior standing. (U/G)(3)

AN 460. 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)

AN 481, 482, 483. Independent Study: An opportunity for qualified students to pursue a topic of individual interest. With permission of the director. (U/G)(1, 2, 3)

AN 484, 485. 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: AN 102 and permission of the director. (U)(3, 6)

AN 486. Seminar: Intensive reading with problems for investigation in some special field. Pre-requisites: AN 102 and permission of the director. (U)(3)

AN 499. Honors Thesis: (U)(3)

# **Biological Sciences**

Administration:

Carmen Salsbury, Ph.D., department head **Professors:** 

Thomas E. Dolan, Ph.D.; Michael S. Maloney, Ph.D.; James L. Shellhaas, Ph.D.; Michael Zimmerman, Ph.D.

#### Associate professor:

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

#### Assistant professors:

Nathanael R. Hauck, Ph.D.; Christopher M. Hess, Ph.D.; Jennifer R. Kowalski, Ph.D.

#### Lecturers:

Erin Gerecke, Ph.D.; Marva Meadows, M.S.; Charissa Osborne, Ph.D.; Rebecca Dolan, Ph.D., Director, Friesner Herbarium; Marjorie L. Hennessy, M.L.A., Academic Program Coordinator, Center for Urban **Ecology** 

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 general biology courses, followed by 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. Faculty are familiar with these methods as we apply them in our individual research programs, and we strive to develop such capabilities in our students. Therefore, we give our students opportunities to actively use the tools of scientific investigation in the lab and the field through a variety of courses at the molecular, cellular, organismal and population levels of biological organization.

#### Requirements for a major in Biology:

A total of 37 biology credit hours are required. All students must complete BI 120-123; these courses are prerequisites for all other major-level biology courses. Additionally, students must take one course with an accompanying lab (indicated with L) from each group below. Two additional courses, with or without labs, must be taken from two different groups. The remaining credit hours can be obtained by taking any biology course at the 300 level or above. At least one of the courses must be a plant course (indicated with\*) and at least one of the courses must be an animal course (indicated with\*\*). The plant and animal courses should be taken in the sophomore year. All senior biology majors must complete BI 480.

Genetics/Cellular/Molecular: Courses focus primarily on the processes that occur within

and between cells and that are common to most living things.

305 Vertebrate Histology and Microtechnique (L)

323 Immunology

350 Cell Biology (L)

355 Plant Development\* (L)

357 General Genetics (L)

358 Genomics, Bioinformatics, and Gene Evolution (L)

363 Plant Physiology\* (L)

410 Microbiology (L)

440 Practical Molecular Biology (L)

458 Molecular Genetics (Prereq: 350 or 357)

Evolution/Ecology/Behavior: Courses focus on the processes that are responsible for understanding the distribution, abundance, and diversity of organisms, from both contemporary and historical perspectives.

310 Evolution

364 Population and Community Ecology (L)

370 Conservation Biology

415 Indiana Natural History (L)

420 Animal Behavior (L) (Prereq: 301)

425 Landscape Ecology (L)

Organismal: Courses focus on particular taxonomic groups of organisms. They may include information on physiology, behavior, ecology, evolution, classification, etc. of the group.

301 Zoology\*\* (L)

302 General Botany \* (L)

303 Principles of Physiology (L)

312 Biology of Non-vascular Plants\* (L)

316 Mammology\*\* (L)

322 Vertebrate Biology\*\* (L)

330 Tropical Field Biology (L)

412 Local Flora (L)

430 Developmental Biology (L)

In addition, all Biology majors must take general chemistry (CH 105/106 or CH 107).

BI 325 cannot be counted toward the 37-hour minimum required for the biology major. Students will be allowed to use a maximum of three hours of independent study credit, internship credit, research or honors thesis credit towards the 37-hour minimum required for the biology major.

Requirements for a minor in Biology:

- BI 120-123 10
- 3 BI elective courses with lab at the 300 level (excluding BI 325).
- One elective must be chosen from the following: BI 302, 312, 355 or 363 and

- another from the following: BI 301, 316, 322.
- 22 credit hours

#### Courses

- **BI 100. Introductory Biology:** A survey of the major concepts in the biological sciences. Lecture and laboratory. A course for nonscience majors. (U)(5)
- **BI 101. General Botany:** Fundamental principles and methods of the plant sciences. Lecture, demonstration and laboratory. A course for non-science majors. (U)(5)
- **BI 103. Genetics and Evolution:** A study of the significant concepts in molecular, organismal and population genetics and of 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)
- **BI 105.** 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. Only available to COPHS students. (U)(3)
- **BI 106. Environmental Biology:** Application of scientific principles to understanding and managing the environment. Emphasis on the human relationship with the environment and possible solutions to environmental problems. (U)(5)
- BI 120. Principles of Biology I: An

introductory course emphasizing the central role of evolution and the various methods of investigation in Biology. Topics include Darwinian evolution, ecology and the processing of matter and energy from cells to biomes. Corequisite: BI 121. (U)(3)

- **BI 121. Biological Investigations I:** An introductory course emphasizing the process of inquiry in Biology. Activities include ecological fieldwork and lab experiments with photosynthesis and respiration. Corequisite: BI 120. (U)(2)
- **BI 122. Principles of Biology II:** An introductory course emphasizing the central role of evolution and the various methods of

- investigation in Biology. Topics include genetics, neo-Darwinian evolution and an overview of biological diversity. Corequisite: BI 123. (U)(3)
- **BI 123. Biological Investigations II:** An introductory course emphasizing the process of inquiry in Biology. Activities include lab experiments and computer exercises in genetics and evolution and fieldwork demonstrating biological diversity. Corequisite: BI 122. (U)(2)
- BI 250. Research and Analysis in the Biological Sciences: This course is designed to prepare biology majors for research (e.g., independent study, honors thesis, or Butler Summer Institute) and internships during their undergraduate experience. Basic statistical analysis and various essential laboratory and field techniques will be covered. Prerequisites: BI 121 & BI 123. (U)(2)
- **BI 257. Human Anatomy and Physiology:** A course for non-major students to relate structure and function in the human body. Prerequisite: BI 100 (CC 214P) or BI 120 & BI 122. (U)(5)
- **BI 301. 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: BI 120 & BI 122. (U)(4)
- BI 302. Principles of Botany: A survey of the basic principles of plant biology, covering the major plant groups, their evolutionary relationships, and their structural and functional characteristics. Prerequisite: BI 120 & BI 122. (U)(4)
- **BI 303. Principles of Physiology:** Analysis of the functions of all major systems of the vertebrates with emphasis on mammalian physiology. Prerequisite: BI 120 & 122. (U)(4)
- **BI 305.** Vertebrate Histology and Microtechnique. A study of the structure of vertebrate tissues and the techniques used in microscope slide preparations. Prerequisite: BI 301 or permission of the instructor. (U)(4)
- **BI 310. Evolution:** Analysis of organic evolution, the mechanisms of evolutionary changes and the evolution of higher forms of life. Prerequisite: BI 120 & BI 122. (U)(3)

- **BI 312. Biology of Non-Vascular Plants:** The biology of algae, fungi, mosses, and liverworts, including structure, life histories, classification, physiology, ecology and experimental aspects of nonvascular plants. Prerequisite: BI 120 & BI 122. (U)(4)
- **BI 316. Mammology:** 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: BI 120 & 122. (U)(4)
- BI 322. Vertebrate Biology: Phylogeny, taxonomy, behavior and life histories of the vertebrates. Prerequisite: BI 120 & BI 122. (U)(4)
- BI 323. Principles of Immunology: Principles of Immunology: Basic concepts and techniques of immunology. Prerequisite: BI 105 or BI 120 & BI 122. (U)(2)
- BI 325. Principles of Pathogenic Microbiology: A course designed to provide students with a foundation in pathogenic microbiology. It 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: BI 105 or BI 120 & BI 122. (U)(3)
- **BI 330. 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)(3)
- BI 339. 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: BI 120 & BI 122 or permission of instructor. (U)(3)
- BI 350. Cell Biology: The structure and function of cells, including the properties of macromolecules, membrane structure, cell organelles, cell metabolism and energy relationships, cell division and gene expression. Lecture and laboratory. Prerequisite: BI 120 & BI 122. (U)(4)

- BI 355. 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: BI 120 & BI 122. (U)(4)
- **BI 357. General Genetics:** An introduction to the basics of both classical and modern genetics, with emphasis on human heredity. Prerequisite: BI 120 & BI 122. (U)(4)
- BI 358. 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 over arching field of systems biology. The students will also learn what these new approaches reveal about how genes and genomes evolve. Prerequisites: BI 120 and BI 122. (U)(4)
- BI 363. 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: BI 120 & 122, and CH 106 or CH 107. (U)(4)
- BI 364. 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. (U)(4)
- **BI 370.** 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. (U)(3)
- **BI 401, 402, 403. 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) (1, 2, 3)

BI 405, 406, 407, 408, 409. Topics in Biology: Study of a current biological topic. Prerequisite: Permission of the instructor. (U)(1, 2, 3, 4, 5)

**BI 410. Microbiology:** Basic principles of microbiology and associated laboratory techniques. Lecture, demonstration and laboratory. Prerequisites: BI 120 & BI 122 and [CH 106 or CH 107]. (U)(4)

**BI 412. Local Flora:** Collection, identification, classification, uses and ecology of Indiana flowering plants. Learning the use of identification keys will be stressed. Prerequisite: BI 100 (CC214P) or BI 120 & BI 122. (U)(3)

**BI 415. Indiana Natural History:** Study of the various forces that have influenced the landscape of Indiana (geological, climatological, ecological and human), focusing on the natural areas that illustrate and preserve our natural heritage. Lecture, lab and field trips. Prerequisites: BI 120 and BI 122. (U) (4)

**BI 420. Animal Behavior:** The adaptive behavior of animals is approached from physiological, developmental, ecological and evolutionary perspectives. Prerequisite: BI 301. (U)(4)

BI 425. 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: BI 120 and BI 122. (U)(4)

BI 430. Developmental Biology: A study of embryonic development from the formation of gametes, through fertilization, and up to the development of the multi-celled organism. Emphasis will be on the anatomical changes during development and on the cellular and molecular events causing these changes. Lecture and laboratory. Prerequisite: BI 120 and BI 122. (U)(4)

**BI 440. Practical Molecular Biology:** Theory and practice of methods used to study genes and their expression. Laboratory emphasizes DNA isolation and analysis, as well as basic

molecular cloning. This course may be taken as BI 440 or CH 468, but not both. Two lectures, two 3-hour laboratories/week. Prerequisites: CH 352 or permission of instructor. (U)(4)

**BI 458. Molecular Genetics:** Molecular structure, biochemical function of the gene as illustrated by the original research literature, viruses and eukaryotes cells. Prerequisite: BI 350 or BI 357 or CH 361. (U)(3)

**BI 480. 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)

**BI 490. 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 head is required. (U)(3)

**BI 499. Honors Thesis:** (U)(3)

# Chemistry

Administration:

Stacy O'Reilly, Ph.D., department head **Professors:** 

Joseph L. Kirsch, Ph.D.; Shannon G. Lieb, Ph.D.; Robert A. Pribush, Ph.D, Anne M. Wilson, Ph. D.

#### Associate professors:

Olujide Akinbo, Ph.D.; John Esteb, Ph.D.; Geoffrey C. Hoops, Ph.D.; LuAnne McNulty, Ph.D.; Stacy A. O'Reilly, Ph.D.; Michael Samide, Ph.D.

#### Assistant professors:

Todd Hopkins, Ph.D.; R Jeremy Johnson, Ph.D. **Instructors:** 

Tracy LeGreve, Ph.D.; Paul Morgan, Ph.D.

The Department of Chemistry offers course sequences that allow students to pursue a major in chemistry including studies in the fields of inorganic, physical, organic, analytical, and biochemistry. A professional chemistry curriculum approved by the Committee on Professional Training of the American Chemical Society is available. The course sequences prepare students for careers in the chemical profession, for entrance into graduate schools, or for entrance

into professional schools (e.g., medical dental, medical technology, veterinary, physical therapy, law, or business.) A joint program with the College of Education prepares high school chemistry teachers. The chemistry offerings can also be used by students as a scientific support for other majors, as part of a double major, for a minor in chemistry, or for background for professional schools.

The chemistry curriculum is designed to generate a technically competent, broadly educated professional. In order to obtain a bachelor of science degree with a major in chemistry, a student must satisfy the graduation requirements of the College of Liberal Arts and Sciences, the core curriculum requirements of the university, and the course requirements of the Department of Chemistry.

A major in chemistry requires a minimum of 32 hours of chemistry, a year of college physics, and MA 106, along with the college and university graduation requirements. Students completing a major in chemistry with 32 hours should consider combining their chemistry major with another area of study and plan for a double major. Students that 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.

Requirements for a major in chemistry: General Chemistry

CH 105-106 (5 hrs each) or CH 107(6 hrs) Organic Chemistry

CH 351-352 (5 hrs each)

Plus sufficient hours in upper level chemistry courses to complete a total of 32 hours. One year of physics (PH 201-202 or PH 107-108) and MA 106 is also required. Upper level chemistry courses must be selected from the following and from at least two of the following areas:

Analytical Chemistry
CH 321 (5 hrs),
CH 422 (3 hrs)
CH 424 (2 hrs)
Inorganic Chemistry
CH 332 (3 hrs),
CH 431 (3 hrs)
CH 432 (2 hrs)
Biochemistry
CH 361-462 (4 hrs each)
CH 463-464 (2 hrs each)
Physical Chemistry

CH 471-472 (3 hrs each) CH 473-474 (2 hrs each) Requirements for honors in chemistry: General Chemistry CH 105-106 (5 hrs each)

OR CH 107 (6 hrs) Organic Chemistry CH 351-352 (5 hrs each)

Physics

PH 201-202 (5 hrs each)

OR PH 107-108 (4 hrs each)

Mathematics

MA 106 (5 hrs)

MA 107 (4 hrs), or equivalent

Plus at least one from each of the following areas:

Analytical Chemistry

CH 321

Inorganic Chemistry

CH 332

Biochemistry

CH 361

Physical Chemistry

CH 471 or 472

Additional requirements for different levels of departmental honors are:

Honors in chemistry \*

GPA in major 3.6 or greater

High honors in chemistry

GPA in major 3.7 or greater and honors

thesis or comprehensive exam

Highest honors in chemistry

GPA in major 3.8 or greater, honors thesis, and comprehensive exam

\*In the event that a student earns university honors of cum laude, honors in chemistry are not awarded.

Requirements for certification by the American Chemical Society. The requirements for certification by the ACS underwent a major revision in 2008 and the new requirements will be phased in over five years. The old requirements are listed below. Please contact the department chair or a chemistry faculty member to discuss the new requirements.

General Chemistry
CH 105, CH 106 or CH 107 (10 hrs
or 6 hrs)
Analytical Chemistry
CH 321, CH 422, CH 424 (10 hrs)
Organic Chemistry
CH 351, CH 352 (10 hrs)

Physical Chemistry CH 471, CH 472 (6 hrs) CH 473, CH 474 (4 hrs) Inorganic Chemistry CH 332, CH 431, CH 432 (8 hrs) Biochemistry CH 361 (4 hrs) Chemical Literature CH 491(2 hrs) Chemistry Seminar CH 492(1 hr)

Plus at least six hours of advanced chemistry electives and a total of 500 laboratory contact hours. Research and independent study are strongly encouraged for students aiming for graduate studies in chemistry. Up to two hours of independent study may be counted toward the chemistry requirements for graduation with the ACS certification. One year each of physics (PH 201-202 or PH 107-108) and calculus (MA 106-107) are also required.

Requirements for a minor in chemistry: General Chemistry CH 105-106 (5 hrs each) OR CH 107 (6 hrs) Organic Chemistry CH 351-352 (5 hrs each) Plus four hours from the following: CH 321 (Analytical Chemistry) CH 332 (Inorganic Chemistry) CH 361 (Biochemistry) CH 471 or CH 472 (Physical Chemistry)

### Courses

130

CH 101. Chemistry and Society: A onesemester course for students who are not planning to major in the sciences. Chemistry and Society is a study of chemistry and its applications to and impact on society. Four hours of lecture/discussion and one two-hour laboratory per week. Credit not applicable toward a major in chemistry. For students with a minimal or no background in chemistry. Fulfills university core curriculum division four. (U)(5)

CH 105. 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)

**CH 106. 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)

CH 107. 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)

CH 309. Electron Microscopy: Electron microscopy, including characterization of surface chemistry on samples chosen by the student. Two lecture hours and two lab hours per week. Prerequisite: CH 106 or CH 107 or equivalent with a grade of C or better. (U)(3)

CH 321. Analytical Chemistry I: An introduction to the fundamental theory and techniques of quantitative analysis. Four lectures and one four-hour laboratory per week. Prerequisite: CH 106 or CH 107 with a grade of C or better. (U)(5)

CH 332. 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)

**CH 351. Organic Chemistry I:** 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)

CH 352. Organic Chemistry II: 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: CH 351 with a grade of C or better. Four hours of lecture and one threehour laboratory per week. (U)(5)

CH 361. Biochemistry I. 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: CH 352 with a grade of C or better. Knowledge in introductory biology strongly recommended for this course. Four hours lecture/week. (U)(4)

CH 392. Chemistry Seminar I: Attendance at and participation in the chemistry departmental seminar series, including pre- and postseminar reports. Pass/fail credit. Prerequisites: 12 hours of chemistry. (U)(1)

CH 402, 403. 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 head. (U)(3, 6)

CH 411, 412. 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, 2)

CH 422. Analytical Chemistry II: This course provides an introduction to advanced instrumental theory, design, and technique. Three lectures per week. Prerequisite: CH 321 with a grade of C or better. (U)(3)

CH 424. 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: CH 321. (U)(2)

CH 429. 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)

CH 431. Advanced Inorganic Chemistry:

The study of coordination chemistry, organometallic chemistry and catalysis. Three lectures per week. Pre-requisite: CH 332 with C or better. Corequisite: CH 471 or CH 472. (U/G)(3)

CH 432. Inorganic Chemistry Laboratory: Synthesis, isolation and characterization of inorganic and organometallic complexes and the application of main group and transition metal species to the synthesis of organic molecules. One four-hour lab per week. Prerequisite: CH

431 with C or better. (U)(2)

CH 439. 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)

CH 459. 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

CH 462. Biochemistry IIA: Central

instructor. (U/G)(3)

Metabolism: Intermediatry metabolism (carbohydrate and lipid metabolism, electron transport and oxidative phosphorylation). Prerequisites: CH 361 with a grade of C or better. Four hours of lecture/week. (U/G)(4)

CH 463. Biochemistry Laboratory I: Laboratory separation, detection, quantitation, and characterization of proteins, including enzymecatalyzed kinetics, using chromatography, electrophoresis and spectroscopy. This writingintensive class will also emphasize reading, writing and peer-review skills involving biochemical literature. One 1-hour lecture and one 3-hour laboratory per week. Prerequisite: CH 361 and CH 321, both with grade of C or better. (U)(2)

CH 468. Practical Molecular Biology: Theory and practice of methods used to study genes and their expression. Laboratory emphasizes DNA isolation and analysis, as well as basic molecular cloning. This course may be taken as BI 440 or CH 468, but not both. Two lectures, two 3-hour laboratories/week. Prerequisites: CH 352 or permission of instructor. (U)(4)

THE COLLEGE OF LIBERAL ARTS AND SCIENCES

#### CH 469. 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)

CH 471. Physical Chemistry I: The introduction to quantum chemistry, bonding, spectroscopy and statistical mechanics. Prerequisites: CH 352 or equivalent, MA 107 or equivalent, PH 202 or equivalent. (U/G)(3)

**CH 472. Physical Chemistry II:** The introduction to chemical thermodynamics and chemical kinetics. Prerequisites: CH 352 or equivalent, MA 107 or equivalent, PH 202 or equivalent. (U/G)(3)

# CH 473. Physical Chemistry Laboratory I: Laboratory studies in thermodynamics, chemic

Laboratory studies in thermodynamics, chemical kinetics and physical property measurements. One four-hour laboratory per week including one hour of lecture. Corequisites: CH 471 or CH 472. (U/G)(2)

# CH 474. Physical Chemistry Laboratory II:

Laboratory studies of chemical bonding and chemical spectroscopy (uv-visible, ir and nmr). One four-hour laboratory per week including one hour of lecture. Corequisites: CH 471, CH 472. (U/G)(2)

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)

# CH 479. Special Topics in Physical Chemistry:

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

**CH 491. Chemical Literature:** The study of the standard references and journals of the chemical literature. Work in this course includes library assignments and computer searches. Prerequisite: 18 hours of chemistry. (U/G)(2)

CH 492. 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: CH 392 and 28 hours of chemistry. (U)(1)

#### CH 493,494. 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)(1,2)

CH 499. Honors Thesis: (U)(3)

CH 518. Advanced Placement Workshop in Chemistry for 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)

### **Classical Studies**

Administration:

Harry van der Linden., Ph.D.

Associate professor:

Paula Saffire, Ph.D.

#### Assistant professor:

Christopher Bungard, Ph.D.

The Department of Classical Studies offers a major and a minor. Competence in Greek or Latin is required for the major. Familiarity is recommended but not required for the minor. Through both the major and the minor, the department aims to develop in the student an appreciation, understanding and enjoyment of classical literature and a comprehension of the abiding principles of the Western heritage. The department is also interested in students who wish to relate classics to work in other disciplines such as English, philosophy, religion, history and a modern language. Information concerning teacher certification requirements is available in the College of Education.

The Classics program awards advanced placement credit to students who place in the second or third year and complete six hours of language study at the 200 or 300 level. In particular: A student placing into LT 203 and completing LT 203, LT 204 with grades of C

or better will receive 3 hours of advanced placement credit. A student placing into LT 204 who completes LT 204 and 3 hours of 300 level LT courses will receive 6 hours of advanced placement credit. A student placing into 300 level Latin who completes 6 hours of 300 level LT courses with grades C or better will receive 9 hours of advanced placement credit.

Advanced Placement. All freshmen who studied a language in high school take a placement evaluation during orientation week. Students who place at the 200 or 300 level on this evaluation earn from three to nine hours of advanced placement credits after completion, with grades of C or better, of six hours of the language on the 300 level. Students who take the College Board Advanced Placement Tests in high school and score 3, 4 or 5 automatically place on the 300 level in that language and receive 3 hours of 300-level credit.

### 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 all together. 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 all together. 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 towards their minor and towards fulfilling the foreign language requirement for a liberal arts degree.

# Foreign Language Courses

**GK 101, 102.** Elementary Greek I, II: Introductory course which prepares students to read the New Testament and the works of Homer, Sophocles, Plato and others. (U)(4, 4)

GK 203, 204. Intermediate Ancient Greek: 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, 3)

GK 301. 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: GK 203 and 204, placement into the 300 level, or the permission of the instructor. (U)(3)

**GK 360. Topics in Ancient Greek:** In-depth study of works not covered in earlier courses. This course is repeatable for credit. Prerequisite: GK 203 and 204, placement into the 300 level, or permission of instructor. (U)(3)

**GK 499. Honors Thesis:** Thesis subject may be taken from either Greek or Latin. (U)(3)

LT 101, 102. Elementary Latin I, II: An introductory course that prepares the student to read the Latin prose and poetry of Virgil, Homer, Livy, Ovid and others. (U)(4, 4)

LT 203, 204 Intermediate Latin I, II: 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: LT 101 and 102 or placement at the 200 level. (U)(3, 3)

LT 301. 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. This course is repeatable for credit. Prerequisite: LT 203 and 204, placement into the 300 level, or permission of the instructor. (U)(3)

LT 360. Topics in Latin: In-depth study of works not covered in earlier courses. This course is repeatable for credit. Prerequisite: LT 203 and 204, placement into the 300 level, or permission of instructor. (U)(3)

LT 400, 401, 402. Independent Study: Directed reading in Latin or Greek. Consult head of department before registering. (U/G)(1, 2, 3) Culture Courses (on classical topics, taught in the English language)

## **200-Level Culture Courses**

CLA 211. Greek Civilization: A study of Greek civilization, concentrating on important facets of literature, history, government, philosophy, art, and archaeology. (U)(3)

CLA 222. Roman Civilization: A study of Roman civilization, concentrating on important facets of literature, history, government, philosophy, art and archaeology. (U)(3)

CLA 233. Classical Mythology: A general introduction to the mythology of Greece and Rome. A study of the Greek interpretation of the origin of the universe, relation of gods to humankind, and legendary history such as the Trojan War. (U)(3)

CLA 255. Greek Art and Myth: A study of Greek art and myth intertwined. The mythological background will add depth to the understanding of the art, and the art will be seen as embodying and illuminating the myths. (U)(3)

## **300-Level Culture Courses Literary Genre Topics**

CLA 301. Epic Poetry: An in-depth study of the ancient epic. Course will focus on Homer's Iliad, Homer's Odyssey, or Virgil's Aeneid. Other material will be brought in as background. (U)(3)

CLA 302. 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)

## CLA 303. Drama on the Ancient Stage:

Course may focus on Greek or Roman tragedy or comedy. Performance may be part of the course. (U)(3)

CLA 304. 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)(3)

CLA 360. Topics in Classics. (U)(3)

## Communication Studies

#### Administration:

David H. Waite, Ph.D., Department Head; Suzanne Reading, Ph.D.CCC-SLP, Program Director/CSD

#### **Professors:**

William W. Neher, Ph.D.; David H. Waite, Ph.D.

#### Associate professors:

Suzanne Reading, Ph.D.CCC-SP; Carolyn Richie, Ph.D

## Assistant professors:

Kristen Hoerl, Ph.D.; Kristin Swenson, Ph.D.

#### Lecturers:

Janis Crawford, M.A.; Paul J. Sandin, M.Div.

The mission of the department is rooted in the liberal arts tradition of Athens and Rome and passed on to posterity as one of the seven liberal arts (rhetoric or oral communication). In keeping with the liberal arts tradition of Butler University, the Department of Communication Studies combines theory, critical understanding, analysis, and practice.

To fulfill our mission, the department provides students with the critical abilities to analyze the functions and dysfunctions of communication. This emphasis on critical abilities, practice, and reducing communication barriers is reflected in our two majors, Communication Studies (36 hours) and Communication Sciences & Disorders (33 hours).

In addition, we offer minors in each major as well as concentrations that emphasize the study of Organizational Communication and Leadership or Advocacy, Rhetoric, and Media.

The Communication Studies major prepares students for a professional career or for graduate school.

The Communication Sciences & Disorders major prepares students for graduate study in speech language pathology, audiology, or speech science.

Please contact the department for specific information and requirements concerning majors and concentrations or look on line at www.butler.edu/communication-studies/

The field of Communication Study is concerned with the process and effects of oral communication. Scholars in the discipline study all aspects of communication as it relates to individuals, groups, cultures, organizations, pathologies and technologies.

The Department offers two majors:

- 1. The Communication Studies major has concentrations in Advocacy, Rhetoric & Public Culture, and Leadership and Organizational Communication.
- 2. The Communication Sciences & Disorders major prepares students for graduate work in speech-language pathology, audiology or speech science.

In addition, the Department offers two 18hour minors: one in Communication Studies and one in Communication Sciences & Disorders.

Specific course requirements for majors and minors are available on-line or through the department.

## Courses:

## COM 100. Intro to Discipline of Com Studies:

This course will survey three basic genres of Communication Studies: Organizational Communication, Culture & Technology, and Performance. We will learn the basic terminology of the discipline and explore future career and graduate options in preparation for post-college life. (U)(2)

COM 102. Public Speaking: An outcomes-based course that focuses on student's ability and performance in three areas: knowledge of communication theory (tested by written examinations); skill in critiquing speeches (demonstrated by oral and written critiques of in-class speeches); skill in platform presentation (through preparation and delivery of at least two speeches. (U)(2)

COM 138. American Sign Language 1: An introduction to the language of signs and finger spelling. Receptive and expressive skills emphasized. The course will present stories, poems and readings that exist in deaf culture. (U)(3)

COM 139. American Sign Language 2: A continuation of SH138. 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: COM 138. (U)(3)

COM 231. Introduction to Communication Science 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)

COM 238. American Sign Language 3:

Emphasis on competency in signing, both receptive and expressive. Use of videos to gain insight into deaf culture. Prerequisites: COM 138, COM 139 or equivalent. (U)(3)

COM 239. American Sign Language 4: A continuation of SH 238. Emphasis on competency in signing, both receptive and expressive. Use of videos to gain insight into deaf culture. Prerequisite: COM 238. (U)(3)

COM 260. Communication, Technology, and Culture: This class examines the intersections of communication, culture, and technology. This investigation includes how bodies and identities are constructed and performed, the manner in which cultural ideologies and representations are produced in various mediated discourses, and explorations of identity and culture in various communication contexts including on-line and virtual communities. (U)(3)

COM 270. 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)

**COM 300. Tutoring and Mentoring:** This course will focus on the concepts of tutoring and mentoring for skills development in oral presentation. Coaching techniques and Speakers Lab protocol will be studied. Successful completion of COM 102 or approved performance course required. (U)(1)

COM 301. Advanced Public Speaking: Extensive study of theory and practice of platform speaking and speech writing. (U)(3)

COM 302. Seminar in Web Design: Effective communication through web site design. This course in web design introduces students to the principles and practice of effective web site creation, including communication and design principles, consulting with clients, deciding on site purposes, designing sites, creating sites,

launching sites as well as trouble shooting and maintenance. (U)(3)

COM 305, 306. Intercollegiate Speech and Debate: Designed to prepare students to represent the University in competitive tournaments. (U)(1)

**COM 308. History of Film:** A survey of 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 moves. Readings, lecture and discussion, exams and viewing of numerous film clips. (U)(3)

COM 310. The American Motion Picture (1895-1930): The American motion picture from the first silent movies to the first talkies, 1895-1930. Films and people responsible for major advances in theory and techniques in the development of movies as a form of entertainment, art and influence upon society. Required readings, viewing and analysis of films, lectures and discussions. (U)(3)

COM 311. The American Motion Picture (1929-present): The American motion picture from the early talkies to the present with emphasis primarily on the '30s, '40s and '50s. Films and people responsible for major advances in theory and techniques. Required readings, viewing and analysis of films, lectures and discussion. (U)(3)

COM 312. Criticism of Film: An introduction to the language, concepts, and criticism of film and its cultural implication within the context of cinematic production, circulation, and consumption. Course considers basic grammars of composition, continuity, and editing as well as conventions and variations involving narrative, genre, and authorship. (U)(3)

## COM 315. 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) [WAS COM 415]

COM 318. Workshop in Presentational Communication: A lab-based course with concentrated workshop sessions providing

136

instruction and directed practice in presentational speaking for business and professional settings. Students use practice and tutoring facilities of the Butler Speakers Lab in fulfilling requirements for the course. (U)(1)

COM 321. Oral Interpretation: Advanced theory and practice in oral interpretation of literature to equip the student for recital in a public forum. (U)(3)

COM 331. Phonetics: A study of phonological science with emphasis on articulatory phonetics and the skills of phonetic transcription using the International Phonetic Alphabet (IPA). (U)(3)

COM 332. 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. (U)(3)

COM 333. Anatomy and Physiology of Speech and Hearing: Introduction to the anatomical and physiological bases of the speech and hearing mechanisms. (U)(3)

COM 334. Speech Science: The physical characteristics of speech sounds and psychophysical processes involved in speech and hearing. (U)(3)

COM 335. Phonological Development and Disorders: Phonological development and speech characteristics are the focus. Testing and management of disorders will be discussed. Prerequisite: COM 331. (U)(3)

## COM 336. 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: COM 333, COM 334. (U)(3)

COM 337. Clinical Procedures: Introduction to therapy with emphasis upon behavioral observation, description of behavior, good planning, cause-effect relationships and clinical interaction. Prerequisites: COM 332, COM 335. (U)(3)

**COM 338. Language and Culture:** The course will consider the topic of human language and its use in society. Current linguistic and socio-linguistic assumptions, language differences and similarities, and the influence of cultural factors will be discussed. (U)(3)

**COM 339. 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)

## COM 345. Film, Gender and the Body: Seminar examines how film contexts treat the representation of sexual and non-sexual bodies

as well as the cultural performance of related social constraints and constructions of gender. (U)(3)

COM 350. Contemporary Communication **Theory:** An introduction to contemporary

models of communication and to experimental and field research dealing with human communication. (U)(3)

## **COM 351. Small Group Communication:**

Theory and practice in group discussion, leadership, decision making and interpersonal communication in small groups. (U)(3)

COM 352. Rhetorical Criticism: Introduction to critical and interpretive research methods in rhetorical analysis and criticism. (U)(3)

## COM 353W. Interpersonal Communication:

The study of recent theory and practice governing dyadic interactions in conversations and relationships. Writing intensive. (U)(3)

COM 354. Gender Communication: Examination of gender differences in communication behavior, the treatment of gender in language, gender on the public platform and gender in various communication contexts (interpersonal, organizational, etc.). (U)(3)

COM 355. 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)

#### COM 356H. 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. (U)(3) COM 357W. 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. Writing intensive. (U)(3)

**COM 358W. Communication Ethics:** Study of ethical standards for communication. Topics include standards for informative and persuasive communication, problems of advocacy and plagiarism. (U)(3)

#### COM 359. Intercultural Communication:

The purpose of this course is to lead students to acquire the concepts and skills needed to manage effectively communicative encounters in which intercultural factors make a difference. (U)(3)

COM 360SL. Communication Science: Laboratory practice in the diagnosis and treatment of speech and language disorders. Prerequisites: Cum GPA 3.0, minimum grade of B in COM 337, completed 25 hours of observation or permission of the instructor. (U)(3)

## COM 362. 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)

## COM 363. 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 3 hours of classroom discussion and 4 hours of practicum. Prerequisite: Minimum cumulative GPA of 3.0, minimum grade of B in Com 335 AND minimum grade of B in Com 336 or permission of the instructor in consolation with Dr. Suzanne Reading. (U)(3)

COM 397, 398, 399. Directed Research in Com. Disorders: This course provides an opportunity to gain hands-on research experience. Students earn course credit as they engage in directed research with Communication Faculty. Activities may include data collection, data analysis, and/or presentation of results. Pre-requisite: permission of instructor. (U) (1, 2, 3) May be repeated to six hours total.

COM 401, 402, 403. Independent Study: An opportunity for the qualified student to pursue a topic of special interest. Prerequisite: Permission of Department Head. (U)(1, 2, 3)

COM 404, 405. 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, 6)

COM 412. 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)

COM 420. Seminar in Rhetorical Theory: Thematically oriented seminar that develops and interrogates in greater detail an aspect of rhetorical theory and/or rhetorical analysis and criticism. (U)(3)

**COM 432. Audiometric Testing:** The theory and practice of audiometric testing, interpretation of hearing test results and the effect of hearing loss on speech perception. Prerequisites: Cum GPA 3.0, minimum grade of B in COM 336 or permission of the instructor. (U)(3)

COM 433. Aural Rehabilitation: The study of theoretical bases for rehabilitative audiology and principles of clinical application for pediatric and adult populations. Prerequisite: COM 336 Fundamentals of Audiology. (U)(3)

#### COM 436. Neurogenic Communication

**Disorders:** An investigation of the neurological processes involved in communication disorders. Includes Aphasia and cerebral palsy. (U)(3)

COM 437. Language Disorders in Children: Description and diagnosis of various language

disorders in children and procedures for therapeutic management. Prerequisite: SH 332. (U)(3)

Com 450. Senior Seminar in Communication Sciences & Disorders: A capstone course for majors in Communication Sciences & Disorders. Students will discuss professional issues and ethics and will prepare a portfolio of their undergraduate work which will be suitable for submission to graduate programs. (U)(3)

## COM 462. Influence in Public Culture:

Seminar devoted to communication theory and criticism of influence and persuasion; exploration of different contexts of influence in the form of case studies ranging from marketing to politics to cultural critique. (U)(3)

## COM 463. Seminar in Speech and the Law:

Designed to investigate the communication strategies and skills used in the everyday operation of the legal system. Use of actual and/or created legal conflicts serve as focus of research and discussion. (U)(3)

## COM 465. Rhetoric of Emerging Nationalism:

Introduces the role of public address and communications research in the development of nationalism in Africa, Asia and Latin America. (U)(3)

#### COM 470. 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 communications in interview, conference, network and organizational contexts. (U)(3)

COM 480, 481. 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) (2, 3)

COM 485. 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)

COM 499. Honors Thesis: (U)(3)

## Computer Science and **Software Engineering**

Administration:

Jonathan P. Sorenson, Ph.D., department head Web page: http://www.butler.edu/csse

#### **Professors:**

Zhi-Hong Chen, Ph.D.; Panagiotis K. Linos, Ph.D.: Jonathan P. Sorenson, Ph.D.

#### **Assistant Professor:**

Ankur Gupta, Ph.D.

## Software Engineering Major

The software engineering program prepares students for professional careers as software system designers, developers, testers, maintainers and project managers. Software engineering majors must satisfy the following requirements:

Requirements for the software engineering major All of the following courses:

MA 106, 107 Calculus and Analytic Geometry I, II

MA 162 Probability and Statistics

CS 151, 252 Foundations of Computing I,II

CS 248 Object-Oriented Programming and Data Structures

CS 321 Computer Organization

CS 351 Algorithms

CS 485 Computer Ethics

SE 361 Object-Oriented Design

SE 461 Managing Software Development

SE 462 Modernizing Legacy Software

SE 473 Special Topics in Software Engineering

SE 411 Internship

Two of the following four courses:

CS 431 Theory of Operating Systems

CS 433 Theory of Database Systems

CS 435 Networks

CS 441 Organization of Programming Languages

Six additional credit hours of CS or SE electives numbered 300 OR above

## Computer Science Major

The computer science program is designed primarily to prepare students for research and graduate studies in computing related fields. Computer science majors must satisfy the following requirements:

Requirements for the computer science major All of the following courses:

MA 106, 107 Calculus and Analytic Geometry I, II

MA 215 Linear Algebra

CS 151, 252 Foundations of Computing I, II

CS 248 Object-Oriented Programming and Data Structures

CS 321 Computer Organization

CS 351 Algorithms

SE 361 Object-Oriented Design

CS 485 Computer Ethics

One of the following:

CS 473 Topics in Computer Science

CS 490,491 Research Methods and Senior Seminar

Two of the following courses:

CS 431 Theory of Operating Systems

CS 441 Organization of Programming Languages

CS 451 Theory of Computation

Six additional credit hours of CS electives numbered 270 or above

Requirements for the computer science minor

CS 151 Foundations of Computing I

CS 248 Object-Oriented Programming and Data Structures

Twelve additional credit hours of CS or SE electives numbered 250 or above

## Computer Science courses

## CS 101. Computers in the Modern World:

A computer literacy course. Topics include an historical overview of the development of the computer; introduction to applications including spreadsheets, word processors, databases and electronic mail; a brief introduction to computer programming concepts, and discussion of social and ethical issues. (U)(3)

CS 142. 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. Tops such as AI, software engineering and databases are also discussed. Prerequisite: MA 101 or equivalent. (U)(3)

## CS 151. Foundations of Computing I:

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: MA 101 or 102 or equivalent. (U)(4)

CS 245. Business Programming in Visual Basic: Programming in Visual Basic, with applications to business, for students already able to program in a high-level language. Prerequisite: CS 142. (U)(3)

CS 248. 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: CS 142 or equivalent and CS 151. (U)(5)

CS 252. Foundations of Computing 2: As a continuation of CS 151, concepts include mathematical logic, formal grammars, algebraic structures, finite state machines and automata, graph theory, and combinatorics. Prerequisite: CS 151.

CS 271, 272, 273. Topics in Computer **Science:** In-depth study of special topics not covered in regular courses. Prerequisite: permission of department. (U)(1, 2, 3)

CS 282/283. Epics I: Supervised team software project for a local charity or non-profit organization. May be repeated for credit. Prerequisite: Concurrent registration in CS 248 or permission of the department. (U)(2,3)

CS 300. 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. Prerequisites: CS 248 with a grade of B or higher, or permission of the department. (U)(3)

CS 308. 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 CS 248. Prerequisite: CS 248 or permission of the instructor. (U)(1)

CS 321. 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. Prerequisite: concurrent registration in CS 248. (U)(3)

**CS 351. 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: CS 248. (U)(3)

CS 382,383. Epics II: Supervised team software project for a local charity or nonprofit organization. May be repeated for credit. Prerequisites: concurrent registration in CS 351 and SE 361 and either CS 282 or CS 283, or permission of the department. (U)(2,3)

CS 401, 402, 403. Independent Study: Provides an opportunity for qualified students to pursue special topics under the guidance of a department staff member. Prerequisite: permission of the department. (U/G)(1, 2, 3)

CS 411. Internship: Supervised work experience directly related to major area of study. Prerequisites: junior or senior standing and permission of department. (U)(3)

CS 431. 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: CS 252,

CS 433. 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

and CS 321. (U/G)(3)

SQL, file systems, concurrency and deadlock, reliability, security, and query optimization. Prerequisites: CS 252, and CS 321. (U/G)(3)

**CS 435. 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. Prerequisites: and CS 321. (U/G)(3)

CS 441. 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: CS 252, CS 321, and SE 361. (U/G)(3)

CS 451. 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: CS 252, CS 321 and CS 351. (U/G)(3)

CS 455. Numerical Analysis: Solutions of equations and systems, error analysis, numerical differentiation and integration, interpolation, least squares approximation, numerical solution of ordinary differential equations. Prerequisites: MA 107 and CS 142 or equivalent. (U/G)(3)

CS 471, 472, 473. Topics in Computer **Science:** In-depth study of special topics not covered in regular courses. Prerequisite: permission of department. (U/G)(1, 2 or 3)

CS 482,483. Epics III: Supervised team software project for a local charity or non-profit organization. May be repeated for credit. Prerequisite: Concurrent registration in SE 461 and either CS 382 or CS 383, or permission of the department. (U)(2,3)

CS 485. Computer Ethics: Ethical and social issues in computing with emphasis on professional responsibilities, risks and liabilities, and intellectual property. Prerequisite: CS 142 and sophomore standing. (U/G)(1)

CS 490. 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: CS 321, CS 351, and SE 361, or junior standing and permission of the department. (U)(2)

CS 491. Senior Seminar: Techniques for giving oral presentations of research results in computer science. Prerequisite: CS 490 or permission of the department. (U)(1)

**CS 499. Honors Thesis:** (U)(3)

## Software Engineering courses

SE 361. 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: CS 248. (U)(3)

**SE 411. Internship:** Supervised work experience in software engineering. Prerequisites: SE 361, SE 461, CS 485, and one of SE 462 or CS 382 or CS 383. (U)(3)

SE 461. Managing Software Development: Techniques, principles, and processes for developing large and 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: SE 361. (U/G)(3)

SE 462. Modernizing Legacy Software: Fundamental concepts, principles, techniques and tools maintenance and evolution of legacy software systems. Software maintenance and evolution process models, re-engineering, reverse engineering, and program comprehension tools. A modernization project is required. Prerequisite: SE 361. (U/G)(3)

## SE 471,472,473. Topics in Software

**Engineering:** In-depth study of special topics not covered in regular courses. Prerequisite: Permission of the department. (U/G)(1,2,3)

## **Economics**

## **Economics major**

The major in economics in the College of Liberal Arts and Sciences is designed to provide understanding into the decisions made by individuals as students (what major to choose), graduates (what career to follow), citizens (for whom to vote), employees (for whom to work), managers (how many workers to hire), consumers (how income may be allocated for maximum utility), savers (their response to rising interest rates), investors (picking stocks when the market follows a random walk), politicians (whose taxes to lower and whose to raise) and even family members (choosing family size).

It provides understanding of economies, including British underemployment, Bolivian inflation, interest rates in New Zealand, and why the euro appreciates against the yen. It is concerned with the "Wealth of Nations" from the perspective of rich countries (e.g. the United States), poor countries (e.g. Bangladesh), rapidly growing countries (e.g. China), newly industrialized countries (e.g. Malaysia), and countries transitioning to capitalism (e.g. Russia). It is concerned with the invisible hand of the market and the visible hand when one party to a deal has more power than the other. It is concerned with public policy on pollution in Mexico, social security in Germany and national security in the United States. It is concerned with the Bank of America, The Federal Reserve Bank of Chicago, and the World Bank.

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 college intern or a newly-hired bank credit analyst, at one end of the spectrum, to CEO, Supreme Court justice, or U.S. senator, on the other.

Besides being a strong major in its own right, economics is a nice complement to students who have interests in political science, mathematics, engineering, history, philosophy, sociology, psychology, international studies, foreign languages, 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.

A student with a major in economics may enter many professions, including financial services, government, law, journalism, education, banking, and general business. Further, economics provides a useful background for students wishing to do graduate work in law, public policy, international relations, business administration, and, of course, economics.

The student is required to take EC 231, EC 232, MA 125, MS 100, MS 264, and MS 265 as foundation courses. In addition, the student is required to take EC 332, EC 354, and EC 464, and also four courses from the following list: EC 336, EC 339, EC 342, EC 351, EC 352, EC 391, EC 433, EC 434, and EC 438.

In addition, students may substitute MA 162: Statistical Methods for MS 264, and MA 106: Calculus and Analytic Geometry 1 for MA 125.

EC 231 Principles of Microeconomics

EC 232 Principles of Macroeconomics

MA 125 Business Calculus

MS 100 Basic Excel for Business Applications

MS 264 Statistics

MS 265 Information Management

EC 332 Intermediate Macroeconomics

EC 336 Comparative Economic Systems

EC 339 Economic History of the United States

EC 342 Law and Economics

EC 351 Urban Economics

EC 352 Personnel Economics

EC 354 Intermediate Microeconomics

EC 391 Environmental Economics

EC 433 International Economics

EC 434 Public Finance

EC 438 Economic History of Europe

EC 464 Econometrics

The minor in economics consists of 18 credits, including EC 231, EC 232, either EC 332 or EC 354, and three additional 300- and/ or 400-level economics electives.

Students considering a major or minor in economics should contact a professor in the economics department to set a meeting to discuss their individual program, path to graduation, and career opportunities.

# Engineering Dual-Degree Program (EDDP)

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. 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
- Mechanical 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 (mechanical, electrical, computer, or biomedical) and a degree from Butler University (biology, chemistry, computer science, economics, mathematics, physics, or STS).

- 2. The EDDP program 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.
- The electrical, mechanical, and computer engineering programs are ABET accredited.
   The biomedical program is expected to be accredited in the next ABET cycle.
- 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. Engineering courses taken during the first three years will be taught at Butler.
- 7. All engineering courses taken during the first three years will be taught at Butler University along with mathematics, sciences and other courses.
- Transportation supported between sites (Butler and Purdue School of Engineering and Technology at Indianapolis).
- 9. Job placement/career services at Butler University, Purdue School of Engineering and Technology at Indianapolis, and Purdue University at West Lafayette will be available to dual degree students.

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 Literature Administration:

Hilene Flanzbaum, Ph.D., department head **Professors:** 

Joseph Rocky Colavito, Ph.D.; Hilene Flanzbaum, Ph.D.; Marshall W. Gregory, Ph.D.; Andrew Gordon Levy, Ph.D.; Susan Neville, M.F.A.; Carol Reeves, Ph.D.; William P. Walsh, Ph.D.

#### Associate professors:

Dan Barden, M.F.A.; Lee Garver, Ph.D.; William Watts, Ph.D.

#### **Assistant professors:**

Chris Forhan, M.F.A.; Jason Goldsmith, Ph.D.; Ania Spyra, Ph.D.; Brynnar Swenson, Ph.D.

#### Lecturers:

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

The Department of English offers a variety of introductory, upper-level and graduate courses in literature, language and writing. These studies offer knowledge of our literary heritage and cultivate understanding of the critical and imaginative uses of language. A major or minor in English develops the arts of critical reading, writing, listening, speaking, appreciating and evaluating. These skills help qualify students for graduate school and for careers in such fields as teaching, creative writing, publishing, essay and review writing, government, law, public relations and advertising.

The department's goal is to educate people to write with clarity, grace and force and to read significant works of literature with personal sensitivity, historical perspective, critical acumen and good sense. In addition to the traditional "canon" of British and American literature, the department regularly offers courses in world literature, including colonial, post-colonial, American Indian, African and African-American works.

Requirements for English major: With emphasis in literature

Minimum of 36 hours beyond freshman English. Sophomore requirements —

EN 185, three of the four courses in the Literary & Cultural History sequence (EN 245, 246, 265 and 266); EN 321 OR 322. Junior/Senior requirements —

EN 390: 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 & Cultural history Sequence; for seniors, one 400-level seminar and one EN 450-level senior essay With emphasis in writing

Minimum of 48 hours beyond freshman English Sophomore Requirements —

EN 185, 218, 219, three of the four courses

in the Literary & Cultural History sequence (EN 245, 246, 265 and 266); EN 321 OR 322 Junior/Senior Requirements —

EN 390: 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 & Cultural history Sequence; two 300-level writing courses; for seniors, EN 410: Senior Creative Writing Seminar and one creative writing portfolio and one EN 450 senior essay.

Requirements for English minor: Emphasis in literature —

Minimum of 18 hours beyond freshman English; EN 185; 3-6 hours of EN 200-level literature courses and 9-12 hours of EN 300- and 400-level literature courses.

Emphasis in writing —

Minimum of 21 hours beyond freshman English requirement; EN 185, EN 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.

## Courses

The first-year core requirement (formerly EN 102 Freshman Writing Seminar and ID 103 Humanities Colloquium) is now First-Year Seminar (FYS 101 & FYS 102). The course description for the seminar can be found in the Core Curriculum section in chapter one.

**EN 101. Writing Tutorial:** Intensive practice in discovering, shaping and communicating meaning through writing. Individualized instruction for students who need additional preparation and development for the writing expectations of the First-Year Seminar. Students are assigned to the course on the basis of tests and writing samples. Pass/fail credit. (U)(3)

EN 185. 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: FYS 101 & 102. (U)(3)

**EN 201. Advanced Composition:** Studies the craft of expository prose. Emphasizes the construction of well-developed and well-supported arguments. Prerequisites: FYS 101 & 102. (U)(3)

## EN 218. Introduction to Creative Writing:

Poetry— Focuses on the connection between reading and writing. Emphasis on techniques of writing poetry. Prerequisites: FYS 101 & 102. (U)(3)

## EN 219. Introduction to Creative Writing:

Prose — Introduces students to techniques used by good writers in all disciplines. Emphasis on techniques of fiction and non-fiction prose. (U)(3)

# EN 221. Themes in Literature Themes in Literature: Changing Images of Humanity — Examines through significant works of literature the various ways men and women

— Examines through significant works of literature the various ways men and women have viewed themselves and their world. Core course. (U)(3)

Themes in Literature: Myth, Legend and Literature — Examines the connections between myth, legend and literature with emphasis on recurring characters, plots, images and motifs from the folk tale to the modern novel. Core course. (U)(3)

Themes in Literature: Literature and Contemporary Values — Analyzes selected literary works and the moral standards and values by which fictional characters evaluate their own and one another's lives. Core course. (U)(3)

**EN 241. The American Dream:** Examines the dream of freedom and success, as well as the nightmare of failure and spiritual impoverishment; studies values and aspirations as reflected in important works of American literature. Core course. (U)(3)

EN 245. Inquiries in American Literary and Cultural History I: This course will be organized around a theme in early American literature, and thereby seek to increase students' understanding of major works, authors and literary movements of the period. Texts for the course will come primarily from the period up to the American Civil War, and both the texts and the authors studied will be placed within their larger literary and cultural contexts. Particular themes for the course will be published each semester in the schedule of classes. (U)(3)

EN 246. Inquiries in American Literary and Cultural History II: This course will be organized around later American literature, and thereby seek to increase students' understanding of major works, authors and literary movements of the period. Texts for the course will come primarily from the period after the

American Civil War, and both the texts and the authors studied will be placed within their larger literary and cultural contexts. Particular themes for the course will be published each semester in the schedule of classes. (U)(3)

## EN 263. The Worlds of Shakespeare:

Introduces Shakespeare's themes, stagecraft, language and moral vision with special attention to the varieties of human experience portrayed in the plays. Core course. (U)(3)

EN 265. Inquiries in British Literary and Cultural History I: This course will be organized around early British literature, and thereby seek to increase students' understanding of major works, authors and literary movements of the period. Texts for the course will come primarily from the period up to 1800, and both the texts and the authors studied will be placed within their larger literary and cultural contexts. Particular themes for the course will be published each semester in the schedule of classes. (U)(3)

EN 266. Inquiries in British Literary and Cultural History II: This course will be organized around later British literature, and thereby seek to increase students' understanding of major works, authors and literary movements of the period. Texts for the course will come primarily from the period after 1800, and both the texts and the authors studied will be placed within their larger literary and cultural contexts. Particular themes for the course will be published each semester in the schedule of classes. (U)(3)

**EN 300.** Advanced Grammar: Reviews grammar, examines the history of grammar and dictionaries and relates ideas of correctness to the study of grammar and usage. Open to juniors and seniors. (U/G)(3)

## EN 301. 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)

**EN 303. Scientific Writing:** Studies modes of writing relevant to science and technology — description, explanation and argument. Workshop format. Open to juniors and seniors or by permission of instructor. (U/G)(3)

EN 310. Intermediate Writing Workshop (poetry, fiction, screenwriting or non-fiction prose): 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 Visiting Writers Series events. Prerequisites: EN 218 and 219 or permission of the director of creative writing. (U/G)(3)

**EN 319. History of the English Language:** Studies changes in our language from Indo-European and Old English through Middle English to modern American and British English. Open to juniors and seniors. (U/G)(3)

**EN 321/421: Comparative Literature 1:** Surveys major periods and texts in Western world literature. (U/G)(3)

**EN 322/ 422: Comparative Literature 2:** Surveys major periods and texts in non-Western world literature. (U/G)(3)

EN 341/441. Literature of the American Renaissance: Studies two or three major writers representing this flowering of American culture. Open to juniors and seniors. (U/G)(3)

**EN 361/461. Medieval Literature:** Studies the rich variety of English literature in its first 700 years from Old English elegies and Beowulf to Middle English lyrics, drama, romance and ballads. Acquaints students with both Old and Middle English, although texts are primarily in translation. Open to juniors and seniors. (U/G)(3)

**EN 362/462. Renaissance Literature:** Studies English poetry, prose and drama of the 16th and early 17th centuries. Open to juniors and seniors. (U/G)(3)

**EN 363/463. 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)

**EN 366/466. Romanticism:** Studies English poetry and prose of the late 18th century through 1832. Examines the aesthetic, historical and intellectual issues of the Romantic Revolution. Open to juniors and seniors. (U/G)(3)

**EN 367/467. 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)

EN 368/468. Twentieth-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)

EN 381/481. Studies in Major Authors: Specific courses focusing on extensive study of

one or two major writers, their lives, their art and their development. Open to juniors and seniors. (U/G)(3)

**EN 382/482. 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)

**EN 383/483. Studies in Fiction:** Specific courses on narrative fiction and its forms in historical periods or national literatures. Current offerings include English Novel 1 and 2, American Novel 1 and 2, Modern European Novel and Short Story. Open to juniors and seniors. (U/G)(3)

EN 384/484. Studies in Drama: Specific courses on genres of drama, historical periods of drama or bodies of national drama. Current offerings include Elizabethan and Jacobean Drama, Modern American Drama and Modern European Drama. Open to juniors and seniors. (U/G)(3)

EN 385/485. Studies in Literary Criticism: Specific courses in the history of literary criticism, important groups of critics or aspects of critical theory. Open to juniors and seniors. (U/G)(3)

**EN 386/486. Studies in Rhetoric:** Offers general and specialized study of the history, criticism, theory, literature and application of the rhetorical arts. (U/G)(3)

**EN 390: Research Seminar:** Focusing on a single text, or a set of texts by a single author, this course is designed to equip students with the research and writing skills necessary for

advanced work in English. This course is required of all English majors, and should be taken during the junior year. Prerequisite: EN 185 and two of the following: EN 245, EN 246, EN 265 and EN 266. (U/G)(3)

**EN 392/492. Special Topics:** Special course on topics of interest. Open to juniors and seniors. (U/G)(2)

EN 393/493. Special Topics in Literature: Specific courses on topics of interest. Open to juniors and seniors. (U/G)(3)

**EN 395, 396. Internship:** Directed experience in a career setting. Students apply through the head of the department. Open to junior and senior majors. (U)(3, 6)

EN 410. 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: EN 390, Senior standing and pre-approval of course project by director of creative writing. (U)(3)

EN 450. The Senior Essay: In this course, students will work towards completing their Senior Essay, a 20-25 page literary research-based paper that is 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)

**EN 495, 496. Independent Study:** (U/G)(1, 2)

EN 499. Honors Thesis: Senior majors. (U)(3)

**EN 501.** Graduate Seminar Special Topic: (G)(3)

EN 710. Research Problems: (G)(3)

**EN 711. Thesis:** (G)(3)

# History — including Geography Administration:

Scott Swanson, Ph.D., department head **Professors:** 

Bruce L. Bigelow, Ph.D.; George Geib, Ph.D.; Paul R. Hanson, Ph.D.

## Associate professors:

John S. Cornell, Ph.D.; Xiaorong Han, Ph.D.; Scott G. Swanson, Ph.D.

## Assistant professors:

Vivian Deno, Ph.D.; Ageeth Sluis, Ph.D.

The Department of History and Anthropology houses the disciplines of History, Anthropology, and Geography. Faculty, program and course descriptions for Anthropology appear earlier in this bulletin.

The History program at Butler offers wide ranging courses in European, Asian, U.S. and Latin American history along with courses in the theories and methods of historians. The skills learned in history classes – critical and imaginative thinking, archival research, careful attention to detail, historical preservation and more – translate into skills that prepare students for a lifetime of learning and that make them attractive job candidates. History students go on to positions in technology, law, government, teaching, research, law enforcement, and medicine.

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 Head;
- 6 hours of lower-division courses (HS 124, HS 223, HS 226, HS 228), one of which must be U.S. history and one of which must be non-U.S. history;
- HS 357 Historiography, typically offered once a year in the fall semester; and
- a 400-level research seminar, currently either HS 475 Seminar in European History, HS 480 Seminar in Asian History, HS 486 Seminar in American History, or HS 490 Research Seminar.

Enrollment in any HS course numbered 300 or above requires sophomore standing or permission of the instructor.

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

A minor in either History or Geography consists of 18 hours of coursework, with at least 12 hours at the upper-division level.

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 research seminars.

Students may also choose a combined major in the following:

History and Political Science; or History and Anthropology

All History/Political Science majors are required to complete

- 48 hours, 21 in history, 24 in political science, 3 in methodology
- 6 hours of lower-level history courses (HS 124, HS 223, HS 226, HS 228), one in U.S. history, one in non-U.S. history
- 12 hours of upper-level courses
- 3 hour research seminar (HS 475, HS 480, HS 486, HS 490)
- 6 hours of lower-level political science courses (PO 101, PO 131, PO 141, PO 151, PO 210, PO 220)
- 15 hours of upper-level political science courses including at least one U.S. focused course and one non-U.S. focused course.
- 3 hours of PO 490
- 3 hours of methodology, either PO 201 OR HS 357

All History/Anthropology majors are required to complete

- 49 hours, 21 in history, 21 in anthropology, 3 in geography, 4 in methodology
- 6 hours of lower-level history courses (HS 124, HS 223, HS 226, HS 228) from two distinct geographical areas
- 3 hours of Historiography (HS 357)
- 9 hours of upper-level history courses from at least two distinct geographical areas
- 3 hours of 400-level history research seminars (HS 475, HS 480, HS 486, or HS 490)
- 3 hours of Introductory Anthropology (AN 102)
- 3 hours of Development of Anthropological Thought (AN 390)
- 3 hours of anthropological methods courses (AN 350-359)
- 6 hours of anthropology area courses (AN 360-389)
- 6 hours of anthropology topics courses (AN 300-349)

## History courses

HS 101. 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)

HS 124. Introductory Seminar: Exploration of selected topics in history. (U)(3)

## HS 223. 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)

HS 226. 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)

## HS 228. 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)

HS 290. Questions in History: Course examines questions in History with a focus on issues of social, political, scientific, and/ or economic concern. Topics to vary by instructor. May be repeated once for credit towards the major. (U)(3)

HS 304. 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. (U/G)(3)

HS 305. Europe in the Renaissance, 1300-1600: A study of politics, society and culture in Renaissance Europe. (U/G)(3)

HS 306. 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. (U/G)(3)

HS 311. Early Modern Europe: A general history of the major changes in Europe from 1500 to 1715. (U/G)(3)

HS 312. Nineteenth Century Europe: A study of European history from 1815 to 1914. (U/G)(3)

HS 314. The French Revolution and Napoleon: An intensive study of the political, social and cultural currents in France during the revolutionary era. (U/G)(3)

HS 318. Modern Germany: A survey of German culture, society and the state from the Napoleonic Era to the founding of the post-war Germanies. (U/G)(3)

HS 319. 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. (U/G)(3)

HS 320. History of Africa: A survey, from prehistoric times to the present, with emphasis on development since the 15th century, the slave trade, modern colonization and the new states of the 20th century. (U/G)(3)

HS 324. 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. (U/G)(3)

HS 326. Sex, Gender, Love and 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. (U/G)(3)

HS 327. Sex, Gender, Love and Friendship in the Medieval World: A continuation of HS 326. Focuses upon dimensions of private life and interplay between private and public worlds in European society during the middle ages. Discussion/seminar format. (U/G)(3)

HS 330. Twentieth 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. (U/G)(3)

HS 331. 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. (U/G)(3)

HS 333. The American Revolution: An intensive study of the revolt from Great Britain, 1754–1789. (U/G)(3)

HS 334. Indiana and the Midwest: Development of the Northwest Territory from colonial origins to the present, with emphasis on its regional culture. (U/G)(3)

HS 335. Colonial America: The first British empire in comparative global perspective. (U/G)(3)

HS 338. The Early American Republic: The United States between 1789 and 1850. (U/G)(3)

HS 340. The Civil War: A study of the causes, conduct and consequences of the American Civil War. (U/G)(3)

HS 342. 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. (U/G)(3)

HS 343. Recent U.S. History: The U.S. from the Great Depression to the present, with an emphasis on contemporary cultural, social and political issues. (U/G)(3)

HS 345. 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. (U/G)(3)

HS 348 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. (U/G)(3)

# HS 351. 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. (U/G)(3)

HS 356. 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 towards the major and/or minor. Lecture/ discussion/ viewing format. (U/G)(3)

# HS 357. Historical Method and Historiography: A study of the methodology of some of the more important historical writers. Required of all majors and of candidates for graduate degrees in history. Should be taken in the junior or senior year. (U/G)(3)

**HS 360. 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. (U/G)(3)

## HS 361. 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. (U/G)(3)

#### HS362. Marxism and Post-Modernism:

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. (U/G)(3)

## HS 365. 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. (U/G)(3)

**HS 366. Modern China:** Political and social history of China since the Opium War (1839) with emphasis on the revolutionary upheavals of the 20th century. (U/G)(3)

HS 367. Asian Villages in Transition: This course coffers an interdisciplinary survey of Asian rural societies, based on the analysis of case studies. The central theme is the transformation of rural Asian societies in the modern era. It explores relevant social scientific theories and such topics as revolution and modernization, agents for social change, rural-urban relations, and environmental problems. (U/G)(3)

HS 369. 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 towards minority groups, forms of ethnic identity, and ethnic nationalism. (U/G)(3)

HS 370. 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. (U/G)(3)

**HS 372. History of Vietnam:** This seminar course examines the different perspectives of Vietnamese history and the diverse cultures of Vietnam, with a focus on the modern period. It locates the Vietnam War in a broad historical and cultural context and explores such themes as Chinese and French colonialism in Vietnam, Nationalism and Communism, tradition and revolution, peasants and revolutionaries. (U/G)(3)

#### HS 374. 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. (U/G)(3)

**HS 375. US Women's History:** This course examines the history of US women through an exploration of the political, social and cultural contribution of women to the nation. The course focuses on the experiences of US 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. (U/G)(3)

HS 376. 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. (U/G)(3)

**HS 383. 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. (U/G)(3)

HS 385. Pacific War: This course explores the Asia-Pacific theatre of WWII. It will trace the different stages of the war, and the experiences of the various peoples involved in the war. It will also examine how the war is remembered in the various countries and why the war is still an important part of regional and international politics today. (U/G)(3)

**HS 390. Topics in History:** Selected topics of significance in contemporary historical scholarship. (U/G)(3)

**HS 400, 401, 402. 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, 2 or 3)

**HS 404, 405. 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 head. (U)(3 or 6)

**HS 460.** Culture and History: This course explores anthropologists' use of historical methods, 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)

**HS 475. Seminar in European History:** A particular phase or period of history will be studied each semester. Prerequisite: consent of the instructor. (U/G)(3)

**HS 480. Seminar in Asian History:** A particular phase or period of history will be studied each semester. (U/G)(3)

**HS 486. Seminar in American History:** A particular phase or period of history will be studied each semester. Prerequisite: consent of the instructor. (U/G)(3)

**HS 499. Honors Thesis:** (U)(3)

**HS 701. Research:** For graduate students researching a master's thesis. By permission of instructor. (G)(3)

**HS 711. Thesis:** For graduate students writing a master's thesis. By permission of instructor. (G)(3)

## Geography courses

**GE 109. Cultural Geography:** Regions of the World: A survey of 11 cultural regions of the world. Course includes study of the ecological base, history, economy, politics and ethnic relations. Emphasis is on conflict between Western and non-Western societies since 1500. (U)(3)

**GE 310.** Historical Geography of the United States: The creation and persistence of regional variations of culture in the United States from the colonial era to the present. (U/G)(3)

GE 313. Urban Geography—The American City: A methodological introduction to American urban studies from the perspective 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)

**GE 390. Topics in Geography:** Regional and thematic study of contemporary issues in geography not treated in traditional courses. (U/G)(3)

# Individualized Major Program Administration:

Judith Harper Morrel, 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. Many Butler students have shown great interest in cross-disciplinary work, and this program allows them to design their own majors. It is not the purpose of the individualized major program (IMP) option to replace double majors nor may an individualized major be used to constitute a general studies option. The IMP may also appeal to non-traditional and returning students as well as to students who have completed an associate degree and wish to return to complete a BA degree with a different focus than that of their associate degree. As examples of IMP programs, 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 Web site and selecting the Individualized Majors Program (IMP) from the drop-down list of programs and majors.

**IM 401, 402, 403. 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)(1,2,3)

**IM 405, 406. 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)(3,6)

**IM 499. Honors Thesis:** (U)(3)

## Irwin Library

Administration:

Lewis R. Miller, dean of libraries

IL 101. 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 which are most appropriate for use in various information structures and for evaluating the quality of information will be emphasized. (U)(1)

## **Journalism**

## Administration:

Nancy Whitmore, Ph.D., Director

#### **Professor:**

Kwadwo Anokwa, Ph.D.

## Associate professors:

Rose Campbell, Ph.D.; Nancy Whitmore, Ph.D.

## Assistant professors:

Margaretha Geertsema, Ph.D.; Mark Rademacher, M.A.; Charles St. Cyr, Ph.D.

#### Instructors:

Donna Gray, M.S.; Edward Kanis II, M.B.A.

The journalism program offers students curricular and extracurricular preparation for careers in the mass communication professions of journalism, public relations and advertising. In addition to its major specializations, the school offers 18-hour minor specializations and coordinates the interdisciplinary public and corporate communication major. Students are encouraged to combine their journalism major with other majors and minors in the university.

Journalism courses stress communication theories and skills with emphasis on written and visual message creation and adaptation, communication processes, ethics and information retrieval and dissemination. Students may specialize in the areas of news editorial, public relations or integrated communication, public relations and advertising. The major requires completion of up to 45 hours in departmental courses appropriate to the chosen specialization. Students also may elect to take an internship as a university elective or as part of their major.

## Journalism courses

**JR 107. Introduction to Mass Communications:** Media responsibility, government press relations, communication theory. (U)(3)

**JR 112. Writing for Print Media:** Introduction and practice for newspapers and public relations. (U)(3)

**JR 212. Newswriting and Reporting:** The advanced application of newswriting assignments. Publication requirement. Prerequisite: C- or above in JR 112. (U)(3)

JR 221. Principles of Advertising: A survey of advertising, including its history, functions, theories, ethics and relations to modern organizations. Prerequisite: C- or above in JR 112. (U)(3)

JR 223. Introduction to Public Relations: An introduction to the practice of public relations, including its history, functions, theories, ethics and relations to modern organizations. Prerequisite: C- or above in JR 112. (U)(3)

**JR 309. Feature Writing:** Writing the feature story, interviewing, personality profiles and the human interest story. Prerequisite: C- or above in JR 112. (U)(3)

**JR 311. News Editing:** Fundamental principles of news editing, design, headlines, selection and placement of news, copy desk experience and terminal techniques. Prerequisites: C- or above in JR 112 and 212. (U)(3)

JR 315. 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. A digital camera will be provided with a rental fee. Prerequisite: C- or above in JR 112 or permission of the department head. (U)(3)

JR 317. Editorial Writing: The nature and purpose of newsprint and electronic editorials. Prerequisite: C- or above in JR 112. (U)(3)

JR 321. Advertising Practices: Advertising practices in agencies and organizations, including media analysis, buying and coordination, as well as analyses of effective agency functions, structures and relationships. Prerequisite: C- or above in JR 221. (U)(3)

**JR 322. Advertising Copywriting:** A practical approach to creative strategy and copywriting in advertising, including applications to various print and electronic media. Prerequisites: C- or above in JR 112 and 221. (U)(3)

**JR 324.** Case Problems in Public Relations: The case study method applied to problems in public relations. Prerequisite: C- or above in JR 223. (U)(3)

JR 327. Research Methods for Public Relations and Advertising: Principles of and methods for research employed in planning, monitoring and evaluating public relations and advertising projects and campaigns.

Prerequisites: C- or above in JR 223. (U)(3)

**IR 328. Public Relations Techniques:** Public relations writing, message dissemination and use of internal and external print, electronic, personal and audio-visual media. Prerequisites: C- or above in JR 223. (U)(3)

**JR 350. Media Internship:** Supervised training on a community newspaper or with a public relations organization; either public or corporate. Prerequisites: News editorial: C- or above in JR 112, 212, 311. Public Relations and Advertising: C- or above in JR 223, 327, 328, and 351. (U)(3)

JR 351. Design & Production in Public Relations & Advertising: Design and production of public relations and advertising materials, including copy preparations, graphics, typography, photography and computer applications for various print, electronic and audio-visual media. Prerequisites: C- or above in JR 221 or JR 223. (U)(3)

352. Post Media Internship: Supervised training at a previous internship. Prerequisites: C- or above in two JR 350 classes with different positions and approval of the director. Pass/fail. (U)(1)

JR 353. Media Internship: Supervised training in an internship that requires 30+ hours of work a week. Prerequisites: News editorial concentration: C- or above in JR 112, 212 and 311 or approval of director. Public Relations and Advertising Concentration: C- or above in JR 223, 327, 328 and 351 or approval of the director. (U)(6)

JR 355. Sports Journalism: The course will provide a foundation for reporting and writing about sports in an urban setting. Prerequisite: C- or above in JR 112. (U)(3)

JR 356. Sports Promotion Marketing & **Administration:** The course is designed to give the students an overview of the sports industry, specifically marketing and promotions. While much of the course will focus on sports marketing for a team, the student will be introduced to the entire industry. Prerequisite: C- or above in JR 112. (U)(3)

JR 357. Web Design: The introductory course in Web Design focuses on Web site development techniques and skills. Students will learn Webbased software and other critical Web basics. The course includes writing for the Web, design and layout and best practices. Prerequisite: Cor above in JR 112. (U)(3)

JR 401, 402, 403. Independent Study:

Provides opportunity for qualified students to pursue a topic of individual interest. Open to juniors and seniors with permission of department head. (U)(1, 2, 3)

JR 409. Media Management: An overview of the principles, theory and practices of mass media institutions within current society. Product considerations, constitutional underpinnings, leadership, technology within workplace, budgeting issues and market analysis are covered. Prerequisites: junior or senior standing. (U)(3)

JR 412W. Reporting Public Affairs: Coverage of city, state, and federal government, school board meetings and courts with emphasis on investigative reporting. Prerequisites: C- or above in JR 112, 212, 311. (U/G)(3)

JR 413. Teaching High School Journalism:

Teaching methods, course content, role of school publications, multimedia approaches, role of journalism in the high school. (Satisfies certification requirement for education majors.) (U/G)(3)

JR 414. 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)

JR 415. History & 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)

JR 416. Mass Communication 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)

JR 417. 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)

JR 424. Public Communication Campaigns: Applications of campaign methods to solving specific client problems in on-site situations.

This course integrates the theories and technical skills required for professional practice in profit, not-for-profit and agency organizations. Prerequisites: C- or above in JR 223, JR 324, JR 327, JR 328 and JR 351 or permission of the instructor. (U/G)(3)

JR 426. Special Topics in Public Relations and Advertising: Thematic study of contemporary topics and issues in public relations and/ or advertising. May be repeated when topics change. Prerequisite: permission of director. (U/G)(3)

**JR 499. Honors Thesis:** (U)(3)

## **Mathematics and Actuarial** Science

## Administration:

Amos J. Carpenter, Ph.D., department chair; Lacey P. Echols, M.A.T., Coordinator of Mathematics Support Services web page: http://www.butler.edu/math-actuarial

#### **Professors:**

Amos J. Carpenter, Ph.D.; Prem L. Sharma, Ph.D.

## Associate professors:

John W. Gaisser, Ph.D.; Duane Leatherman, M.A.; Judith Harper Morrel, Ph.D; Scott T. Parsell, Ph.D.

## Assistant professors:

Pisheng Ding, Ph.D.: Rebecca G. Wahl, Ph.D. **Instructors:** 

Shirley R. Henderson, M.S.; Karen Holmes, Ph.D.; Christopher J. Wilson, M.A.

The Department of Mathematics and Actuarial Science offers majors in mathematics and actuarial science. In addition to the departmental requirements below, a student must complete the core curriculum requirement, the College of Liberal Arts and Sciences language requirement and other general requirements given in this Bulletin.

## Mathematics major

The mathematics major is designed for students who are interested in employment in government or industry, who plan to attend graduate or professional school, or who plan to teach. The requirements are:

Requirements for Mathematics major: MA 106, 107, 208 - Calculus and Analytic Geometry I, II, III

MA 205, 206 - Discrete Mathematics I, II MA 215 - Linear Algebra MA 312 - Modern Algebra I MA 326 - Real Analysis I Choose one of: MA 313 - Modern Algebra

MA 200 - Basics of Advanced Mathematics

II or MA 327 – Real Analysis II Programming course numbered CS 142 or higher

Three upper division electives numbered between MA 310 and MA 362 OR numbered MA 365, MA 396 or MA 473.

## **Actuarial Science major**

An actuary is a mathematician responsible for estimating risks, primarily in the insurance and financial security industries. The Butler program helps to prepare students for the jointly administered CAS/SOA Examinations P, FM, MLC, and C.

Requirements for the Actuarial Science major: MA 106, 107, 208 Calculus and Analytic Geometry, I, II, III MA 215 Linear Algebra MA 360, 361 Probability and Statistics I, II MA 362 Applied Statistical Methods MA 363 Introduction to Actuarial Science MA 372 Loss Models MA 395 Theory of Interest MA 397 Actuarial Mathematics I MA 399 Derivative Investments One of the following two courses: MA 371 Stochastic Process Models MA 398 Actuarial Mathematics II

## **Actuarial Science/Management** Program:

The insurance and financial service industries see a strong need for management prospects who combine the analytical and technical skill related to the actuarial science training with the leadership capabilities, people skills and understanding of business which come from good management education. Individuals with this blend of skills and training should be able to command excellent entry-level positions, and be strong candidates for advancement to management positions. This program includes an undergraduate major in actuarial science and a component of business theory followed by a 30-hour MBA program, most likely with a concentration in either organizational leadership or finance.

## Phase I—The undergraduate curriculum

Requirements for the actuarial science major: MA 106, 107, 208 Calculus and Analytic Geometry, I, II, III MA 215 Linear Algebra MA 360, 361 Probability and Statistics I, II MA 362 Applied Statistical Methods MA 363 Introduction to Actuarial Science MA 372 Loss Models MA 395 Theory of Interest MA 397 Actuarial Mathematics I MA 399 Derivative Investments One of the following two courses: MA 371 Stochastic Process Models MA 398 Actuarial Mathematics II

In addition, the following business courses are required:

AC 203, 204 Introduction to Accounting I, II MS 265 Information Technology (prerequisite: MS 100) EC 231, 232 Principles of Micro/ Macroeconomics FN 340 Corporation Finance MK 380 Introduction to Marketing Management MG 360 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, students can complete the College of Business MBA program with a minimum of 30 hours of MBA course work (500 level). To qualify for full admission into the MBA Program the following requirements must be satisfied: (1) Students must obtain an acceptable 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.

#### Mathematics minor

MA 106, 107 - Calculus and Analytic Geometry I, II MA 205 - Discrete Mathematics I MA 206 - Discrete Mathematics II or MA 208 – Calculus and Analytic Geometry III MA 215 – Linear Algebra

One upper division elective numbered between MA 310 and MA 362 OR numbered MA 365, MA 396 or MA 473.

## Mathematics courses

MA 101. 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 MA 101. Must not be taken pass/fail. Prerequisite: high school algebra. (U)(3)

MA 102. 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, MA 106 or above, will not be given credit for MA 102. Must not be taken pass/fail. Prerequisite: high school algebra and appropriate score on the Butler Math Placement Exam. (U)(3)

MA 104. Introduction to Contemporary Mathematics: Intended for students in the humanities, social sciences and fine arts, the course emphasizes a problem-solving approach and is designed to impart an appreciation of mathematical techniques and modes of thought. Topics include sets and logic, combinatorics, probability and statistics and graph theory. Prerequisite: MA 101 or equivalent. (U)(3)

## MA 106. Calculus and Analytic Geometry I:

The beginning calculus course for properly prepared students. Topics include differentiation, integration, elementary differential equations, exponential and logarithmic functions, trigonometric functions. Applications are emphasized. The Analytic Reasoning core course is waived for students who successfully complete this course. Prerequisite: MA 102 or equivalent. (U)(5)

MA 107. Calculus and Analytic Geometry II: Continuation of MA 106. Topics include methods of integration, improper integrals, infinite series, conic sections and polar coordinates. Prerequisite: MA 106. (U)(4)

MA 125. Business Calculus: This course introduces students to the concepts and methods of calculus and the mathematics of finance. Topics include interest, future and present annuity values, differentiation, integration, exponential and logarithmic functions, elementary differential equations, functions of several variables, partial derivatives and extrema of functions of several variables. Prerequisite: MA 101 or equivalent. (U)(3)

MA 162. Statistical Methods: An introduction to applied statistics for students in the natural, social and managerial sciences. Topics include sampling, data analysis, experimental design and the use of computer-based statistical software. Three hours lecture, one hour recitation weekly. The Analytic Reasoning core course is waived for students who successfully complete this course. Prerequisite: MA 101 or equivalent. (U)(4)

## MA 200. Basics of Advanced Mathematics:

Introduces students to the concepts and methods of higher mathematics with an emphasis on techniques of mathematical proof. Topics include foundations of logic, set theory, relations, partial orders, well-ordering, isomorphisms, induction, equivalence relations, and functions. Prerequisite or corequisite: MA 106 or equivalent. (U)(3)

MA 205. Discrete Mathematics I: Proofs by induction, simple diagonalization proofs, combinatorial theory, relations and functions, inclusion/exclusion principle, derangements, recurrence relations and generating functions. Prerequisite: MA 106. (U)(3)

MA 206. Discrete Mathematics II: Graphs and subgraphs, planar graphs, graph coloring and chromatic polynomials, trees, weighted trees and prefix codes, transport networks, matching theory. Prerequisite: MA 205. (U)(3)

MA 208. Calculus and Analytic Geometry III: Continuation of MA 107. Topics include vector calculus, multivariable calculus, partial differentiation, multiple integration, line integrals and Green's Theorem. Prerequisite: MA 107. (U)(3)

MA 215. Linear Algebra: Systems of linear equations, matrices, determinants, vector spaces, linear transformations and the eigenvalue problem. Prerequisite: MA 107. (U)(3)

MA 301. 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: MA 107 and MA 205. (U/G)(3)

MA 308. 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: MA 107. (U/G)(1)

MA 311. Number Theory: Divisibility, the Euclidean algorithm, prime numbers, unique factorization, linear congruences, the Chinese Remainder Theorem, and applications to public-key cryptography. Additional topics may include primitive roots, quadratic residues, factorization algorithms, Diophantine equations, continued fractions, and the distribution of primes. Prerequisite: MA 205. (U/G)(3)

MA 312. Modern Algebra I: Relations and graphs, groups, subgroups, normal subgroups, homomorphism theorems, rings, and fields. Prerequisite: MA 200, MA 205, MA 215. (U/G)(3)

MA 313. Modern Algebra II: This course is a continuation of MA 312. Topics include Euclidean rings, principal ideal domains, unique factorization domains, field extensions, and Galois theory. Prerequisite: MA 312. (U/G)(3)

MA 326. Real Analysis I: A rigorous study of the principles underlying real-variable calculus. Topics include limits, continuity, differentiation and Riemann integration. Prerequisites: MA 107, MA 200, MA 205. (U/G)(3)

MA 327. Real Analysis II: Continuation of MA 326. A variety of topics, such as sequences, series, uniform convergence, introduction to Lebesgue measure and integration, line and surface integrals. Prerequisite: MA 326. (U/G)(3)

MA 330. Complex Analysis: Complex numbers, analytic functions, complex integration, Cauchy's Theorem, Taylor and Laurent series, contour integrals and the residue theorem. Prerequisite: MA 208. (U/G)(3)

MA 334. Differential Equations: Analytical, numerical and qualitative approaches to differential equations, including linear equations and systems, and nonlinear equations. Prerequisite: MA 107. (U/G)(3)

MA 341. 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: MA 206 and CS 142 or equivalent. (U/G)(3)

MA 351. Geometry: Various topics from Euclidean, projective and non-Euclidean geometry. Prerequisite: MA 107. (U/G)(3)

MA 354. Topology: Introduction to topological spaces, separation axioms, compactness, connectedness, metric and function spaces. Prerequisite: MA 326. (U/G)(3)

## MA 360. Probability and Statistics I:

Exploratory data analysis, general probability, random variables, standard distributions, sampling distribution theory, and estimation. Prerequisite: MA 107. (U/G)(3)

MA 361. Probability and Statistics II: Tests of statistical hypotheses, linear models, nonparametric methods, multivariate distributions and theory of statistical inference. Prerequisite: MA 360. (U/G)(3)

MA 362. 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: MA 215 and 361. (U)(3)

## MA 363. Introduction to Actuarial Science.

An introduction to risk management in property/casualty and life insurance. Prerequisite/corequisite: MA 360. (U)(3)

MA 365. Numerical Analysis: Solutions of equations and systems, error analysis, numerical differentiation and integration, interpolation, least squares approximation, numerical solution of ordinary differential equations. Prerequisites: MA 107. (U/G)(3)

MA 371. Stochastic Process Models: Markov Chains, Exponential Distribution and the Poisson Process, Continuous-Time Markov Chains, Brownian Motion. Prerequisite: MA 360. (U/G)(3)

MA 372. Loss Models: Models for the amount of a single payment, models for the number of payments, aggregate loss models. Prerequisite: MA 361. (U/G)(3)

MA 395. Theory of Interest: Compound interest and annuities, applications to problems in finance. Prerequisite: MA 107. (U/G)(3)

MA 396. Operations Research: Linear programming and theory, network analysis, including project scheduling with PERT-CPM, dynamic programming, queuing theory, simulation and decision analysis. Prerequisite: MA 360. (U/G)(3)

MA 397. Actuarial Mathematics I: Survival distributions and life tables; the mathematics of life insurance, life annuities, net premiums, and net premium reserves. Prerequisites: MA 360, MA 395. (U/G)(3)

MA 398. Actuarial Mathematics II: Multiple life functions, multiple decrement models, valuation theory for pension plans, ruin models. Prerequisite: MA 397. (U/G)(3)

MA 399. Derivative Investments: Investigation of the mathematics behind put and call options, interest rate swaps, forwards, futures, hedges, and other derivative investments. Prerequisite: MA 395. (U)(3)

MA 401, 402, 403. 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, 2 or 3)

MA 411. Internship: Supervised work experience directly related to the major area of study. The student is required to present his or her internship work in a seminar to a group of students and faculty. Prerequisites: junior or senior standing and permission of department. (U)(3)

MA 471, 472, 473. Topics in Mathematics: In-depth study of special topics not covered in regular courses. Prerequisite: permission of department. (U/G)(1, 2 or 3)

MA 490. 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)

**MA 499. Honors Thesis:** (U)(3)

## Modern Languages, Literatures & Cultures

#### Administration:

Larry W. Riggs, Ph.D., department chair **Professors:** 

Larry W. Riggs, Ph.D.; Linda M. Willem, Ph.D.; Betty Blades Lofton, Professor of Spanish

## Associate professor:

Terri Carney, Ph.D.; Willi H. Schwoebel, Ph.D.; Sylvie Vanbaelen, Ph.D.

## Assistant professors:

Irune del Rio Gabiola, Ph,D.; Xiaoqing Liu, ABD; Gabriela Muniz, Ph.D.; Jose Quintanilla, ABD.; Eloise Sureau, Ph.D.

#### **Instructors:**

Liliana Goens, M.A. Linda Hadley-Miller, M.A. Elisa Lucchi-Riester, M.A. Fred Yaniga, Ph.D.

The study of other languages and cultures offers students communicative skills and understanding that enhance their lives and are increasingly valuable in many fields — business, education, fine arts, government, media, social services and others.

Students may prepare for careers, for example, in international trade by majoring in a language and business studies; by combining a language major with a minor or major in business; in international communications with a major in a language and a minor or major in a field of communications; or in government by adding a minor or major in international studies, political science or history to their language major.

A major in French, German or Spanish consists of 33 hours in the language, at least 24 of these hours being on the 300 and 400 levels. Students are required to include the following upper-division courses: At least:

One skills course (oral communication, written communication or language for business)

One civilization course One literature course

Two 400-level courses

To increase fluency, all upper-division courses are conducted completely in the target language; however, one course designated as an FL course, in English, approved by the department head, may be part of a language major.

Advanced placement credits in the language and credits earned in an approved study abroad program count toward majors and minors in foreign languages. Students who major in a foreign language are encouraged to study abroad.

A major in French and Business Studies joins a French major with a solid core of business courses. It offers knowledge of French language and culture as well as of business practices and principles. Because cultural understanding is central to this program, all majors study or have internships in a French-speaking country.

A major in German and Business Studies joins a German major with a solid core of business courses. It offers knowledge of German language and culture as well as of business practices and principles. Because cultural understanding is central to this program, all majors study or have internships in a Germanspeaking country.

A major in Spanish and Business Studies joins a Spanish major with a solid core of business courses. It offers knowledge of Spanish language and culture as well as of business practices and principles. Because cultural understanding is central to this program, all majors study or have internships in a Spanishspeaking country.

A minor in French, German, or Spanish consists of 21 hours in the language, at least 12 of these hours being on the 300 and 400 levels. The department recommends that students who minor in French, German or Spanish also include study abroad in their programs.

A minor in Chinese also requires 21 hours with at least 12 being at the 300/400 level. CN 370, Summer Chinese Language and Culture Program must be included.

**Study Abroad.** Through membership in the International Student Exchange Program, Butler offers programs in France, Quebec, Austria, Germany, Spain, Mexico, Argentina, Colombia, Costa Rica, and other countries. Students may choose to participate in other programs through Butler-directed study abroad. Students receive credit for study abroad.

Certification for teaching. Information about certification for teaching a foreign language is available in the College of Education. Majors for teaching consist of 36 hours and minors for teaching are 24 hours in the language.

158

Advanced Placement. All freshmen who studied a language taught at Butler in high school take a placement evaluation during orientation week. Students who place at the 200 or 300 level on this evaluation earn from three to nine hours of advanced placement credits after completion, with grades of C or better, of six hours of the language on the 300 level. Students who take the College Board Advanced Placement Tests in high school and score 4 or 5 automatically place on the 300 level in that language and receive an additional 3 hours of 300-level credit.

Modern Language Center. The Modern Language Center in Jordan Hall has state-of-the-art facilities for second language acquisition. The MLC (JH 391) features comprehensive video, audio, periodical, IBM and Macintosh computers and satellite equipment for student use, with an extensive and current library of French, German and Spanish video and audio tapes.

Another component of the Modern Language Center is the Multi-Media Classroom, Room 387, which provides a multi-media classroom environment featuring video, DVD and satellite with large-screen capabilities, as well as audio and computer capabilities.

## Courses in English

Courses given in English do not satisfy the foreign language competency requirement in the College of Liberal Arts and Sciences.

**FL 320. 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)

FL 380. Methodology in the Teaching of Foreign Languages: Designed for students seeking state certification. 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. (For certification for teaching, but does not count toward a major or minor in a foreign language.)(U)(3)

**FL 390. 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)

FL 480. 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)

**FL 490. 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)

## 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. All courses also offer practice with videos, audiocassettes, television, microcomputers and/or shortwave radio in the Language Center.

## Chinese courses

**CN 101. Beginning Chinese I:** Emphasis on spoken Chinese. Development of speaking, listening, and writing skills, and insights into Chinese culture. Regular practice in the language center. (U)(4)

**CN 102. Beginning Chinese II:** 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)

**CN 203. 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)

CN 204. Intermediate Chinese II: 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)

CN 305. Advanced Chinese I: 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)

CN 306. Advanced Chinese II: 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: CN 305, placement by evaluation, or the equivalent. (U)(3)

CN 370. 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 in Tianjin 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)

CN 491, 492, 493. Independent Study: Independent study of Chinese culture, literature and language. (U)(1, 2, 3)

## French courses

FR 101. Beginning French I. Emphasis on spoken French: Development of speaking, listening, reading and writing skills and insights into French culture. Regular practice in the Language Center. Prerequisite: No previous formal French instruction. Permission granted upon personal interview with Department Head. (U)(4)

FR 102. Beginning French II. Continuation of FR 101: Emphasis on spoken French.

Development of speaking, listening, reading and writing skills and insights into French culture. Regular practice in the Language Center. Prerequisite: FR 101 or placement test authorization. (U)(4)

**FR 203. Intermediate French I:** Practice in listening, speaking, reading and writing to develop competence in French. Review of basics. Use of videos and the language laboratory. Prerequisite: one year of college French or placement on the 200 level. (U)(3)

FR 204. Intermediate French II: Continued practice in listening, speaking, reading and writing for communicative skills. Further review of fundamentals. Use of videos and the language laboratory. Prerequisite: FR 203 or placement by evaluation or the equivalent. (U)(3)

FR 305. French for Communication: Oral Emphasis: Conversations, discussions and individual presentations based on readings, films, etc. Vocabulary building and grammar review supported by written exercises. Prerequisite: two years of college French or placement on the 300 level. (U)(3)

**FR 310. French for Communication:** Written Emphasis: Development of written skills in French through description, narration and argumentation. Peer-editing, rewriting, grammar review. Discussions based on student writing and selected readings. Prerequisite: two years of college French or placement on the 300 level. (U)(3)

**FR 315. French for Business:** Introduction to the French business world and examination of its structures, institutions, procedures and terminology. Prerequisite: two years of college French or placement on the 300 level. (U)(3)

FR 320. Topics in French and Francophone Cultures: Study of a selected theme, period or topic in French or Francophone culture through a variety of cultural materials. Literature, film, and other media. Prerequisite: FR 305 or 310. (U)(3)

FR 335. 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. Prerequisite: FR 305 or 310. (U)(3)

FR 340. France: 18th and 19th Centuries: A survey of the evolution of France in the 18th and 19th centuries through the study of literature and other cultural material. Prerequisite: FR 305 or 310. (U)(3)

FR 345. France and the Francophone World: 1900 to Present: A survey of France and the Francophone world in the 20th and 21st centuries through the study of literature and other cultural material. Prerequisite: FR 305 or 310. (U)(3)

160

**FR 400. Internship:** A supervised work experience in business, government, media or other institutions in a French-speaking country as a part of a year of a semester study abroad program or in bilingual settings in this country. Prerequisite: acceptance into the program and permission of the department head. (U/G)(3)

**FR 415.** The French Renaissance: Study of the French Renaissance as a historical, cultural and literary movement. Lectures, reading assignments, class discussions, videos and recordings. Prerequisite: three years of college French or equivalent. (U/G)(3)

**FR 425. 17th-Century France:** Overall view of the classical age in France and study of significant works of the period. Lectures, reading assignments, class discussions, videos and recordings. Prerequisite: three years of college French or equivalent. (U/G)(3)

**FR 435. 18th-Century France:** Overall view of the French Enlightenment and study of the significant literary works of the period. Lectures, reading assignments, class discussions, videos and recordings. Prerequisite: three years of college French or equivalent. (U/G)(3)

FR 450. 19th-Century France: Overall view of French culture and literature in the 19th Century. Emphasis on the Romantic movement or on the development of the novel. Study of significant literary works of the period, lectures, reading assignments, class discussions, videos and recordings. Prerequisite: three years of college French or equivalent. (U/G)(3)

**FR 465. 20th-Century French Novel:** Study of the evolution of the French novel in the 20th century. Analysis of important novels. Lectures, reading assignments, class discussions, videos and recordings. Prerequisite: three years of college French or equivalent. (U/G)(3)

FR 475. 20th-Century French Drama: Study of the evolution of the French drama in the 20th century. Analysis of important plays. Lectures, reading assignments, class discussions, videos and recordings. Prerequisite: three years of college French or equivalent. (U/G)(3)

FR 485. Topics in Francophone Studies: Study of the literatures and/or cultures of French-speaking countries outside of France (Quebec, North Africa, West Africa, Martinique and Guadeloupe, Belgium, etc.). Use of literary texts, social documents and movies, depending on topic. Course may be repeated with each different topic. Prerequisite: three years of college French or equivalent. (U/G)(3)

**FR 490. 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)

FR 491, 492, 493. 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 head. Prerequisite: three years of college French or equivalent. (U/G)(1, 2, 3)

FR 499. Honors Thesis in French: (U)(3)

## German courses

**GR 101. Beginning German I:** Emphasis on development of spoken German. Development of speaking, listening, reading, and writing skills and insights into German culture. Regular practice in the Language Center. Prerequisite: No previous formal German instruction. Permission granted upon personal interview with Department Head. (U)(4)

**GR 102. Beginning German II:** Continuation of GR 101. Emphasis on development of spoken German. Development of speaking, listening, reading, and writing skills and insights into German culture. Regular practice in the Language Center. Prerequisite: GR 101 or placement test authorization. (U)(4)

**GR 203. Intermediate German I:** Introduction to German literature through readings and discussions in German of short literary texts. Review of the basic structures of the language with emphasis on active skills. Prerequisite: one year of college German or placement on 200 level. (U)(3)

**GR 204. Intermediate German II:** Practice of language skills through readings and discussions of German culture. Explorations of topics of social, artistic, historical or political importance. Review of the basic structures of the language with emphasis on active skills. Prerequisite:

one year of college German, placement by evaluation or consent of instructor. (U)(3)

## GR 305. German for Oral Communication: Conversation, discussion, dramatization and use of audio and videocassettes to increase fluency in spoken German. Prerequisite: two

fluency in spoken German. Prerequisite: two years of college German or placement on the 300 level. (U)(3)

GR 310. German for Written Communication:

Practice in writing German to facilitate the expression of ideas. Discussion of issues, style and structure. Use of audio and videocassettes and microcomputers to increase accuracy and fluency. Prerequisite: two years of college German or placement on the 300 level. (U)(3)

GR 311. Contemporary German Authors:

A course providing reading and discussion of selected texts by post-war authors; supplementary reading chosen by each student; practice in simple literary analysis in German, oral and written. Prerequisite: GR 203, 204 or equivalent. (U)(3)

**GR 315. German for Business:** Introduction to the German business world and examination of its structures, institutions, procedures and terminology. Prerequisite: two years of college German or placement on the 300 level. (U)(3)

GR 335. Germany: Middle Ages to 1871:

Use of selected works and audiovisual materials to study the history, literature, and arts of Germany from the Middle Ages to 1871, the year of German unification. Prerequisite: two years of college German or placement at the 300 level. (U)(3)

GR 340. Germany: 1871 to the Present:

Through the use of various selected reading and audiovisual materials study the history, literature, and arts of Germany from 1871 to the present. Prerequisite: Two years of college German or placement at the 300 level. (U)(3)

**GR 341. Romanticism to the Modern Period:** Representative works of leading authors and artists of the 19th century. Prerequisite: two years of college German or placement on the 300 level. (U)(3)

**GR 342. Major Trends in Modern German Literature:** Investigation of currents underlying modern art and literature from Nietzsche to the present. Prerequisite: two years of college German or placement on the 300 level. (U)(3)

**GR 400. Internship:** A supervised work experience in business, government, media or other institutions in a German-speaking country as 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 head. (U/G)(3)

**GR 430. German Drama After 1945:** An intense study of selected dramas in written texts as well as in film, of Brecht, Duerrenmatt, Frisch, Hochhuth, Grass and Borchert, with emphasis on their dramatic theories. Discussion mostly in German. Prerequisite: 20 semester hours of college German or equivalent. (U/G)(3)

**GR 467. The Age of Goethe I:** German literature of the late 18th century. The Enlightenment, Storm and Stress, early Classicism, and selected works of Lessing, Goethe and others. Prerequisite: three years of college German or equivalent. (U/G)(3)

**GR 468. The Age of Goethe II:** German literature, 1790–1830 — Classicism and Romanticism. Selected works of Schiller, Kleist and the Romantics. Prerequisite: three years of college German or equivalent. (U/G)(3)

**GR 470. German Literature of the 19th Century:** The literature of the 19th century and of the major political, social and philosophical influences during that period. Prerequisite: three years of college German or equivalent. (U/G)(3)

GR 475. Seminar in 20th Century German Literature: A study of recent and contemporary writing, including social and political background, intellectual currents and stylistic innovations. Individual study. Prerequisite: three years of college German or equivalent. (U/G)(3)

**GR 490. Seminar:** Study of a selected topic in German culture such as themes, genres, individual writers, artists or political figures, historical or social circumstances. Prerequisite: three years of college German or equivalent.

**GR 491, 492, 493. 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 head. Prerequisite: three years of college German or equivalent. (U/G)(1, 2, 3)

**GR 499.** Honors Thesis in German: (U)(3)

## Italian courses

**IT 101. Beginning Italian I:** Introduction to Italian grammar, vocabulary and culture. Emphasis will be placed on the development of speaking, reading and writing skills. Topics include present, future and present perfect tenses, object pronouns and topical vocabulary. (U)(4)

**IT 102. Beginning Italian II:** Continuation of introduction to Italian grammar, vocabulary and culture. Emphasis will be placed on the development of spoken proficiency, reading and writing skills. Topics include imperfect, conditional and conditional perfect tenses, and topical vocabulary. (U)(4)

**IT 203. Intermediate Italian I:** Continued practice in listening, speaking, reading and writing for communicative skills. Review of fundamental grammar and introduction of advanced grammatical structures. Prerequisite: one year of college Italian. (U)(3)

**IT 204. Intermediate Italian II:** Continued practice in listening, speaking, reading and writing for communicative skills. Further review of fundamental grammar and advanced structures. Prerequisite: IT 203 or equivalent. (U)(3)

## IT 305. Italian for Oral Communication:

Conversation and discussion to increase fluency in spoken Italian. Prerequisite: IT 203 and IT 204 or the equivalent. (U)(3)

## IT 310. Italian for Written Communication:

Practice in Italian to facilitate the expression of increasingly complex ideas in written format. Prerequisite: IT 203 and IT 204 or the equivalent. (U)(3)

IT 491, 492, 493. Independent Study: An opportunity for qualified students to pursue a topic of special interest. Open to minors in Italian, by permission of the instructor and department head. Prerequisite: three years of college Italian or equivalent. (U)(1,2,3)

## Spanish courses

164

**SP 101. Beginning Spanish:** Emphasis on spoken Spanish. Intensive oral training and development of writing and reading skills;

regular practice in the Language Center. Prerequisites: No previous Spanish instruction. Permission grated upon personal interview with the Department Head. (U)(4)

**SP 102. First Year Spanish:** Continuation of SP 101. Emphasis on spoken Spanish. Intensive oral training and development of writing and reading skills; regular practice in the Language Center. Prerequisites: SP 101 or placement test authorization. (U)(4)

**SP 103. Review of Basic Spanish:** A review of basic grammar and vocabulary through practice in speaking, listening, reading, and writing. Regular practice with video and/or audiocassettes in the classroom and the Language Center. For students who previously have studied Spanish. Prerequisite: admission by placement test authorization. (U)(4)

SP 201. 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).

**SP 203. Intermediate Spanish:** Practice in listening, speaking, reading and writing for communicative skills. Review of fundamentals. Use of the Language Center. Prerequisite: one year of college Spanish or SP 103, or placement test authorization. (U)(3)

**SP 204. Intermediate Spanish II:** Continuing practice in listening, speaking, reading and writing for communicative skills. Further review of fundamentals. Use of the Language Center. Prerequisite: SP 203 or placement test authorization. (U)(3)

## SP 300. Service Learning in Spanish:

Supervised volunteer work in Spanish supported by weekly class meetings for discussion and reflection. Goal of course is to increase fluency in Spanish skills and to encourage students to frame their community experience in meaningful ways. (U)(3)

SP 305. Spanish for Oral Communication: Conversation, discussion, dramatization and use of audio and videocassettes to increase fluency in spoken Spanish. Prerequisite: two years of college Spanish or placement on the 300 level. (U)(3)

**SP 310. Spanish for Written Communication:** Practice in Spanish to facilitate the expression of ideas. Discussion of issues, style and structure. Use of audio and videocassettes and microcomputers to increase accuracy and fluency. Prerequisite: two years of college Spanish or placement on the 300 level. (U)(3)

**SP 315. 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)

**SP 325. Linguistics:** Overview of the History, Phonetics, Syntax, Acquisition and Language Variation in Spanish (theories, analysis and application, conducted in Spanish). (U)(3)

**SP 330.** 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 level. (U)(3)

**SP 335. 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. (U)(3)

**SP 340. Spain: 1700 to the 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. (U)(3)

**SP 345. Hispanic Masterpieces:** Readings in selected works from well-known Spanish and Latin American authors. Prerequisite: two years of college Spanish or placement on the 300 level. (U)(3)

SP 350. Spanish American Culture: Mexico, Central 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)

SP 355. Spanish American Culture: South America: 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 America from pre-Encounter America, including Southern Cone and Andean countries. Prerequisite: two years of college Spanish or placement on the 300 level. (U)(3)

**SP 360. Hispanic Film:** Viewing of selected Hispanic movies. 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. (U)(3)

**SP 365. 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. (U)(3)

SP 370. 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. (U)(3)

**SP 400. 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 head. (U/G)(3)

**SP 410 Topics. 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)

SP 420. 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)

SP 430. Topics: 18th- and 19th-Century Spain: Study of historical, literary and/or artistic aspects of the period. Course may be repeated with each different topic. Prerequisite: three years of college Spanish or equivalent. (U/G)(3)

SP 440. 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)

## SP 450. 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)

**SP 460. Topics: 20th-Century Spanish-American Studies:** Emphasis on the contemporary cultures of the nations of Spanish-America. Through the use of literary texts, historical and social documents, movies and other audiovisual media, topics will focus on the dynamics of this rapidly developing cultural region. Course may be repeated with each different topic. Prerequisite: three years of college Spanish or equivalent. (U/G)(3)

# SP 470. Topics: Hispanic Culture in the United States: Study of a major facet of Hispanic culture, such as the family, the church, bilingual education, migrant experience, or poetry and theater of protest. Materials vary with the topic but may include literary and social documents, videocassettes, movies and television. Course may be repeated with each different

topic. Prerequisite: three years of college

Spanish or equivalent. (U/G)(3)

**SP 490. 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)

**SP 491, 492, 493. 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 head. Prerequisite: three years of college Spanish or equivalent. (U/G)(1, 2 or 3)

SP 499. Honors Thesis in Spanish: (U)(3)

## Philosophy and Religion

Administration:

Harry van der Linden, Ph.D., department head **Professors:** 

Stuart Glennan, Ph.D., Paul Valliere, Ph.D.; Harry van der Linden, Ph.D

## Associate professor:

Katharina Dulckeit, Ph.D.; James F. McGrath, Ph.D.,

## Assistant professors:

Chad Bauman, Ph.D., Tiberiu Popa, Ph.D.

#### Lecturer:

Brent Hege, Ph.D.

The Department of Philosophy and Religion offers majors and minors in philosophy and religion, as well as a combined major.

Students pursuing a major in philosophy will be introduced to the history of the western philosophical tradition. In addition, they can select from a wide variety of courses devoted to specific fields of philosophy such as metaphysics, epistemology, ethics, philosophy of religion, and social and political philosophy. The department also offers many courses that study more contemporary philosophical issues arising from other academic disciplines such as the natural and social sciences, business, law, literature and the fine arts. Majors are required to take formal logic. All courses emphasize logical analysis, critical thinking, and analytical and expository writing.

After graduating, philosophy majors pursue a variety of careers. A few do graduate work in philosophy, but most of them pursue graduate studies in other areas, enter professional schools, or seek employment. The analytical and critical skills they acquire from their philosophy courses enhance their abilities in all these fields and invariably make them more attractive as applicants to future educational institutions (e.g. law school or medical school) as well as to prospective employers. However, the study of philosophy is not confined to professional matters. It also has a uniquely human value. It introduces students to the most fundamental and enduring questions about human life questions about God, immortality, the mind, moral conduct, truth, beauty and goodness. Although these questions do not typically arise in our day-to-day professional lives, they all have direct relevance to how we live our personal lives. For this reason, the importance

of philosophy can hardly be exaggerated.

The religion major offers students the opportunity to engage in critical and sympathetic study of various religious traditions, to study religious literature, to examine general questions regarding the nature of religion, and to examine their own religious heritage and experience. A major in religion is a liberal arts major and offers the same broad benefits that other liberal arts majors offer. The major also provides a strong background for students who plan to go to graduate school in religion or to a theological school to prepare for a career in a religious organization.

Students majoring in religion are expected to acquire skills in critical thinking, textual analysis, understanding and empathy for other faiths, and knowledge of religion as a significant motivating factor affecting the actions of individuals and societies. Students with an interest in religion may wish to consider combining a major or minor in religion with a major or minor in another discipline to broaden their career possibilities.

For non-majors, the department emphasizes — in addition to the traditional courses of the disciplines — various courses relating philosophy and religion to other fields.

## Philosophy

Requirements for major
One course in logic:
PL 210 Introduction to Logic, OR any
course so designated

Two courses in history sequence: PL 311, History of Ancient Philosophy PL 313, History of Modern Philosophy

One course in analytic philosophy:
PL 320, Theory of Knowledge OR PL 323,
Introduction to Analytic Philosophy OR
PL 343, Philosophy of Science, OR PL
346, Philosophy of Mind, or any course
designated analytic philosophy

One course in value theory (normative philosophy): PL 345, Contemporary Social and Political Philosophy OR PL 360, Ethics, OR any course designated value theory

Two offerings (6 hours) of PL 410, Seminar in Philosophy.

Students may request a substitute for 3 hours of this seminar requirement if PL 410 is

offered when they are studying abroad. Students may also substitute PL 499, Honors Thesis, for 3 hours of PL 410. Plus 12 hours of additional philosophy courses for a total of 33 hours. No mor

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 minor:

A minor in philosophy consists of 18 hours in philosophy, 9 of which should be on the 300- OR 400-level. Minors will be strongly advised to create a suitable package of courses in consultation with a philosophy professor appointed by the department head.

## 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)
  - a. RL 307 The Historical Jesus
  - b. RL 308 Paul and the Early Church
  - c. RL 347 History of Christianity
  - d. RL 350 Topics in Judaism
- e. RL 366 Topics in Jewish and Christian Traditions (e.g., Theology from the Margins)
- f. RL 370 Modern Religious Thought
- g. RL 372 Mysticism
- h. RL 374 Faith & Doubt
- i. Any approved 3-credit internship, field study, or study abroad opportunity
- 2. Islam and the Asian Faiths (6 credit hours required from the list below)
- a. RL 353 Buddhism: Past and Present
- b. RL 354 Islam
- c. RL 358 Hinduism: Past and Present
- d. RL 363 Religion, Politics and Conflict in South Asia
- e. RL 367 Topics in Islam/Asian Faiths
- f. RL 377 Religion, Gender and the Goddess in Asia
- g. Any approved 3-credit internship, field study, or study abroad opportunity
- 3. Texts and Textual Interpretation (3 credit hours required from the list below)
- a. RL 202 The Bible
- b. RL 213 Biblical Hebrew\*
- c. RL 304 Psalms

- d. RL 308 Paul and the Early Church
- e. RL 375 Topics in Religion: Topics in Texts and Textual Interpretation (e.g., Midrash, Heresy, The Gospel of John)
- 4. Religion and Society (3 credit hours required from the list below)
  - a. RL 363 Religion, Politics and Conflict in South Asia
  - b. RL 368 Topics in Religion & Society
  - c. RL 371 Religion and Science
  - d. RL 377 Religion, Gender and the Goddess in Asia
  - e. RL 391/392 Topics in Religion: Religion and World Civilization Seminar
  - f. Any approved 3-credit internship, field study, or study abroad opportunity
- 5. RL 381 Theory and Method (3 hours)
- 33 total hours in Religion, including (not in addition to) credits for courses fulfilling distributional requirements

\*Both RL 213 and RL 214 (Biblical Hebrew, second year) can count as elective religion credit. But only RL 213 may be used to fulfill a distribution requirement. (RL 214 can only be used as elective credit.)

Requirements for the minor:

A minor in religion consists of 18 hours in religion, 12 of which must be on the 300 OR 400 level. Minors should create a suitable package of courses in consultation with a religion professor appointed by the chair.

Combined Majors

The department offers combined majors in Philosophy and Religion, and Philosophy and Psychology. For requirements, see the department head.

## Philosophy courses

## PL 201. Introduction to Philosophy:

Introduces the student to the methods and problems of philosophy through critical analysis of philosophical texts. Students learn how philosophers have answered questions about reality, knowledge and value. The aim is not merely to teach students about philosophical theories but to help them begin to think philosophically. (U)(3)

PL 203. Contemporary Moral Issues: A critical examination of the moral issues that confront our society, such as morality and the law, pornography and censorship, abortion, race and gender issues, and global justice. Students

will receive a solid introduction to classical and contemporary moral theories. (U)(3)

PL 210. Logic: An introduction to formal logic. Topics will include systems for proving logical propositions, the interpretation of formal systems, and the relationship between formal and natural languages. Consideration will be given to the applications of formal logic to problems in philosophy, mathematics, computer science and the natural sciences. Prerequisite: MA 101 or equivalent. (U)(3)

PL 245. 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)

**PL 311. 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)

PL 313. 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)

PL 314. History of 19th Century Philosophy through Nietzsche: A study of major 19th century philosophers, including Fichte, Schelling, Hegel and Nietzsche. Prerequisite: one philosophy course or permission of instructor. (U/G)(3)

**PL 320. 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)

PL 323. Introduction 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)

PL 327. Philosophical Classics: A detailed study of a selected philosopher or philosophical text: e.g. Socrates, Aristotle's Nicomachean Ethics, Aquinas, Hume's Inquiry or Hegel. (May be repeated with different topic). Prerequisite: one philosophy course or permission of instructor. (U/G)(3)

**PL 340. Philosophy of Art:** A study of some of the major problems in the philosophy of art with special emphasis on music. Prerequisite: one philosophy course or sophomore standing. (U/G)(3)

**PL 342. 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)

**PL 343. 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)

**PL 344. 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)

PL 345. 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)

PL 346. 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)

PL 347. 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)

PL 348. Philosophy and 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 sophomore standing. (U/G)(3)

PL 349. 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: BI 110 or permission of instructor. (U/G)(3)

**PL 360. Ethics:** An examination of the fundamental concepts and problems of morality, facts and values, duty and self-interest and the logic and justification of moral judgments. Attention to major figures in history of ethical theory such as Aristotle, Butler, Kant and Mill. Prerequisite: one philosophy course or permission of instructor. (U/G)(3)

PL 363. 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)

**PL 375. Topics in Philosophy:** Treats a specific subject area of philosophy that is not the major subject of a regularly scheduled course. (U/G)(3)

**PL 391. Topics in Philosophy:** Treats a specific subject area of philosophy that is not the major subject of a regularly scheduled course. (U/G) (1)

- **PL 392. Topics in Philosophy:** Treats a specific subject area of philosophy that is not the major subject of a regularly scheduled course. (U/G) (2)
- PL 401, 402, 403. 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 head before enrolling. (U/G)(1, 2, 3)
- **PL 405.** 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 head if interested. Open to juniors and senior philosophy majors. (U)(3)
- **PL 406.** 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 head if interested. Open to juniors and senior philosophy majors. (U)(6)
- **PL 410. 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)
- **PL 499. Honors Thesis:** Undergraduate honors thesis in philosophy. (U)(3)

## Religion courses

- RL 101. Religions of the World: An introduction to the major historical religions including Hinduism, Buddhism, Confucianism, Taoism, Shintoism, Judaism, Christianity, Islam and modern alternatives to religion. (U)(3)
- **RL 111. Elementary Hebrew I:** An introductory course that prepares the student to read Biblical literature in Hebrew. (U)(3)
- RL 112. Elementary Hebrew II: An introductory course that prepares the student to read Biblical literature in Hebrew, building on the foundation of RL 111. Prerequisite: RL 111. (U)(3)
- **RL 202. The Bible:** Introduction to the content, historical context, methods of study, religious ideas and cultural influence of the Jewish and Christian scriptures. (U)(3)

- RL 213. Intermediate Hebrew I: A course at the intermediate level, with emphasis on vocabulary acquisition and reading more challenging selections from the Hebrew Bible. Prerequisite: RL 111 and 112 or placement at the 200 level. (U)(3)
- RL 214. Intermediate Hebrew II: A course at the intermediate level, with emphasis on vocabulary acquisition and reading more challenging selections from the Hebrew Bible. Prerequisite: RL 213 or placement at the 200 level. (U)(3)
- **RL 304. The Book of Psalms:** Study of the Book of Psalms, the most frequently read and recited book of the Bible. Topics include origin and composition of the Psalms in ancient Israel, ethical and religious significance, and the impact of the Psalms on world literature and music. Prerequisite: One religion course or sophomore standing. (U/G)(3)
- **RL 307. 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/G)(3)
- **RL 308.** Paul & 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. Prerequisite: One religion course or sophomore standing. (U/G)(3)
- RL 312. Topics in Biblical Studies: An in-depth examination of one or two designated books of the Bible; a body of biblical literature; or a general topic (e.g., Israelite religion; biblical theology). Prerequisite: One religion course or sophomore standing. (U/G)(3)
- RL 347. History of Christianity: Historical development of Christianity from the first century to the present. Special attention to selected topics, such as Eastern Orthodox worship and icons, Benedictine monasticism, the Roman Papacy, Luther and the Protestant Reformation, African Christianity and the challenges to Christian belief in modern times. Prerequisite: One religion course or sophomore standing. (U/G)(3)

- **RL 350. Topics in Judaism:** Study of a central area of Jewish studies such as introduction to Judaism, American Judaism, Jewish religious thought and philosophy, and Jewish-Christian relations. May be repeated with a different topic. Prerequisite: One religion course or sophomore standing. (U/G)(3)
- **RL 353. 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/G)(3)
- RL 354. 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/G)(3)
- RL 357. Native American Religions: Introduction to Native American religious beliefs, traditions and practices of the past and present, including the interaction with European based culture and religion. In addition to selected writings by Native Americans and outside observers, the course will utilize audio-visual and museum resources. Prerequisite: One religion course or sophomore standing. (U/G)(3)
- RL 358. 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/G)(3)
- RL 363. Religion, Politics, and Conflict in South Asia: Investigation of the interaction of 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)
- RL 366. Topics in Jewish and Christian Traditions: Treats a specific subject area of

- Judaism or Christianity which is not the major subject regularly scheduled course. (U)(3)
- **RL 367. 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)
- **RL 368/ Topics in Religion & Society:** Treats a specific subject area of Religion and Society which is not the major subject of a regularly scheduled course. (U)(3)
- RL 370. Modern Religious Thought: A survey of important religious thinkers and theological issues of the 19th and 20th centuries (e.g., Buber, Tillich, Weil, liberation theology, feminism). Emphasis is on the Christian and Jewish traditions as they relate to earlier theological developments and to contemporary philosophical and cultural movements. Prerequisite: One religion course or sophomore standing. (U/G)(3)
- RL 371. 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/G)(3)
- **RL 372. 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/G)(3)
- RL 374. Faith & Doubt: The Brothers Karamazov: Course examines the grounds for faith and doubt about the existence of God, using Dostoevsky's novel, The Brothers Karamazov, as the primary text. The novel is a story of love and hate, atheism and religious belief, suffering and the search for redemption. Prerequisite: One religion course or sophomore standing. (U/G)(3)
- **RL 375. Topics in Religion:** Treats a specific subject area of religion that is not the major subject of a regularly scheduled course. (U/G)(3)

RL 377. 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 goddess-oriented communities, past and present, with a focus on Asia. (U-G)(3)

## RL 381. Topics in Theory and Method:

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, Wilfred Cantwell Smith and others. Prerequisite: Two religion courses or junior standing. (U)(3)

**RL 391. Topics in Religion:** Treats a specific subject area of religion that is not the major subject of a regularly scheduled course. (U/G) (1)

**RL 392. Topics in Religion:** Treats a specific subject area of religion that is not the major subject of a regularly scheduled course. (U/G) (2)

**RL 397. 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)

**RL 398. 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)

## RL 401, 402, 403. 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 head before enrolling. (U/G)(1, 2, 3)

**RL 405, 406. 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 head if interested. Open to junior and senior religion majors. (U)(3, 6)

**RL 499. Honors Thesis:** Undergraduate honors thesis in religion. (U)(3)

## RP 401, 402, 403. Independent Study:

Individual study of a specific topic in philosophy and religion under supervision of a member of the department. Assigned readings, papers and tutorials. Obtain permission from department head before enrolling. (U)(1, 2, 3)

**RP 499. Honors Thesis:** Undergraduate honors thesis in philosophy and religion. (U)(3)

## **Physics and Astronomy**

## Administration:

Xianming L. Han Ph.D., Department Head **Professors:** 

H. Marshall Dixon, III, Ph.D., Brian W. Murphy, Ph.D., Director, J. I. Holcomb Observatory and Planetarium

## Associate professors:

Dan W. Kosik, Ph.D., Xianming Han, Ph.D.

## Assistant professor:

Gonzalo Ordonez, Ph.D.

#### Senior instructor:

Jennifer L. Poor, Ph.D.

## Associate director, J. I. Holcomb Observatory and Planetarium:

Richard B. Brown, M.S.

The Department of Physics and Astronomy offers a variety of courses designed to prepare a student for a career in physics, astronomy, engineering, teaching physical science at the secondary school level, or to become an industrial scientist.

## Physics major

Requirements for physics major:

PH 201, 202 Introduction to Analytical Physics

PH 301 Modern Physics

PH 303 Electromagnetic Waves and Optics

PH 311 Experimental Modern Physics

PH 321 Intermediate Classical Mechanics

PH 325 Thermodynamics and Statistical Physics

PH 331, 332 Electromagnetic Theory I and II PH 495 Senior Seminar

A student who intends to pursue graduate studies in physics also should complete at least PH 315, 421 and 422. Other electives may be advised by the department in consideration of a student's individual career plans.

Requirements for physics minor:

PH 201, 202 Introduction to Analytical Physics

PH 301 Modern Physics

PH 303 Electromagnetic Waves and Optics

PH 311 Experimental Modern Physics

PH 321 Intermediate Classical Mechanics

## Requirements for astronomy minor:

AS 102 Modern Astronomy with Laboratory PH 201, 202 Introduction to Analytical Physics

AS 301 Modern Astronomical Techniques

AS 311 Astrophysics I

AS 312 Astrophysics II

Students wishing to pursue a career in astronomy and astrophysics should combine the physics degree with the astronomy minor.

Particular regard should be given to the mathematics prerequisites for physics and astronomy courses. MA106, 107, 208, and 334 are prerequisites to most 300-level physics and astrophysics courses.

# **Dual-Degree Engineering Program**

The Dual Degree Engineering Program results from a partnership between two institutions (Butler University and Purdue University School of Engineering and Technology at Indianapolis). Completion of this program will yield a degree from Butler University in physics and a degree from Purdue University School of Engineering and Technology at Indianapolis in mechanical, electrical, or computer engineering. This partnership will allow students to study in a small, private university environment with faculty dedicated to undergraduate education and also have access to ABET accredited programs in mechanical, electrical, or computer engineering which are normally found in larger, public institutions.

## Summary of Program Features:

- The dual degree program leads to a degree in engineering from Purdue School of Engineering and Technology at Indianapolis (mechanical, electrical, or computer) and a physics degree from Butler.
- 2. The engineering programs are ABET accredited.
- The dual degree programs are five years with residence at Butler University during the programs.

- 4. One paid summer internship is part of the program.
- 5. The courses in mathematics, sciences, humanities, social sciences, and fine arts are taught at Butler University while the engineering courses are taught through Purdue School of Engineering and Technology at Indianapolis. Engineering courses taken during the first three years will be taught at Butler.
- Transportation provided between sites (Butler and Purdue School of Engineering and Technology at Indianapolis).
- 7. Job placement/career services at Butler University, Purdue School of Engineering and Technology at Indianapolis and Purdue University at West Lafayette will be available to dual degree students.

Requirements for the Dual-Degree Engineering/ Physics Major:

To obtain a Physics/Engineering Major, offered only in conjunction with the Butler/Purdue (Indianapolis) Engineering **Dual**-

# Degree Program, a student must complete the following:

CH 105 General Chemistry	5
CH 106 General Chemistry	5
MA 106 Anly. Geom & Calculus 1	5
MA 107 Anly. Geom & Calculus 2	4
PH 201 Intro to Analytical Physics	5
PH 202 Intro to Analytical Physics	5
PH 301 Modern Physics	4
MA 208 Anly.Geom. & Calculus 3	3
MA 215 Linear Algebra	3
PH 303 Electromag. Waves & Optics	3
MA 334 Differential Equations	3
PH 311 Experimental Modern Physics	3
PH 321 Intermediate Classical	
Mechanics	4
PH 325 Thermodynamic/	
Statistical Physics*	4
PH 331 Electromagnetic Theory 1**	3
PH 332 Electromagnetic Theory 2**	3
PH 351 Analog Electronics*	4
PH 352 Digital Electronics*	3
PH 495 Senior Seminar	1

Up to 20 hours of coursework must either be transferred back to Butler from IUPUI, or taken from Butler electives, to complete major and other general requirements. These generally will depend upon the field of engineering studied and will be selected in consultation with the engineering advisor in the Butler Department of Physics and Astronomy.

The engineering physics major program includes all customary requirements of the Butler University College of Liberal Arts and Sciences.

- \* Students of mechanical engineering may substitute appropriate engineering mechanics courses.
- \*\* Students of electrical engineering may substitute appropriate engineering electronics courses.

## Physics courses

PH 105. Concepts of Physical Science: A one-semester 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)

PH 107, 108. Elementary Physics: A two-semester course based on algebra and elementary trigonometry. This course is suitable preparation to meet the entrance requirements of most dental, medical and pharmacy schools. Three class periods and two hours of laboratory per week. PH 108 must be preceded by PH 107. (U)(4, 4)

## PH 152. Preparatory Analytical Physics:

A course in physical-problem analysis and solution using calculus and other mathematical tools required for PH 201. Recommended for science and mathematics majors who need/wish to study PH 201, but whose mathematical and physical-problem solving experience is limited. Prerequisite or co requisite: MA 106. (U)(4)

**PH 200.** 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)

PH 201, 202. 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. PH 202 must be preceded by PH 201. Prerequisite: MA 106 (may be concurrent) or permission of instructor. (U)(5, 5)

PH 301. 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: MA 208 (may be concurrent) and PH 202 or permission of instructor. (U)(4)

PH 303. 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: MA 208 (may be concurrent) and PH 202 or permission of instructor. (U)(3)

PH 311. 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)(3)

PH 315, 316. 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: MA 208, PH 201, and PH 202. (U)(4, 4)

PH 321. 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: PH 202 and MA 208 or permission of instructor. (U)(4)

PH 325. 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: PH 202 and MA 107 or permission of instructor. (U/G)(4)

PH 331, 332. Electromagnetic Theory I and II: 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: PH 202 and MA 208 or permission of instructor. (U/G)(3, 3)

**PH 351. Analog Electronics:** 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. Two lectures and three hours of laboratory per week. Prerequisite: PH202 or permission of instructor. (U)(4)

PH 352. 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: PH 351 or permission of instructor. Fee. (U)(3)

PH 411, 412. 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 MA 334 or permission of instructor. (U/G)(3, 3)

PH 421. Quantum Theory I: 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 PH 331 or permission of instructor. (U/G)(4)

**PH 422. Quantum Theory II:** 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: PH 421 or permission of instructor. (U/G)(4)

**PH 427. 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 PH 332 or permission of instructor. (U/G)(3)

PH 428. General Relativity & Gravity II: Tensor analysis in classical field theory, Einstein's field equations, the Schwarzschild solution, linearized field equations, experimental gravitation, cosmological models and gravitational collapse. Prerequisites: PH 327 or permission of instructor.

(U/G)(3)

PH 461. 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: PH 321, PH 331, or permission of the instructor. (U)(3)

**PH 480. Special Topics:** By arrangement with appropriate staff. (U/G)(3)

PH 491, 492, 493. Undergraduate Tutorial and Research: (U)(3, 6, 9)

**PH 495. 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)

**PH 499. Honors Thesis:** (U)(3)

## **Astronomy courses**

AS 100. The Astronomical Universe: A descriptive study of basic astronomy including the planets and the apparent motions of celestial objects, the seasons, constellations, comets and meteors, stars, galaxies and large-scale structure of the universe, plus current events in space exploration. There will be planetarium demonstrations and telescope observations. Some hands-on lab experiences are provided. (U)(3)

**AS 102. Modern Astronomy with Laboratory:** First course of an introductory astronomy sequence for both non-science and science majors. This course and laboratory include the

history of astronomy, time-keeping, the solar system, planets and their motions, the moon, comets, meteors, the solar evolution, Kepler's Laws, etc., with planetarium demonstrations, use of astronomical instruments, and small telescopes and binoculars. Four hours of lecture, plus one two-hour lab weekly. (U)(5)

#### AS 301. 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: AS 102 and PH 202. (U)(3)

**AS 311. Astrophysics I:** 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: AS 102 and PH 202. (U)(3)

AS 312. Astrophysics II: A continuation of AS 311. 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: AS 311. (U)(3)

## **Political Science**

Administration:

Terri Jett, Ph.D., department chair

**Professors:** 

Margaret A. Brabant, Ph.D.;

Associate professors:

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

Assistant professor:

Robin Turner, ABD

**Professor Emeritus:** 

Dave Mason, Ph.D.

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 Political Science Department at Butler University 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.

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 and that encourage students to accept responsibility for their learning and to recognize that knowledge may be obtained from a variety of different people and situations.

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 PO 201, plus three of the other introductory courses (PO 101, PO 102, PO 131, PO 141, PO 151, PO 210, PO 220) and at least one writing-intensive departmental seminar (PO 490)

Requirements for Political Science minor:

18 hours of PO courses, including PO 101 and PO 201 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.

## Political Science courses

PO 101. 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)

PO 102. Introduction to Peace Studies: This course provides a basic introduction to the study of Peace Studies. It begins with an examination of the history of the field and its major theoretical and philosophical currents. The second part of the course deals with structural, cultural, and direct violence and issues as social justice, human rights and peace building with reference to contemporary cases. (U)(3)

#### PO 131. Introduction to United States 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)

PO 141. Introduction to International Politics: An analysis of patterns in international politics with emphasis on conflict and cooperation, the international economy and resource scarcity and the foreign policies of major powers. (U)(3)

PO 151. Introduction 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)

PO 201. 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)

PO 210. 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)

PO 220. 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)

PO 302. Third World Politics: A detailed analysis of the political systems, cultures and processes in developing countries with emphasis on the sources of political instability, the colonial heritage, and the efforts of Third World nations to cope with the challenges of modernization. (U/G)(3)

PO 320. International Relations: Problems in world politics since 1900 with particular attention to the efforts at peaceful settlement of international conflicts. (U/G)(3)

PO 322. 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: PO 141 or PO 220 or consent of the instructor. (U/G)(3)

PO 332. State and Local Government and Politics: American state and local government activities and electoral politics, emphasizing the issues of political management and policy analysis. (U)(3)

PO 335. 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)

## PO 337 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 or stagnation, and anticipate the importance of the urban community to our survival as a nation. (U/G)(3)

PO 350. 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: PO 151 or junior standing. (U)(3) **PO 355.** 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)

PO 358. 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. capital, how these policies are shaped and why they succeed or fail to achieve their stated objectives. (U)(3)

PO 360. Political Regimes in 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: PO 101, PO 151 or permission of the instructor. (U/G)(3)

PO 362. 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: PO 101, PO 151 or permission of the instructor. (U/G)(3)

PO 364. 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: PO 101, PO 141 or permission of the instructor. (U/G)(3)

PO 370. Governments and Politics of Europe: An analysis and comparison of the political processes, policies and ideologies of several governments in Western and Eastern Europe. Prerequisite: PO 151 or consent of instructor. (U/G)(3)

PO 371. United States 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)

PO 372. The 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) PO 101, PO 131, PO 141 or consent of instructor. (U/G)(3)

**PO 373. 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) PO 101, PO 131, PO 151 or consent of instructor. (U/G)(3)

PO 375. 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 (computerassisted telephone interviewing) software, and do some basic analysis of the results. Prerequisite: One of the following: PO 101, PO 201, junior standing or consent of the instructor. (U/G)(3)

**PO 377. 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)

PO 379. 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)

**PO 380. Topics in Political Science:** Selected topics of contemporary significance in scholarship in political science. Prerequisite: At least one Political Science class or junior standing or permission of instructor. (U)(3)

PO 381. 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: PO 101, PO 210 or permission of instructor. (U/G)(3)

**PO 382. 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)

PO 383. United States Political Thought: Selected writings of U.S. authors focusing on four periods: founding of the republic, slavery, suffrage and the civil rights movement. Prerequisite: PO 131, PO 210 or permission of the instructor. (U/G)(3)

**PO 384. 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: PO 101, PO 131 or consent of instructor. (U/G)(3)

## PO 385. The Enduring Quest for Community:

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 parts of the continuing efforts on the part of human beings to link personal and political practices. This course includes a service-learning component. (U/G)(3)

**PO 386. 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/G)(3)

**PO 391. Russian Politics:** Political institutions, processes and issues in Russia, with consideration of the political history of the former Soviet Union, the reforms of Gorbachev, the collapse of the Soviet Union, and the processes of transition from state socialism to capitalism and from authoritarianism to democracy. Prerequisite: PO 151 or permission of instructor. (U/G)(3)

PO 392. The Transition from Communism in East-Central Europe: The rise and fall of communism in Eastern Europe and the politics of transition to democracy and market-based economies. Includes consideration of post-Cold War international politics and alliance systems. Prerequisite: PO 151 or permission of instructor. (U/G)(3)

## PO 400, 401, 402. 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, 2 or 3)

**PO 403, 404, 405. 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, 3, or 6)

PO 407, 408, 409. Student Apprenticeship in Political Science: Students work with faculty mentors on their teaching or their research. In teaching apprenticeships, students work with the professor in the development and discussion of the classroom experience. In research apprenticeships, students work with a faculty mentor on his or her current research. Prerequisites: Junior standing, two courses in political science. By application only. (U)(1, 2 or 3)

**PO 490. 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)

**PO 499. Honors Thesis:** (U)(3)

## **Psychology**

## Administration:

Kathryn A. Morris, Ph.D., department head **Professors:** 

John Neil Bohannon III, Ph.D.; Robert H. I. Dale, Ph.D.

#### Associate professors:

Tara Lineweaver, Ph.D.; Joel Martin, Ph.D.; Kathryn A. Morris, Ph.D.; Robert J. Padgett, Ph.D.

## Assistant professors:

Brian Giesler, Ph.D.; Amanda Hege, Ph.D.

The program in psychology has the goal of providing a knowledge of basic principles of behavior as established by scientific methods. By the proper selection of courses, undergraduate students can prepare themselves for a variety of employment and educational opportunities. Students majoring in psychology can make an intensive study of the content of psychology in preparation for graduate study and later professional pursuits in the field; develop knowledge and skills valuable in pursuing careers in such related areas as personnel, management, public administration, sales, social work, etc.; and use the major as the basis of an interdisciplinary liberal arts and sciences education. The student planning a major in psychology should begin his or her program before the second semester of the sophomore year and should work closely with a departmental advisor.

## Requirements for major:

The major in psychology (39 credit hours) sets three goals for student development: to master a central core of psychological knowledge, to acquire some basic methodological and computer skills, and to attain a sophisticated knowledge of at least one area within psychology. Students must take the following courses:

PS 101, PS 202, PS 235, PS 320, PS 350, PS 385, PS 440

Methodological core: PS 210, PS 211, PS 310

## Specialized courses:

180

One psychology course at the 300-400 level, one 400-level course and 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 minor:

A minor in psychology (21 credit hours) consists of: PS 101, PS 210 and PS 211; any three of PS 202, PS 235, PS 320, PS 350, PS 385 or PS 440; and any psychology course at the 300-400 level.

## Psychology courses

## PS 101. Introduction to Psychology:

An introduction to the general principles and facts of behavior as established by the methods of science. (U)(3)

PS 105. Careers in Psychology: Overview of major's program. Discussions of potential career options and credentials required for each. Outside speakers. Development of statement of career objectives. Pass/fail credit. (U)(1)

## PS 112. Professional Writing in Psychology:

Psychology students must write research reports, proposals, critical analyses, annotated bibliographies, and other written products, while following APA formats, maintaining sound organization of material, and producing logical analyses. This course teaches these skills early in students' careers. Open to all psychology majors, minors, and other interested students. One hour lecture/one hour laboratory. Pass/fail credit. (U)(1)

**PS 202. 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: PS 101, or permission of instructor. (U)(3)

PS 210. 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: PS 101 or permission of instructor. (U)(3)

PS 211. 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: PS 210 or permission of instructor. (U)(3)

PS 235. Biological Bases of Behavior: Relations between the anatomy and physiology of the organism and its behavior. Prerequisite: PS 101 or permission of instructor. (U)(3)

PS 305. 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. A background in introductory psychology is strongly recommended. (U)(3)

PS 310. Statistics in Psychology: Introduction to the use of statistics in the analysis of psychological data. Emphasis is given to both the logical and the computational aspects of statistics. Prerequisite: PS 201, PS 210 and PS 211, or permission of instructor. (U)(3)

PS 311. Experimental Psychology II: Presents advanced issues in psychological research methodology. Students will develop their own experiments. Topics covered include experimental and quasi-experimental designs, survey research methodologies and proposal and report writing. Two hours of lecture and two hours of lab weekly required. Prerequisites: PS 201 and PS 310 or permission of instructor. (U)(3)

PS 320. 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: PS 101 or permission of instructor. (U)(3)

PS 333. 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: PS 101 or instructor's permission. (U)(3)

PS 350. 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: PS 101 or permission of instructor. (U)(3)

PS 360. Industrial Psychology: The methods and facts of psychology as applied to such persistent personnel problems as selection and placement, training, merit rating and efficient working conditions. Prerequisite: PS 101 or permission of instructor. (U)(3)

PS 385. 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: PS 101, or permission of instructor. PS 202 recommended. (U)(3)

**PS 391. 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. (U)(1) May be repeated up to six hours.

PS 396. 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. (U)(1) May be repeated up to six hours.

PS 404. Sensory Processes and Perception: An intensive introduction to the phenomena, data and theories in sensory processes and perception. Prerequisite: PS 201 and PS 235, or permission of instructor. (U/G)(3)

PS 415. 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)

PS 420. 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)

PS 440. Psychology of Personality: An intensive study of the more important theories regarding the nature and determinants of

THE COLLEGE OF LIBERAL ARTS AND SCIENCES

personality. Prerequisites: 10 hours or permission of instructor. (U/G)(3)

PS 441. 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: PS 440 or permission of instructor. (U/G)(3)

PS 443. 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: PS 440 or permission of instructor. (U/G)(3)

PS 475. Advanced Seminar in Cognitive **Psychology:** This is a capstone course for learning and cognition. The topics will vary across semesters. They may include neural networks and connectionism, comparative cognition, theories of learning, eyewitness testimony, or other specialty areas in learning and cognition. Prerequisites: PS 385 or permission of instructor. (U/G)(3)

## PS 476. 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: PS 235 or permission of instructor. (U/G)(3)

PS 477. 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: PS 350 or permission of instructor. (U/G)(3)

PS 478. 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: PS 201 and PS 320 or permission of instructor. (U/G)(3)

PS 479. 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)

PS 496. 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)

**PS 499. Honors Thesis:** (U)(3)

## The Public and Corporate Communication major

Administration:

Nancy Whitmore, Ph.D., director

Public and corporate communication is an interdisciplinary program designed for students with an interest in careers or further study in the fields of organizational or corporate communications. The program provides a broad frame of reference and background in several areas of communication study. The program leads to a B.A. degree granted by the College of Liberal Arts and Sciences.

- I. Required in Communications: (at least three courses in each of the five areas)
- 1. Public relations and advertising
  - JR 223 Introduction to Public Relations\*
  - JR 324 Case Problems in Public Relations\*
  - JR 327 Research Methods for Public Relations and Advertising\*, OR
  - JR 328 Public Relations Techniques\*
- 2. Journalism
  - JR 112 Writing for Print Media
  - JR 311 News Editing\*
  - JR 414 Mass Communications Law, OR JR 416 Mass Communication in Society
- 3. English
- EN 201 Advanced Composition
- EN 218 Intro to Creative Writing: Poetry and Fiction
- EN 219 Introduction to Writing Non-Fiction Prose
- EN 310 Intermediate Writing Workshop (Poetry, Fiction, Screen-writing, or Non-Fiction Prose) OR EN 386 Studies in Rhetoric
- 4. Media Arts
  - MDA 201 Audio Production
  - MDA 202 Video Production 1

- MDA 203 Electronic Journalism\* OR MDA 212 Writing for the Electronic Media or A 300/400 level class approved by the Media Arts Department Head
- 5. Speech Communication
  - COM 350 Contemporary Communication Theory\*
  - COM 415 Business and Professional Speech Communication\*
- COM 351 Small Group Communication\*, OR COM 470 Organizational Communication\*
- II. Cognate requirements:(four courses required)
  - 1. Business administration
    - AC 203 Introduction to Accounting
    - EC 101 Economics and the Modern World\*
    - MK 280 Principles of Marketing
    - MG 263 Legal Environment of Business\*, OR MS 264 Statistics\*, OR PL 362 Business Ethics
- III. Internship or three-hour communications elective.
- IV. College of Liberal Arts requirements, including language.
- V. Special courses:
  - CM 301, 302, 303. Independent Study in Public and Corporate Communication (U) (1, 2, 3)
- CM 401, 402, 403. Internship in Public and Corporate Communication (U)(1, 2, 3)

\*Make sure to complete prerequisites (listed in the current Butler Bulletin) before enrolling for these courses.

## Sociology

## 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 Cline, Ph.D.

The Department of Sociology aspires to be a cornerstone program in the social sciences, emphasizing writing and critical thinking, analytical skills, computer literacy and an indepth understanding of the changing world. The department provides comprehensive coursework in sociology, preparing students for advanced study in graduate programs in

this and other related disciplines. In addition, courses offered through the department satisfy part of the curricular needs of many students pursuing degrees in the professional colleges. Finally, the department cooperates with other departments in developing and enhancing interdisciplinary programs of mutual interest and actively participates in the social science curriculum of the general education program.

The sociology program enables the department to satisfy the goals of the university (including exposing students to multicultural issues) through a pursuit of excellence in the areas of teaching, research and community service. Through teaching, we seek to engage students in the consideration of major issues in sociology and to promote student awareness of the relevance of sociology for investigating and understanding social and cultural issues. Through student and faculty collaboration in research, we seek to enhance students' abilities to define and solve empirically based problems. The department thus seeks to immerse students in the urban community through carefully crafted teaching and research experiences. It also attempts to engage students and faculty in utilizing their expertise as sociologists, in community service while also looking beyond local issues to the international context.

Students may elect to do one of the following:

- Major in sociology (39 hours)
- Minor in sociology (21 hours).
- Major in sociology with specialization in social work and social policy (39 hours plus Internship)
- Major in sociology and criminology (39 hours plus Internship)
- Major in urban affairs (36 hours plus Internship)
- Combined major in Sociology with specialization in social work and social policy and psychology (60 hours)
- Combined major specialization in criminology and psychology (60 hours)

Each major consists of a set of core courses (SO 101 Introductory Sociology, SO 205 Contemporary Social Issues, SO 391 Social Theory, SO 393 Research Methods and SO 486 Senior Seminar) and additional courses at the 300-400 level as specified below.

Most upper-division courses are scheduled in alternate years.

## Major in Sociology:

The major in sociology is a program of 39 hours (13 courses) plus an internship or service learning agreement. The major consists of a set of core requirements (SO 101, SO 205, SO 391, SO 393, SO 486 or SO 499), eight additional courses selected from four concentration areas, and an internship.

## Sociology Major

(39 hours: 13 courses & Internship) Core Requirements (15 hours):

SO 101 Introductory Sociology

SO 205 Contemporary Social Issues

SO 391 Social Theory Seminar

SO 393 Research Methods Seminar

SO 486 Senior Seminar or SO 499

Honors Thesis

## Additional Requirements (24 hours)-

select at least one course from each of the four concentration areas\*:

#### **Socio-Cultural Institutions:**

SO 301 Families and Gender Roles

SO 303 Political Behavior, Polity and Society

SO 305 Sport, Culture and Society

SO 307 Leisure and Everyday Life

SO 309 Sociology of Economic Life

SO 311 Law and Society

SO 319 Mental Illness, Culture and Society

## Social Structure and Differentiation:

SO 321 Crime and Society

SO 323 Racial and Ethnic Relations

SO 325 Class, Status and Power

SO 327 Community Organization

SO 329 The Sociology of Racism

#### Socio-Cultural Process and Integration:

SO 341 Self and Society

SO 343 Popular Culture

SO 345 Social Deviance

SO 347 Urban Society

SO 349 Social Movements

SO 351 Punishment and Society

SO 353 Juvenile Justice

SO 339 Violence, Media, Culture

## Global and Comparative Studies:

SO 331 Latin American Societies

SO 333 European Societies

SO 335 Global Society

SO 355 International Crime

## Internship (must complete one)

SO 484 OR

SO 485 or Service Learning Agreement

\*SO 380 Selected Topics in Sociology. This course may be substituted for one of the above courses in a concentration area with the permission of the Department chair.

## **Minor in Sociology:**

The minor in sociology is a program of 21 hours (7 courses), including SO 101, SO 391, SO 393, and four additional courses with a minimum of one course in each of the four concentration areas (see the sociology major requirements for courses in each concentration area).

# Sociology Major with Specialization in Social Work and Social Policy

(39 hours: 13 courses & Internship) Core Requirements (15 hours):

SO 101 Introductory Sociology

SO 205 Contemporary Social Issues

SO 391 Social Theory Seminar

SO 393 Research Methods Seminar

SO 486 Senior Seminar or SO 499 Honors Thesis

## **Additional Requirements**

Social Work Practice (9 hours)

SO 381 Social Work and Social Policy

SO 383 Social Work Methods

SO 385 Practice Skills in Social Work

## Social Processes, Structures and Institutions

(12 hours)- select 4 of the following courses\*:

SO 301 Families and Gender Roles OR

SO 341 Self and Society

SO 327 Community Organization OR

SO 347 Urban Society

SO 319 Mental Illness, Culture and Society

SO 325 Class, Status and Power OR

SO 309 Sociology of Economic Life

SO 345 Social Deviance OR

SO 353 Juvenile Justice

SO 343 Popular Culture OR

SO 339 Violence, Media, Culture

SO 303 Political Behavior, Polity and Society OR

SO 349 Social Movements

SO 335 The Global Society

## **Global and Social Diversity** (3 hours)- select 1 of the following\*:

SO 323 Racial and Ethnic Relations OR SO 329 The Sociology of Racism SO 331 Latin American Societies OR \*SO 370 Selected Topics in Social Work or SO 380 Selected Topics in Sociology may substitute for another course with permission of the department head

## Internship: (3 hours required)

SO 484 OR SO 485

## Sociology and Criminology Major

(39 hours: 13 courses & Internship)

Core Requirements (15 hours):

SO 101 Introductory Sociology

SO 205 Contemporary Social Issues

SO 391 Social Theory Seminar

SO 393 Research Methods Seminar

SO 486 Senior Seminar OR

SO 499 Honors Thesis

## Required Courses (12 hours total):

SO 321 Crime and Society AND

Three of the following:

SO 311 Law and Society

SO 345 Social Deviance

SO 351 Punishment and Society

SO 353 Juvenile Justice

## **Elective Courses** (9 hours)- select 3 of the following\*:

SO 301 Families and Gender Roles OR

SO 341 Self and Society

SO 303 Political Behavior, Polity, and Society OR

SO 349 Social Movements

SO 319 Mental Illness, Culture and Society

SO 327 Community Organization OR

SO 347 Urban Society

SO 325 Class, Status, and Power OR

SO 309 Sociology of Economic Life

SO 339 Violence, Media, Culture OR

SO 343 Popular Culture

## **Global and Social Diversity** (3 hours)- select 1 of the following\*:

SO 355 International Crime

SO 323 Racial and Ethnic Relations OR

SO 329 Sociology of Racism

SO 331 Latin American Societies OR SO 335 the Global Society

**Internship** (3 hours required):

SO 484 or SO 485
\*SO 360 Selected Topics in Criminology

OR SO 380 Selected Topics in Sociology may substitute for another course with permission of the department chair.

## **Urban Affairs Major**

(36 hours: 12 Courses & Internship)

#### Administration:

Professor Kenneth Colburn Jr., Ph.D.

Urban affairs majors are encouraged to go beyond the minimum required course work below in order to expand their knowledge of the urban environment and to develop proficiency in research skills. Completing a research project is excellent preparation for advanced study or employment in the challenging arena of urban affairs. For this reason, majors are encouraged to complete an honors thesis or to take SO 486 Senior Seminar. Some courses below may have prerequisites.

## **Interdisciplinary Foundation** (12 hours)

Four courses, one from each of the following disciplines:

AN 102 Introduction to Anthropology OR GE 109 Cultural Geography

EC 101 Economics and the Modern World OR EC 231 Principles of Economics

PO 101 Introduction to Politics OR

PO 131 Introduction to U.S. Politics OR PO 151 Introduction to Comparative

Politics

SO 101 Introduction to Sociology OR SO 205 Contemporary Social Issues

## Content Area Courses (21 hours)

Four required courses, as follows:

EC 351 Urban Economics

PO 332 State and Local Government and Politics OR

PO 337 Politics of the Urban Experience

PO 335 Racial and Ethnic Politics OR

SO 323 Race and Ethnic Relations OR

SO 329 Sociology of Racism

SO 347 Urban Society

## Three courses from at least two different disciplines:

AN 354 The American City OR

GE 313 Urban Geography EC 391 Environmental Economics

EC 434 Public Finance OR

EC 435 Government and Business

PO 373 Public Policy

PO 385 The Enduring Quest for Community

SO 303 Political Behavior, Polity & Society

SO 309 Sociology of Economic Life OR

SO 325 Class, Status, Power

SO 331 Latin American Societies OR

EC 433 International Economics OR SO 335 Global Policy OR

PO 364 United States-Latin American Relations

SO 327 Community Organization

SO 343 Popular Culture OR

SO 307 Leisure and Everyday Life

SO 380 Selected Topics in Sociology OR PO 380 Topics in Political Science (requires approval)

#### Research Methods (3 hours)

One methods course from the following (more than one recommended):

AN 350 Anthropological Methods

EC 464 Quantitative Methods

PO 375 Public Opinion

SO 393 Research Methods Seminar

**Internship** (minimum of one three credit hour course in an urban/community setting or organization):

SO 484

SO 485

PO 404

PO 405

PO 406

## Combined Major in Sociology with Specialization in Social Work and Social Policy and Psychology (60 hours)

Sociology Requirements (30 hours):

SO 101 Introductory Sociology

SO 205 Contemporary Social Issues

SO 381 Social Work and Social Policy

SO 383 Social Work Methods

SO 385 Practice Skills in Social Work

SO 391 Social Theory Seminar (prerequisite:

SO 101, SO 205)

SO 393 Research Methods Seminar (prerequisite: SO 101, SO 293 or equivalent, and Junior standing)

SO 484 or SO 485 Internship

SO 486 Senior Seminar OR

SO 499 Honors Thesis

## One course from the following: (3 hours)

SO 301 Families and Gender Roles of Self and Society OR SO 323 Racial and Ethnic Relations OR SO 329 Sociology of Racism

SO 327 Community Organization OR

SO 347 Urban Society

SO 345 Social Deviance OR

SO 353 Juvenile Justice

SO 331 Latin American Societies OR

SO 335 Global Society

SO 370 Selected Topics in Social Work OR SO 380 Selected Topics in Sociology (may substitute with permission of

department chair)

## Psychology Requirements (30 hours):

PS 101 Introduction to Psychology

PS 202 Learning and Memory

PS 210 Research Methods/Statistics I

PS 211 Research Methods/Statistics II

PS 235 Biological Basis of Behavior

PS 310 Statistics in Psychology

PS 320 Life Span Developmental Psychology

PS 350 Social Psychology

PS 440 Psychology of Personality

PS 475 OR

PS 476 OR

PS 477 OR

PS 478 OR

PS 479 OR

PS 499 Honors Thesis

## Combined Major in Sociology and

Criminology and Psychology (60 hours):

Sociology Requirements (30 Hours):

SO 101 Introductory Sociology

SO 311 Law and Society

SO 321 Crime and Society OR

SO 345 Social Deviance

SO 323 Race/Ethnic Relations OR

SO 327 Community Organization OR

SO 347 Urban Society

SO 351 Punishment and Society

SO 355 International Crime OR

SO 353 Juvenile Justice

SO 391 Social Theory Seminar

(prerequisite: SO 101 and junior standing)

SO 393 Research Methods Seminar

(prerequisite: SO 101, SO 293 OR

equivalent and Junior standing)

SO 484 OR

SO 485 Internship

SO 486 Senior Seminar OR

SO 499 Honors Thesis

SO 360 Selected Topics in Criminology OR SO 380 Selected Topics in Sociology (may substitute with permission of department head)

## Psychology Requirements (30 Hours):

PS 101 Introduction to Psychology

PS 202 Learning

PS 210 Research Methods/Statistics I

PS 211 Research Methods/Statistics II

PS 235 Biological Bases of Behavior

PS 310 Statistics in Psychology

PS 320 Life Span Developmental Psychology

PS 350 Social Psychology

PS 440 Psychology of Personality

PS 475 OR

476 OR

477 OR

478 OR

479 OR

PS 499 Honors Thesis

## Core courses

the program. (U)(3).

**SO 101. Introductory Sociology:** An introduction to the sociological approach and methods through an analysis of human interaction, cultural patterns, social groups and social institutions, their structures, functions and processes, emphasizing both continuity and change. Prerequisite to all sociology courses in

SO 205. Contemporary Social Issues: Analysis of selected social problems in contemporary society using readings from both academic and popular sociological analysis. The emphasis of this course is on developing in the students the ability to identify social phenomena, to understand how these causes may influence social policy, and to develop an ability to conduct basic research on social issues using social science methodology; including documentary and literature based search skills from bibliographical databases and online web-based materials. Prerequisite: SO 101 or any introduction to social sciences course. (U)(3)

**SO 391. Social Theory Seminar:** An historical and analytical survey of major contributions to social theory with major emphasis upon late 19th-century, 20th-century and contemporary developments. Prerequisites: SO 101 and junior standing. (U/G)(3)

**SO 393.** Research Methods Seminar: The principal methods of social research. Formation of research problem concepts and hypotheses; measurement and data collection and analysis; and reporting of research. Prerequisites: SO 101, SO 293 or equivalent, and junior standing. (U/G)(3)

**SO 486. Senior Seminar:** Capstone writing-intensive research seminar for all majors in their senior year. Emphasis is on the synthesis and integration of information obtained in theory, methods and substantive courses. Students

will be expected to demonstrate mastery of the sociological perspective in the completion of a senior paper or thesis. Prerequisites: SO 391, SO 393 and senior status. (U/G)(3)

## Additional courses

SO 293. 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: MA 101 or equivalent. (U)(3).

**SO 301. 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: SO 101. (U/G)(3)

SO 303. 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: SO 101. (U/G)(3)

**SO 305. Sport, Culture and Society:** An analysis of the place and function of sports in society and culture. Prerequisite: SO 101. (U/G)(3)

**SO 307. Leisure in Everyday Life:** An analysis of the significance of the social institutions of work and leisure in technologically advanced societies. Prerequisite: SO 101. (U/G)(3)

SO 309. Sociology of Economic Life: An analysis of economic systems and institutions in contemporary societies and its effect on people's lives. In addition to theoretical approaches to understand the economic structures, issues such as resources distribution, poverty, and the welfare system will be addressed from a comparative perspective. Prerequisite: SO 101 or any introduction to social sciences course. (U)(3)

**SO 311. 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)

## SO 319. 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: SO 101 or permission of the instructor. (U/G)(3)

**SO 321.** Crime and Society: Nature of crime forms, extent, causes and treatment. Prerequisites: SO 101 and junior standing. (U/G)(3)

**SO 323. 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: SO 101. (U/G)(3)

**SO 325. 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: SO 101. (U/G)(3)

**SO 327. Community Organization:** A study of structures, basic processes, resources and techniques and their application in the functioning of rural, urban and suburban communities. Special attention to planning principles in the Indianapolis metropolitan area. Prerequisite: SO 101. (U/G)(3)

**SO 329.** 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: SO 101. (U/G)(3)

SO 331. 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: SO 101 or any Introduction to Social Studies course. (U/G)(3)

SO 333. 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. Prerequisite: SO 101 or any Introduction to Social Sciences course. (U/G)(3)

**SO 335.** 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: SO 101 or any Introduction to Social Sciences course. (U/G)(3)

## SO 339. 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)

**SO 341. 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: SO 101. (U/G)(3)

**SO 343. 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: SO 101. (U/G)(3)

**SO 345. Social Deviance:** 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: SO 101. (U/G)(3)

**SO 347. Urban Society:** Urban origins, the genesis of the modern city and the metropolitan area and region — structure, ecology, problems and programs for their control. Prerequisite: SO 101. (U/G)(3)

**SO 349. 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: SO 101. (U/G)(3)

**SO 351. 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: SO 101. (U/G)(3)

**SO 353. Juvenile Justice:** 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 "deviant" or "delinquent" children in particular. Prerequisite: SO 101. (U/G)(3)

SO 355. 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: SO 101 or any Introduction to Social Sciences course. (U)(3)

## SO 360. Selected Topics in Criminology:

Designed to give the advanced undergraduate student academic flexibility. 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: SO 101. (U)(3)

**SO 370.** Selected Topics in Social Work: 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: SO 101. (U)(3)

SO 380. 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: SO 101. (U/G)(3)

**SO 381. 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. Prerequisite: SO 101. (U/G)(3)

**SO 383. Social Work Methods:** An introduction to social work fields of practice and the methods used by social work professionals. Prerequisite: SO 101. (U/G)(3)

SO 385. 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 lean 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. Prerequisite: SO 101 or any Introduction to Social Sciences course. Prerequisite: SO 101. (U/G)(3)

SO 481, 482, 483. Independent Study: An opportunity for qualified students to pursue a topic of individual interest. Open to seniors and juniors with permission of department head. (U/G)(1, 2, 3)

SO 484, 485. 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: SO 101,10 hours in sociology and permission of the department head. (U/G)(3, 6)

**SO 499. Honors Thesis:** (U)(3)





## 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, supervisors, counselors and administrators for positions in early childhood and middle childhood education, middle childhood and early adolescent education, and middle/secondary education.
- providing services to schools, educational organizations and 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 to the dean

## **Professors:**

Stephen Bloom, Ph.D.; Roger W. Boop, Ed.D; Ronald W. Goodman, Ed.D.; Sam Guerriero, Ed.D.; Arthur Hochman, Ed.D.; Matthew Maurer, Ph.D.; Ena Goodrich Shelley, Ph.D.

#### Associate professors:

Deborah Corpus, Ed.D.; Carol Hagans, Ph.D.; Thomas Keller, Ed.D.; Suneeta Kercood, Ph.D.; Debra Lecklider, Ph.D.; Judith Lysaker, Ph.D.; Marilyn Strawbridge, Ed.D.

#### Assistant professors:

Daniel Abbott, Ph.D. (ABD); Meredith Beilfuss, Ph.D.; Kathryn Brooks, Ph.D.; Brooke Kandel-Cisco, Ph.D.; Lisa Farley, Ed.D.; Shelly Furuness, Ph.D.; Catherine Pangan, Ed.D.; Mindy Welch, Ph.D.

#### **Instructors:**

Angela Lupton, M.S.; Theresa Meyer, M.S.; Brandi Oliver, M.S.; Brian Reagan, M.S.; Alicia Wenzel, Ph.D.

#### Director of EPPSP:

Marilyn Sudsberry, Ph.D.

## **Accreditation Coordinator:**

Karen Farrell, M.S.

#### **Director of METL:**

Brooke Kandel-Cisco, Ph.D.

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

leading to the bachelor of science degree in early childhood & middle childhood 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 and Licensing Development and the National Council for Accreditation of Teacher Education.

The College of Education offers curricula

## Graduation requirements

All students who plan to teach in an elementary, middle or high school must complete the bachelor's degree. Candidates must satisfactorily complete a minimum of 126 semester hours of college coursework. They also must meet all requirements listed under respective program areas.

At least 40 of the 126 semester hours needed for graduation must be in upper-division courses — courses numbered 300 or above. Student teaching is required for initial licensure programs.

## **Educational placement**

The College of Education has moved to entirely self-managed credentials. Self-managed files are appropriately responsive and practical in the era of portfolios and electronic applications and communications. Current job listings for Indiana are on "Blue" on the Butler Web site, or on individual school district websites.

## College of Education Undergraduate Transition Points

Effective: Fall 2002 entering freshmen The College of Education has set four transition points for delineation and progress through the licensure/degree program.

# 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 D or F in EN 102, ID 103 or SH 102 (or CC 101P/ CC 102P) will have repeated the course and received a grade of C or better. Any grade of C- in English or Speech will have been removed by either repeating the class and obtaining a grade of C or above or by obtaining 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):
  - ED 112: Introduction to the Profession of Teaching
  - ED 245: Introduction to Computers in Education
  - PRAXIS I Passing scores must be received one week prior to the start of classes each semester.
  - 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 C or better):
- ED 241: Developmental Theory & Application in Education
- ED 242: Educating Children with Special Needs
- ED 244: Concepts of Education
- 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 on line 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: ED 112, ED 245, ED 241, ED 242, and ED 244
- 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 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

- Candidates for student teaching must have completed COE CORE I and COE CORE II and been admitted to Teacher Education.
- 2. During the first semester of the junior year, candidates for student teaching must obtain a student teaching application available on line 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.
- 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

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

## **PRAXIS II**

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

# Early Childhood and Middle Childhood Education

In addition to a comprehensive liberal arts background, the early childhood and middle childhood education program prepares students for teaching and instructional leadership in elementary schools. By successfully completing Butler University requirements, the program requirements, student teaching and PRAXIS I and II, early childhood and middle childhood education majors also meet state licensing course requirements for licensure in early childhood (beginning with kindergarten) and middle childhood settings. An option to add Reading and/or Special Education is available. Specific curriculum requirement sheets are available on line at www.butler.edu/coe under Student Resources.

# Middle Childhood and Early Adolescent Education

The middle childhood and early adolescent license supports students who are interested in working with students in the intermediate grades (4th and 5th) and the middle school grades (6-8 and 9th if the middle school has a 9th grade). Some future teachers do not see themselves as strictly elementary, strictly middle school or high school-oriented, but instead are really interested in and respond to children in those middle years starting at the end of elementary school through middle school. This program can be done in four years and contains a great deal of site-based practical experience (both before and during student teaching) in local elementary and middle schools, guided by Butler faculty. Students choose a specific content area for their middle school focus. By successfully completing the Butler University requirements, program requirements, student

teaching, and PRAXIS I and II middle child-hood and early adolescent education majors also meet state licensing course requirements for licensure in middle childhood and early adolescent settings. An option to add Special Education is available. Specific curriculum requirement sheets are available on line at www.butler.edu/coe under Student Resources.

## Middle/Secondary Education

The middle/secondary education program at Butler University enables students to combine the strength of in-depth preparation in an academic content area with the professional teacher education skills necessary for success in the classroom. Extensive clinical experiences are provided prior to student teaching in a variety of school settings.

A junior high/middle school/secondary program (grades 5–12), and a secondary program (grades 9–12) may have the following content area major (36–54 hours depending on individual major requirements):

English

Foreign language: French, German, Spanish

Science: primary areas in biology, chemistry, physics

Social studies

Or, a secondary program may be for all-grade (K–12) licensure in:

Music education — choral, instrumental, area Physical education/Health Education (K–12 licensure)

Theatre education (K-12 licensure)

By successfully completing the program requirements, a student teaching experience, and PRAXIS I and II, middle/secondary and K-12 majors also meet state licensing course requirements for state licensure. Specific curriculum requirement sheets are available on line at www.butler.edu/coe under Student Resources.

## Physical Education/ Health Education

The Physical Education/Health Education program prepares students for Indiana teaching licensure in Physical Education (K-12) and Health Education (6-12). By successfully completing Butler University requirements, program requirements, student teaching, and PRAXIS I and II, the Physical Education/

Health Education major meets the state licensure requirements. Physical Education/ Health Education majors can also choose a nonlicensure concentration in Exercise Science. Non-licensure students must successfully complete the Butler University requirements, program requirements, PRAXIS I, and the Advanced Internship.

All students are prepared for American College of Sports Medicine (ACSM) Certified Personal Trainer (cPT), Health/Fitness Instructor (ACSM-HFT), National Strength and Conditional Association (NSCA) Certified Personal Trainer (NSCA-CPT) and/or Certified Strength and Conditioning Specialist (CSCS) exams. Effective teaching and training principles are applied to students' interests in coaching various sports on all levels. Students are prepared to pursue advanced degrees based on individual interests in related disciplines e.g., Physical Education, Health Promotion, Nutrition, Exercise Science, Physical Therapy, Athletic Training, Kinesiology, or School Counseling.

## **Education courses**

## ED 112. 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)

ED 204. Infusing the Arts in the 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)

ED 206. Introduction to Early and Middle Childhood Education: This course explores the history and philosophy of early and middle childhood education including significant trends and research. Students will be introduced to the guiding themes of the early and middle childhood education program. (U)(3)

ED 227. Introduction to Middle Grades Students and Schools Phase 1A: This course introduces middle school structure for students choosing a concentration in middle level education. Students will investigate the developmental needs of the young adolescent, appropriate school environments, activities and organization. Prerequisite: Completion of COE CORE I. (U)(3)

ED 228. Literacy Instruction within the Middle School Curriculum Phase /I B: This course introduces literacy instruction within the middle school. Extensive field experience is required. Students will acquire the skills necessary to improve adolescent literacy. Practicing reading, writing, and speaking strategies, the students will learn how to improve reading comprehension for young adolescents. Prerequisite: ED 227 and Completion of COE CORE I. (U)(3)

ED 241. 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 is included. Content is focused on teacher education. Prerequisites: Successful completion of COE CORE I and Praxis I. (U)(3)

ED 242. 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)

ED 243. Methods and Materials: Mild Intervention: This course examines and demonstrates basic modifications and adaptations used in teaching and assessing exceptional students needing mild intervention. It also includes techniques in communication and collaboration with parents and professionals. (U)(2)

ED 244. 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)

ED 245. 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)

ED 301. Special Problems: (U)(1)

ED 302. Special Problems: (U)(2)

ED 303W. 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. Prerequisite: Completion of COE CORE I and COE CORE II. (U)(6)

ED 307. 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)

ED 308W. Reading and Language Arts: Middle Childhood: This course will provide students with opportunities to explore the nature of literacy for middle childhood. Students will become familiar with current theoretical perspectives on developing literacy, explore a wide variety of texts to support literacy growth and learning, and gain practical experience in instruction and assessment. (U)(6)

ED 316. Teaching Mathematics: Early Child**hood:** 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)

ED 317. 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 undergrads the social studies. On-site practical experiences provide a laboratory in which to integrate curriculum and reflect on teaching experiences. Prerequisite: Completion of COE CORE I and COE CORE II. (U)(2)

ED 324. Secondary General Methods: The goal of this course is to increase the pre-service teachers' skills and understanding of the teaching process. Specifically this course will help students plan and evaluate a unit of study and also help them practice effective teaching methods and strategies. To be taken before ED 433. Prerequisites: ED 241, 242, 244. (U)(2)

## ED 327. Curriculum and Instructional Strategies for Middle Grades, Phase II A:

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: ED 227, ED 228 and completion of COE CORE I and COE CORE II. (U)(3)

ED 328. Integrated Curriculum Methods, Phase II B: This course incorporates the best methods of middle school teaching as students work with veteran middle school teachers. This class requires extensive field experiences. Students will be assigned to teams to plan lessons incorporating strategies for middle school teaching. Prerequisite: ED 327 and completion of COE CORE I and COE CORE II. (U)(3)

ED 329. Teaching Reading in Secondary **Schools:** This course increases the pre-services teacher's ability to improve reading comprehension in secondary school students. Strategies for engagement and improvement of the reading process are studied and practiced. Field experience required. Prerequisites: ED 241, 242, 244. (U)(3).

ED 346. Integration of Computers in Education: The primary emphasis of this course will be to develop a philosophy and associated

College of Education

196

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)

ED 398. English Language Learners and Their Cultural Contexts: This course focuses on the cultural practices and norms that affect the learning process in schools for students who are leaning English as a new language. The various conditions that inhibit and support leaning both English and content will be analyzed. Prerequisites: ED 241, 242, 244. (U)(3).

ED 401, 402, 403. Workshops in Education: Short-term concentrated study of a specific topic related to the field of education. (U/G)(1, 2, 3)

ED 408. Problems in the Teaching of Reading: This course focuses on the problems of teaching reading as a part of the basic elementary and secondary school curriculum. Students will be required to tutor a child in reading under the supervision of the instructor as part of the lab component. (U/G)(3)

ED 414. 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. Prerequisite: Completion of COE CORE I and COE CORE II. (U)(3)

## ED 416. Curriculum: Early Childhood:

This course will acquaint the learner with the theory of constructivism and its application to designing curriculum for young children. How children, parents and teachers construct meaning and knowledge and how this information should be used to develop meaningful learning experiences for children will be examined. Prerequisite: Completion of COE CORE I and COE CORE II. (U)(6)

## ED 418. Teaching Science: Middle Childhood:

This course focuses on inquiry-based experiences designed to offer the elementary pre-service teacher the opportunity to examine personal, cultural and scientific concepts that provide the foundations for science literacy and the teaching of science in multicultural classrooms.

Prerequisite: Completion of COE CORE I and COE CORE II. (U)(2)

**ED 420. Young Adolescent Literature and Strategies for Teaching It:** This course familiarizes students with a wide variety of young adolescent fiction and non-fiction that include multicultural and ethical considerations. At the same time, good teaching strategies will be modeled and practiced. (U/G)(3)

ED 423. Student Teaching — Junior High/ Middle School (Secondary): Taken in conjunction with ED 425 or 423A, practical experience in approved schools under the guidance of supervising teachers and university professors. Prerequisite: Permission of the director of student personnel services or completion of COE CORE I, COE CORE II, and COE CORE III. Pass/Fail (U)(5)

ED 425. Secondary Student Teaching I: Taken only in conjunction with ED 423 or 426. Practical experience in approved schools under guidance of supervising teachers and university professors. Prerequisite: Permission of the director of student personnel services or completion of COE CORE I, COE CORE II, and COE CORE III. Pass/Fail (U)(5)

ED 426. Secondary Student Teaching II: 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 or completion of COE CORE I, COE CORE II, and COE CORE III. Pass/Fail (U)(5)

**ED 430.** Current Issues in Early and Middle Childhood Education I: 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)

ED 431. Current Issues in Early and Middle Childhood Education II: 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)

ED 432. Integrated Arts for Practicing Elementary Teachers: This course is designed to introduce the in-service teacher to using the arts of dance, music, theater and visual arts to enrich classroom life and enhance learning across the curriculum, as well as to enhance personal aesthetic development. The course will explore learning THROUGH the arts, ABOUT the arts, as well as AESTHETICS. The goal will be to help teachers build these skills in themselves as well as their students. (G)(3)

ED 433. Integrated Special Methods Seminar: This Seminar integrates special teaching methods by discipline with a practicum in secondary education. Each disciplinary section requires extensive field experiences and is taught off campus in a high school setting, Butler students will learn secondary special methods within their disciplines through seminar work and modeled by veteran classroom teachers.

Prerequisite: ED 324 and completion of COE CORE I and COE CORE II. (U)(3)

ED 434. Middle Secondary Student Teaching Seminar: A professional seminar which meets during Early Adolescent and Adolescent Young Adult student teaching phases focusing on relationships with students, personnel, lesson planning, teaching, extra-curricular expectations, classroom management, professional development, career search and reflection on student teaching issues. Prerequisites: Completion of COE Core I, COE Core II, and COE Core III. (U)(2)

ED 440. Early/ Middle Childhood Student Teaching I: 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. Pass/Fail (U)(6)

ED 441. 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)

ED 442. Early/ Middle Childhood Student Teaching II: 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. Pass/Fail (U)(6)

ED 443. 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)

ED 444. MC/EA Student Teaching Seminars 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)

**ED 448.** Instructional Technology 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)

**ED 454. 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)

ED 465. Second Language Acquisition and Assessment: This course will explore the socio-psycholinguistic factors that influence how English language learning students acquire English as a second language in terms of reading, writing, speaking and listening. Students will learn how to assess second language acquisition and literacy development. Prerequisites include ED 408, ED 490, ED 497 and ED 498. (U/G)(3)

ED 467. Standards-Based Professional Practices for ELLs: Students will receive mentoring from a licensed ESL teacher. Students will engage in critical self-reflection on their professional practices with ELL students. Using state ESL licensing standards, students will document how they support ELL students in an ESL or content-area class. Prerequisites include ED 408, ED 490, ED 497, ED 498 and ED 465. (U/G)(3)

198

ED 490. Assessment of Children with Special Needs: This course examines formal and informal assessment and their application to writing Individual Education Plans (IEPs), curriculum modifications (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)

ED 491. 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 focuses 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)

ED 492. Special Education Law: This on-line 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. The required text, Article 7, can be obtained at no charge by calling IERC at (800) 833-2198 or (317) 232-0587. Prerequisite: Completion of COE CORE I, COE CORE II, and COE CORE III. (U/G)(1)

ED 493. Professional Practicum: Mild Intervention Early Childhood: Guided professional experiences in a primary grade (K-3). 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 10 standards required to teach exceptional children needing mild intervention. Concurrent with ED 440. Prerequisite: Completion of COE CORE I, COE CORE II, and COE CORE III. (U/G)(3)

ED 494. Professional Practicum: Mild Intervention Middle Childhood: Guided professional experiences in a primary grade (4-6). 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 10 standards required to teach exceptional children needing mild intervention. Concurrent with ED 442. Prerequisite: Completion of COE CORE I, COE CORE II, and COE CORE III. (U/G)(3)

ED 496. Professional Practicum: Mild **Intervention Early Adolescent:** Assures competency in the general and special education INTASC standards through integration with student teaching in inclusive environments for early adolescent students. Guided professional experiences in early adolescent grades (aged 7-15). 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 10 standards required to teach exceptional children needing mild intervention. Concurrent with ED 423 and ED 442. Prerequisite: Completion of COE CORE I, COE CORE II, and COE CORE III. (U/G)(3)

ED 498. Theory and Practice of English as a New Language: This course will assist in understanding effective 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. (U/G)(3)

**ED 499. Honors Thesis:** (U)(3) See other courses listed in graduate section.

## Physical Education/ **Health Education**

The Physical Education/Health Education program prepares students for Indiana teaching licensure in Physical Education (K-12) and Health Education (6-12). By successfully completing Butler University requirements, program requirements, student teaching, and PRAXIS I and II, the Physical Education/ Health Education major meets the state licensure requirements. Physical Education/ Health Education majors can also choose a non-licensure concentration in Exercise Science. Non-licensure students must successfully complete the Butler University requirements, program requirements, PRAXIS I, and the Advanced Internship.

All students are prepared for American College of Sports Medicine (ACSM) Certified

Personal Trainer (cPT), Health/Fitness Instructor (ACSM-HFT), National Strength and Conditional Association (NSCA) Certified Personal Trainer (NSCA-CPT) and/or Certified Strength and Conditioning Specialist (CSCS) exams. Effective teaching and training principles are applied to students' interests in coaching various sports on all levels. Students are prepared to pursue advanced degrees based on individual interests in related disciplines e.g., Physical Education, Health Promotion, Nutrition, Exercise Science, Physical Therapy, Athletic Training, Kinesiology, or School Counseling.

PE 127. Introduction to Health, Physical Education, Recreation and Dance: An orientation course for physical education majors; considers history, philosophy, professional organizations, and job opportunities in areas of physical education, dance, recreation, and health and safety. (U)(2)

PE 128. First Aid and Safety: Discussion, demonstration and practice in giving first aid. Safety education stressed. Meets requirements for American Red Cross first-aid and CPR certifications. (U)(2)

#### PE 202. Skills Series: Basketball/Soccer:

Course emphasizes content knowledge and development of competent or proficient motor skill performance using basic sport- related skills that are foundational to effective teaching and coaching. Related emphasis includes sport history, culture, conventions and traditions, rules, language, tactics and strategies, competition and fair play. Prerequisite: permission by the instructor for non-education majors. (U)(1)

PE 203. Skills Series: Pickleball/Golf: Course emphasizes content knowledge and development of competent or proficient motor skill performance using basic sport-related skills that are foundational to effective teaching and coaching. Related emphasis includes sport history, culture, conventions and traditions, rules, language, tactics and strategies, competition and fair play. Prerequisite: permission by the instructor for non-education majors. (U)(1)

## PE 204. Skills Series: Tennis/Badminton:

Course emphasizes content knowledge and development of competent or proficient motor skill performance using basic sport-related skills that are foundational to effective teaching and

coaching. Related emphasis includes sport history, culture, conventions and traditions, rules, language, tactics and strategies, competition and fair play. Prerequisite: permission by the instructor for non-education majors. (U)(1)

PE 205. 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)

## PE 206. Skills Series: Baseball/Softball:

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)

PE 207. Skills Series: Weight Training/ Fitness-Track & Field/Cross Country: Course emphasizes content knowledge and development of competent or proficient motor skill performance using basic sport-related skills that are foundational to effective teaching and coaching. Related emphasis includes sport history, culture, conventions and traditions, rules, language, tactics and strategies, competition and fair play. Prerequisite: permission by the instructor for non-education majors. (U)(1)

PE 217. Lifeguard Training: Lifeguarding procedures; knowledge and skills applicable to safety in a swimming pool. Meets requirements for American Red Cross lifeguarding certificate. (U)(2)

PE 218. Water Safety Instructor: Preparation for teaching swimming and other water activities. Meets requirements for Red Cross WSI certificate. (U)(2)

PE 224. School and Community Health Education: Personal, school and community health problems and needs, especially as they affect and concern children; the role of the

practitioner in assisting with the identification and possible correction of unsatisfactory conditions. (U)(2)

**PE 235. 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)

#### PE 237. 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 kindergarten-middle school students with and without disabilities in the physical education +/or physical activity settings. (U)(3)

**PE 253. 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)

**PE 254.** 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. (U)(3)

# PE 261. 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)

**PE 297. Internship in Physical Education:** To provide early on-the-job experience in a facility or with an agency directly related to the student's degree objectives. Prerequisites:

202

Sophomore standing and permission of the instructor. (U)(3)

## PE 321. 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)

**PE 322.** Nutrition for Educators: Basic principles of nutrition, with emphasis on identification, functions, and food sources of nutrients required by individuals for optimum health and development. Rationale for dietary modifications in conditions related to the life cycle and to disease. Prerequisite: Completion of COE CORE I and COE CORE II. (U/G)(2)

**PE 323. 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: BI 257 or equivalent and completion of COE CORE I and COE CORE II. (U/G)(3)

**PE 324.** 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: BI 257 or equivalent and PE 323 and completion of COE CORE I and COE CORE II. (U/G)(3)

PE 325. The Adapted Program in Physical Education: Study of activities suitable for students in adapted programs; knowledge of current special education laws and guidelines; assessment of basic locomotor and activity skills; information on different disabilities; observation of local facilities with special education students. Prerequisite: Completion of COE CORE I and COE CORE II. (U/G)(3)

PE 330. Introductory Methods for Physical Education: This course provides instruction for developing teacher effectiveness in the physical education and related physical activity settings. Application of instructional principles in small peer groups using open and closed motor skills, task presentations, environmental conditions, content development and feedback. Prerequisite: completion of CORE I and CORE II. (U)(2)

PE 331. Phys Ed Methods for Early & Middle Childhood: Course provides preparation with subject matter content and pedagogical knowledge, skills and dispositions appropriate for teaching K-5 students with and without disabilities in the physical education and physical activity settings. Emphasizes classroom management and content development through lesson planning, lecture, seminar and field-based practicum. Prerequisite: PE 330. (U)(3)

PE 335. Physical Education Methods Middle /Secondary: Course provides preparation with subject matter content knowledge and pedagogical knowledge, skills and dispositions appropriate for teaching K-12 students with and without disabilities in the middle and secondary physical education and physical activity settings. Emphasis on curriculum and content development through lesson planning, unit planning, lecture, seminar and field-based practicum. Prerequisite: PE 331. (U)(3)

**PE 352. Exercise Prescription:** This course focuses on developing physical activity programs for achieving physical fitness which includes the use of screening instruments, risk appraisals, contraindication for exercise and assessments for the purpose of program planning. Work loads for various forms of exercise will be determined. Prerequisite: PE 254 and completion of COE CORE I and COE CORE II. (U/G)(3)

PE 369. Supervised Field Experiences for Coaches: Students act as an assistant with a coach in a local high school. Prerequisites: Two of the following: PE 261, PE 262, PE 263, PE 264, PE 265 or PE 266, permission of the instructor, and completion of COE CORE I and COE CORE II. (U)(3)

**PE 397. Practical Experience in Physical Education:** To provide technical experience directly related to the student's degree objectives. Prerequisites: Junior or senior standing, permission of the instructor, and completion of COE CORE I and COE CORE II. (U/G)(3)

**PE 407. Special Problems:** 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)

**PE 408. Special Problems:** 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)

PE 444W. Organization and Administration: Identify the administrative challenges in physical education and assist the student with objective solutions to organizing a successful program. Topics include finances, personnel, record keeping, legal issues, equipment purchases, storage systems and tournament structures. Prerequisites: PE 233 and PE 234. (U)(3)

**PE 497.** Advanced Internship in Physical Education: To provide advanced on-the-job experience in a facility or with an agency directly related to the student's degree objectives. Prerequisites: PE 397, junior or senior standing and permission of the instructor. Prerequisite: Completion of COE CORE I and COE CORE II. (U/G)(3)

PE 499. Advanced Practical Experience in Physical Education: To provide clinical experience directly related to the student's degree objectives. Prerequisites: PE 397, junior or senior standing and permission of the instructor. Prerequisite: Completion of COE CORE I and COE CORE II. (U/G)(3)

## College of Education Graduate Programs

Graduate coursework and degree programs are offered in the College of Education for teachers, counselors, administrators and others who seek advanced degrees, professional credentials or personal enrichment.

Graduate tuition rates are competitive with public institutions and several scholarship programs for graduate students make graduate education at Butler very affordable (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 (940-9501). You also may wish to consult the college Web site at: http://www.butler.edu/educ/grad/main/.

203

# Experiential Program for Preparing School Principals (EPPSP)

EPPSP began in 1982. Innovative and experience-centered, this program combines hands-on opportunities with academic rigor. Graduates are challenged to be prepared for the role of the principal in the new millennium.

EPPSP is a two-year, 36-semester hour program for every person admitted, regardless of previous experience or credits. All credits earned in EPPSP also may be applied to a master's degree program at Butler.

A cohort group of approximately 25 goes through the program together with Phase I beginning spring semester (January) and graduation occurring at the end of fall semester (December) in the following year.

# Effective Teaching and Leadership Program (METL)

METL has a long history of serving teachers seeking a Master's of Science in Education. METL offers an academically rigorous and personally transformative program that encourages educators to think deeply, creatively, and critically about the discipline of education.

METL is a 36 hour program requiring the completion of 21 CORE hours and 15-18 hours tailored to student interest. The program is designed for working practitioners to complete in 2-3 years.

The program begins with the Summer Cohort (6 hours) and culminates with the presentation of the thesis research project.

# School Counseling Program Master of science in school counseling

The 48 semester hour master's degree program in school counseling is designed to prepare applicants for endorsement to the Indiana Professional Standards Board for the P–12 School Services Personnel Standard License as a guidance counselor. The program is accredited by the Council for the Accreditation of Counseling and Related Educational Programs (CACREP).

#### School counselor program:

 is structured around the knowledge, dispositions and performances for school counselors

- includes school site-based pre-practicum, practicum and internship experiences
- is designed in collaboration with university, schools and educational agencies
- focuses on the k-12 developmental needs of students
- emphasizes valuing diversity and similarity
- expects technological proficiency
- emphasizes facilitating the post-secondary success of all students
- prepares counselors with general practice skills as well as specialized school counselor skills
- prepares counselors to serve as team members empowered to accomplish meaningful systems change

## Courses

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

**ED 407. Survey of Literature for Children and Youth:** 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)

**ED 408.** Problems in the Teaching of Reading: This course focuses on the problems of teaching reading as a part of the basic elementary and secondary school curriculum. Students will be required to tutor a child in reading under the supervision of the instructor as part of the lab component. (U/G)(3)

ED 415. Enrichment of the Language Arts: Improvement of skills in teaching the language arts by examining the literature and analyzing the problems encountered in classrooms. Lecture, discussion and laboratory. (U/G)(3) ED 432. Integrated Arts for Practicing

ED 432. Integrated Arts for Practicing Elementary Teachers: This course is designed to introduce the in-service teacher to using the arts of dance, music, theater and visual arts to enrich classroom life and enhance learning across the curriculum, as well as to enhance personal aesthetic development. The course will explore learning THROUGH the arts, ABOUT the arts, as well as AESTHETICS. The goal will be to help teachers build these skills in themselves as well as their students. (G)(3)

**ED 445.** Introduction 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)

**ED 446.** Integration of Computers in Education: The primary emphasis of this course is 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. Graduate students will be required to write a research paper on a research article related to integration of computers into the curriculum. (G)(3)

**ED 447. Technology at the Building Level:** Students learn about 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)

**ED 454. 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)

ED 461. Multicultural Awareness for Educators: This course will assist in enhancing awareness of culturally diverse groups and increase effectiveness of teachers in a pluralistic society. Readings, lectures, discussions and presentations will focus on the dissemination of current information regarding the historical and contemporary circumstances of under-represented youth in American society and the analysis of educational issues, instructional strategies and curriculum materials that are responsive to the needs and characteristics of all learners. (U/G)(3)

## ED 479. Comm/Collab with Stakeholders:

This course examines how to develop effective communication models with education professionals, community leaders, and families. Ethics in communication and issues of confidentiality are also stressed using models for compliance and professionalism endorsed by the CEC Code of Ethics. 15 clock hours of instructor guided fieldwork are required. (U/G)(3)

ED 480. Foundations in Teaching Children with Differences: This course addresses the various psychological principles as applied to understanding and teaching children with differences. Content covers the various categories of disability, needs of families, community diversity, involvement and advocacy, and curricular needs in planning, teaching, and assessment. (U/G)(2)

**ED 490.** Assessment of Children with Special Needs: This course examines formal and informal assessment and their application to writing Individual Education Plans (IEPs), curriculum modifications (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)

ED 491. 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 focuses 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)

ED 492. Special Education Law: This on-line 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. The required text, Article 7, can be obtained at no charge by calling IERC at (800) 833-2198 or (317) 232-0587. Prerequisite: Completion of COE CORE I, COE CORE II, and COE CORE III. (U/G)(1)

**ED 497.** Inclusive Education for ELLs (English Language Learners): This course focuses on the cultural practices and norms that affect the learning process in schools for students who are learning English as a new language. The various conditions that inhibit and support learning both English and content will be analyzed. (G)(3)

ED 501, 502, 503. Concentrated Learning Experiences: Concentrated study of topic(s) of current importance, interest and relevance.

Independent study and research will be stressed along with classwork. (G)(1, 2, 3)

#### ED 504. Curriculum Concepts and Construction: A historical, sociological, philosophical and psychological analysis of school curriculum; theories, trends and methods of curriculum construction. (G)(3)

ED 505. Seminar in Early Childhood Education: Current trends in the education of young children with particular emphasis on nursery school, kindergarten and first grade. Survey of research in child development and related fields. Class projects may be based upon local problems. Prerequisite: teaching experience in nursery school, kindergarten and pre-K, primary. (G)(3)

#### ED 506. Strategies and Solutions for Contemporary Early Childhood Classrooms:

Strategies & Solutions for Contemporary Early Childhood Classrooms. Early childhood and primary grade teachers will explore issues that create ongoing challenges in implementing a developmentally-appropriate curriculum in their school setting. Students will create an action plan with practical strategies to address the identified challenges. (G)(2)

ED 507. Developmental Reading: A study of materials, equipment and practices employed in intermediate, junior and senior high school developmental reading programs. Includes selection and adaptation of techniques for developing interests and tastes in reading. Prerequisites: ED 408 or similar course and permission of instructor. Lecture, discussion and laboratory experiences. (G)(3)

#### ED 508. Remedial and Corrective Reading:

Diagnosis of difficulties in elementary, junior and senior high school reading. A background for clinical experiences is provided through research analysis, conferences and observation of clinical procedures. Prerequisite: ED 408 or similar course. (G)(3)

ED 509. Clinical Reading: An analysis of research dealing with clinical cases of reading disability. Identification of remedial cases, diagnosis of individual difficulties, planning and administering remediation. Prerequisites: ED 508 and permission of instructor. Lecture, discussion and laboratory experiences. (G)(3)

ED 510. Advanced Clinical Reading: A continuation of ED 509 as well as the supervising of a reading clinic. Prerequisites: ED 509 and permission of the instructor. (G)(3)

ED 511. Organization for Early Childhood **Education:** The scope of educational opportunities for young children emphasizing staffing, housing, financing, curricular materials, equipment and school-community relations. Prerequisite: ED 505. (G)(3)

ED 513. Supervision of Instruction: The basic principles involved in a cooperative supervisory program designed to improve the learning situation; scope and type of programs; present practices and techniques; measurement of outcomes; historical backgrounds, current literature and research. (G)(3)

#### ED 514. 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)

ED 517. Seminar in Elementary School Social Studies: History, research literature trends and curricula in elementary social studies education. (G)(3)

#### ED 518. Seminar in Elementary School

Science: Readings, experiments and demonstration in physical, life and earth science and their applications for teaching. (G)(3)

#### ED 523. The Mentoring Process in Education:

This course will provide opportunity for students to develop and refine mentoring skills. The course is recommended for mentors of teacher interns, associate teachers, and student teacher cooperating teachers. Topics include an analysis of the role of the supervising teacher, the orientation of the student to classroom teaching, the development of professional competence, and the evaluation of personal growth. (G)(3)

ED 524. Practicum in Junior High/Middle **School:** A limited (45–60 clock hours) teaching experience under supervision. Must see the director of student personnel services for approved placement. Fee. (G)(3)

ED 525. 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 & 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)

#### ED 526. 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)

ED527. Exploration of the Principles & 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)

ED 528. Curriculum and Instructional **Strategies for the Middle Grades:** The study of a variety of curriculum designs and instructional strategies utilized at the middle grades level. Emphasis is placed on traditional and innovative middle level programs and practices. Trends and issues regarding middle level education are examined. Prerequisite: ED 428 or equivalent. (G)(3)

#### ED 529. Teaching Reading in the Content

Areas: The role that content teachers have in developing and implementing reading instruction in order to help students successfully use the content reading materials. (G)(3)

ED 530. Foundations in Effective Teaching and Learning, Level 1: Examines educational theories, research, application of leadership, curriculum and instruction, and diversity issues in the classroom and the school community. The first foundation course in the master of science in effective teaching. Must be taken in Summer I. (G)(3)

ED 531. Foundations in Effective Teaching and Learning, Level 2: Analyzes and demonstrates educational theories, research, application of leadership, curriculum instruction and diversity issues by examining real problems found in the classroom and the school community. The second foundation course in the master of science in effective teaching. Must be taken in Summer II in the same summer as ED 530. (G)(3)

ED 532. Research in Instructional Technology: This course examines several major research threads within the field of instructional technology. Students read scholarly analyses of research in the field as well as several original

studies. Students discuss readings and develop beliefs about how the research in the field impacts their teaching practices. (G)(3)

ED 533. Adult Learning and Staff Develop**ment:** In this course, students explore adult learning theory and apply that theory to the efforts of helping teachers develop greater technology skills in the classroom. A model of powerful oriented staff development is explored and tested. Students have an opportunity to develop and test staff development materials and activities. (G)(3)

ED 534. 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)

ED 535. Teacher Research: This course is designed to support the ongoing work of teacher researchers as they engage in their own classroom inquiries. Completion of ED 530, 531 are prerequisites for this class. Each class session is constructed to give students a chance for collaborative data analysis, writing feedback, and help with a variety of research strategies. Prerequisites: ED 530 and ED 531. (G)(3)

ED 537. Beginning the Candidacy for National Board Certification: Participants will strengthen their teaching practice by thoroughly examining, developing and then implementing effective teaching techniques. This course provides a strong foundation for those who decide to pursue National Teaching Certification and is built upon the five core proposition from the National Board for Professional Teaching Standards, NBPTS. (2)(G)

ED 547. Appraisal: Theory and Technique: Studies that provide an understanding of individual and group approaches to assessment and evaluation of all learners. (G)(3)

206

**ED 548.** Introduction to Research: The nature of educational research with emphasis on problem identification, data gathering and analysis, and organization and presentation of the research report. Required of all candidates for the master's degree. (G)(3)

**ED 553. Professional, Legal and Ethical Issues in Counseling:** An orientation to the school counseling profession and associated legal and ethical concerns. (G)(3)

# **ED 555. School-Community Relations:** Interpreting the school; agencies and media of interpretation; role of parents, community, organizations, informal groups, staff and student problems, principles and practices. (G)(3)

ED 557. The School Principalship – Phase I: Phase I of Butler University's Experiential Program for Preparing School Principals (EPPSP) places emphasis on a vision of learning, collaboration with families and community, school and community relations, and self-assessment. Participants explore learning and leadership styles though the use of several inventories and assessment instruments. Only open to EPPSP students. (G)(6)

# ED 558. The School Principalship – Phase II: Phase II of Butler University's Experiential Program for Preparing School Principals (EPPSP) places emphasis on the school culture and instructional program. Participants engage in activities on curriculum, instruction, and assessment with an emphasis on student achievement and the "leader of learners" theory. Only open to EPPSP student. (G)(6)

ED 559. The School Principalship — Phase III: Phase III of Butler University's Experiential Program for Preparing School Principals (EPPSP) places an emphasis on school law, negotiations and collective bargaining, staff evaluation and development, rules and regulations, and ethics. Participants engage in activities that promote continuous learning and connections to previous phases. Only open to EPPSP students. (G)(6)

# ED 561. The School Principalship — Phase IV: Phase IV of Butler University's Experiential Program for Preparing School Principals (EPPSP) places an emphasis on management and communication. Participants develop knowledge in the areas of budget, school

finance, research, due process, crisis communication, technology, and school safety. Only open to EPPSP students. (G)(6)

ED 562. The School Principalship — Transition I: Transition 1 of Butler University's Experiential Program for Preparing School Principals (EPPSP) places an emphasis on a group project in an area judged to be most useful such as research projects, problem-based learning, evaluations, curriculum planning or studying the future. Only open to EPPSP students. (G)(6)

ED 563. The School Principalship — Transition II: Transition 2 of Butler University's Experiential Program for Preparing School Principals (EPPSP) places and emphasis on completing an internship and experiential activities designed to prepare future school principals in authentic learning. Only open to EPPSP students. (G)(6)

**ED 569. Problems, Issues and Trends in American Education:** Intensive and searching analysis of selected problems and issues in American education. (G)(3)

**ED 571. Career and Life Planning:** Studies that provide an understanding of career development, assessment and related life factors. (G)(3)

ED 572. Fundamental Counseling Theory and Techniques: A study of basic counseling theories and techniques, followed by application of those techniques to real and role-playing experiences. (G)(3)

**ED 575. Human Development Over the Lifespan:** An introduction to developmental theory (personality, moral, cognitive, etc.) as applied to learners and the learning process. (G)(3)

**ED 577. Group Procedures:** A study of group interactions, occasions for group counseling, and techniques of group counseling. (G)(3)

**ED 583.** Characteristics of Children Needing Mild Intervention: This course 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 instructor guided fieldwork are required. (G)(3)

ED 584. 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, and common instructional strategies used for students who require intermittent and limited support in the general education classroom or resource room. 15 clock hours of instructor guided fieldwork are required. (G)(3)

**ED 589. Professional Portfolio Development: Indiana Standards:** Students will demonstrate differentiation through direct instructional strategies in classrooms, collaborate with stakeholders, 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 INTASC teaching standards for mild intervention. (G)(3)

#### ED 600. Individualized Study of Growth:

Course of arranged study to support the ongoing work of METL students s 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)

#### ED 601. Individualized Study of Growth:

Course of arranged study to support the ongoing work of METL students s 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)

**ED 630.** Valuing Diversity and Similarity: A study of cultural, ethnic, socioeconomic, exceptionality and gender diversity concerns as well as sexual harassment issues in counseling and education. (G)(3)

**ED 658.** Leadership in Education: This course involves the practice of leadership in education. Teacher will actively engage in leadership roles in their schools and communities. Perspectives such as servant leadership will be used to extend and critique these experiences. (G)(3)

ED 667. Seminar on National Board
Certification (Level II - Candidate/Study
Group): The purpose of this course is to act
as a professional study group to support the
candidate through the process. A group of
students will meet with a professor and
National Board Certified teacher every 3 weeks
to assemble and acquire the resources and skills
necessary for the process. The teachers will
share data with one another and take part in
professional conversations about their work.

**ED 669.** Seminar on National Board Certification (Level III - Completion): The purpose of the course is to assemble the portfolio and submit it for National Board Certification, and to prepare for the written exam, which is part of the candidacy process. (G)(2)

(G)(3)

**ED 671.** 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)

**ED 672.** Advanced Counseling Theories and Techniques: An inquiry into and participation in behavioral, solution-focused, and rational counseling approaches. Prerequisites: ED 572 and ED 577 (G)(3).

**ED 673. 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)

**ED 676. Consultation in Counseling:** Individual and group study of problems in counseling and guidance. Major emphasis upon problem-solving process and consultation. (G)(3)

**ED 700. Project/Thesis (M.S.):** Credit and hours arranged (hours to be taken immediately before completion of degree). (G)(3)

**ED 712. Practicum** — **Counseling:** A variety of supervised counseling experiences within the classroom and in the field. Prerequisite: Permission of the instructor. (G)(3)

208

ED 722. Internship: Counseling — Three hundred clock hours of on-the-job experience in all aspects of counseling and guidance with a qualified supervisor. Prerequisites: Counseling practicum and permission of the instructor. Repeatable for credit for up to six hours. (G)(3)

**ED 741. Independent Study** — **Elementary:** Independent study arranged with advisor with an emphasis on problem identification, data gathering, analysis, organization and presentation of the research report. (G)(1)

**ED 742. Independent Study** — **Secondary:** Independent study arranged with advisor with an emphasis on problem identification, data gathering, analysis, organization and presentation of the research report. (G)(l)

**ED 743. Independent Study** — **Counseling:** Independent study arranged with advisor with an emphasis on problem identification, data gathering, analysis, organization and presentation of the research report. Permission of program advisor. (G)(l)

ED 744. Independent Study — Special Education: Independent study arranged with advisor with an emphasis on problem identification, data gathering, analysis, organization and presentation of the research report. (G)(l)

**ED 746. Independent Study** — **Administration:** Independent study arranged with advisor with an emphasis on problem identification, data gathering, analysis, organization and presentation of the research report. (G)(1)

**ED 751. Independent Study** — **Elementary:** Independent study arranged with advisor with an emphasis on problem identification, data gathering, analysis, organization and presentation of the research report. (G)(2)

**ED 752. Independent Study** — **Secondary:** Independent study arranged with advisor with an emphasis on problem identification, data gathering, analysis, organization and presentation of the research report. (G)(2)

**ED 753. Independent Study** — **Counseling:** Independent study arranged with program advisor. (G)(2)





### THE COLLEGE OF BUSINESS

The guiding theme in the College of Business (COB) is "real life, real business." Business students receive a rich, well-rounded, academic experience that is grounded in the liberal arts and includes a rigorous curriculum in the business disciplines. Students have access to top internship opportunities, immersive study abroad experiences at our partner schools around the globe, and the opportunity to participate in research with faculty through the Honors Program. COB students often continue their studies at top graduate and law schools.

Undergraduate 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 graduate degrees. The Master of Professional Accounting is designed for students interested in pursuing study leading to the CPA certification, which requires 150 hours of post-secondary education. The Master of Business Administration is an evening program that connects theory with business practice and is flexible and convenient for working professionals.

**Our Vision:** The Butler University College of Business will become a recognized national center of excellence in business education.

Our Mission: *Real Life*. Real Business. 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; Kathy Paulson Gjerde, Ph.D., Associate Dean; William K. Templeton, Ph.D., Associate Dean; William O'Donnell, M.A., Director of Graduate Programs; Karel A. Updyke, Ph.D., Director of Assessment and Advising; Mary Ellen Wolfsie, M.B.A., Director of Career Development; Larry A. O'Connor, M.B.A., Executive Director of Butler Business Accelerator

#### **Professors:**

Robert B. Bennett Jr., J.D.; Peter Z. Grossman, Ph.D.; Harry E. Hicks, J.D.; Sakthi Mahenthrian, Ph.D.; Robert S. Main, Ph.D.; J. Burdeane Orris, Ph.D.; Gregory Osland, Ph.D.; William Rieber, Ph.D.; William K. Templeton, Ph.D.; Chuck Williams, Ph.D.

#### Associate professors:

Roberto Curci, Ph.D.; Steven Dolvin, Ph.D.; Richard E. Fetter, Ph.D.; Kathy A. Paulson Gjerde, 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.; Mark F. Uchida, Ph.D.; Karel A. Updyke, Ph.D.

#### Assistant professors:

Priscilla A. Arling, Ph.D.; Craig Caldwell, Ph.D.; Bela Florenthal, Ph.D.; Sunran Jeon, Ph.D.; Anne Kelly, Ph.D.; Michael Koehler, J.D.; Patrick Rondeau, Ph.D.; Sheryl-Ann Stephen, Ph.D.; George Wilson, Ph.D; Hongjiang Xu, Ph.D; Noriko Yagi, Ph.D.

#### Lecturers:

Thomas Gjerde, Ph.D.; Richard Halstead, M.B.A.; Kathryn King, M.B.A.; Richard McGowan, Ph.D.; Pamela Rouse, M.B.A.; Yulia Tolstikova-Mast, Ph.D.

#### **Adjunct Faculty:**

Eric Bedel, MBA; Joe Daily, ME/MBA; Tom Faulconer, J.D.; David Futrell, Ph.D.; Richard Hofstetter, J.D.; Robert Kirk, Ph.D.; John Kissling; Ted Kuhn, M.A.; Patricia Lashua, MMR; Tom Litkowski, M.A.; James Maxwell, MBA; David Neitzel, MBA; Tim Robinson, J.D.; Robert Rush, MBA; Jan Sauer, MA; Steve Schelonka, MBA; Michael Simmons, MBA; Jason Strachman, MBA; Ralph Wray, Ed.D.

#### Executives in residence:

Mark Cisneros, Ph.D.; Anne Clark, M.D., MBA; Mark Foglesong, Ph.D.; Ed Friel, BS; Ronald Gress, BS, Rhoda Israelov, MS; Jim McKneight, JD; Marvin Recht, BBA; Jack Smith, BA; Jane Surges, MS; Jerry Toomer, Ph.D.; Scott Troyer, MS; Karen Valencic, BS; Charles Williams, BS

#### **COB Staff:**

Mary Allen, Reception; Joyce Bacone, Secretary, Graduate Programs; Melissa Beckwith, M.B.A., Project Manager, BBA; Sharon Bratcher, Faculty Secretary; Angela Chaplin, Career Development Consultant; Judy Chapman, Secretary, Undergraduate Programs; Sandra Coppadge, Secretary, Career Development; Chris Harlow, M.B.A., Associate Director, BBA; Gina Head, Secretary, Dean's Office; Kathleen Hood, M.B.A., Director of Budgets & Analyses; Stephanie Judge, M.B.A., Director of Marketing & Communications; Brian Landis, M.S.I.A., Managing Director, BBA; Carrie Meyer, Career Development Consultant; Jill Novotny, Coordinator of Undergraduate Career Development; Diana Todd, Administrative Assistant, BBA;

#### **Undergraduate Program** Requirements for graduation

Students may be graduated upon completion of 127 semester hours including:

- university core curriculum
- necessary courses to complete a major in accounting, economics, finance, international business, management information systems, or marketing
- no less than 40 semester hours in courses numbered 300 or higher
- a course designated writing intensive during the junior or senior year
- 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 127 must be taken at Butler unless the student has the advance permission of the

Students must meet several grade requirements

- The overall grade point average must be 2.0
- Students must receive a grade of at least Cin 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.

#### Curriculum

Essential elements of the undergraduate curriculum are the liberal arts/communication core, business core, professional development, and majors. Curriculum guides, which list the actual courses required for each major and their sequencing, may be obtained from the COB office. All students complete the following four modules:

Liberal arts/communication core. The purpose of the core is to build broad interests and knowledge as a foundation for a changeoriented 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.

Business core courses. The purpose of the business core is to provide students with a thorough understanding of business basics. It is made up of approximately 50 credit hours of accounting, economics, marketing, finance, business law, operations management, organizational behavior, management information systems and computer courses. A capstone academic experience also is required in addition to practical experiences. Most of the business core is taken in the sophomore and junior years.

L. Ben Lytle 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 entry-level employment. This program includes two required internships and 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 a broad liberal arts base, classes in general business and 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.

#### **Economics**

The major in economics builds on the ninehour requirement of economics taken by all business students. It focuses on the behavior of both large and small decision-making units. It provides the student with problem-solving and data-gathering skills to make informed decisions in a variety of settings (e.g. business, government, and not-for-profit) and for a variety of job responsibilities, from an entry level position in a management-training program, on the one hand, to a CEO of a corporation, on the other. A student with a major in economics may enter many professions, including financial services, government, journalism, banking, and general business. Further, economics provides a useful background for students wishing to do graduate work in business administration, international relations, public policy, and economics.

#### 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.

#### International business

The International Business major is designed to provide students with a multi-disciplinary 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, Economics, MIS or Finance. All students receive customized help to assist them in developing a set of courses to accomplish individual academic and career goals. 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.

#### 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 which provide information throughout the firm. They also can act as support personnel and are able effectively to communicate with suppliers, consultants and service professionals.

#### 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 other related areas.

#### Minor in business

Students with primary majors in other colleges may pursue a minor (21 credit hours) in business. Details and curriculum are available in the College of Business office.

#### Minor in management information systems

Students with primary majors in other colleges or COB may pursue a minor in management information systems. Details and curriculum are available in the COB office.

#### **Graduate Program**

The master of business administration (M.B.A.) degree is a professional degree, offered primarily to early and mid-career professionals seeking

career enhancement.

An individual path to graduation is prepared for each incoming student based on his or her academic background. As students make progress in their programs, they choose to continue towards a general degree or focus on a concentration in one of four areas:

- finance
- international business
- marketing
- leadership

A student may also choose electives from all of the concentration areas. The program requires 33 graduate credit hours. Students also may be required to complete foundation courses, depending upon grades and the currency of business-related courses in their undergraduate curriculum.

- Foundation courses provide the necessary background and competency in functional areas to prepare for the graduate core courses.
- Graduate core courses offer an integrated framework on contemporary leadership perspectives and management practice. Analytical tools and ethical aspects of decision making are discussed and debated. International business considerations are an important part of the coursework. Faculty who teach these courses meet together on a regular basis to discuss appropriate class materials and learning models. The objective is to provide an integrated management educational experience appropriate for leaders in a dynamic business environment and a growing international economy.

#### Courses

216

Courses with an MBA prefix may be taken only by students admitted to the MBA or MPA programs.

**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 accounting. It is designed for students who already hold an undergraduate degree in accounting or another business discipline.

The MPA degree, when combined with an undergraduate business degree, will enable students to meet the CPA certification requirement of 150 hours of post-secondary education, mandated by most states.

The MPA program is a popular choice of Butler students, who choose to add a fifth year of study to their undergraduate program and leave with a graduate degree and ready to take the CPA exam. Because classes are offered in the evening or late afternoon, the MPA program is also a popular choice of working professionals who can complete the program on a part-time basis.

#### **Accounting courses**

The accounting program consists of two distinct paths into the business world. One path will prepare students for careers in all areas of accounting (public, corporate, government, etc.) with an emphasis on entering the business world through public accounting. Graduates will meet the 150-hour CPA requirement by completing 127 undergraduate credit hours and 30 graduate credit hours. Students will earn BS and MPA degrees after completing a structured program that will include undergraduate courses, internships and graduate studies. After earning a BS degree in accounting in four years, students will begin a graduate program that results in an MPA degree. The objective of the graduate level curriculum will be professional development. It will combine additional study of the latest accounting practices with courses in other business areas (finance, leadership, law, information systems etc.). The goal is to increase students' understanding of fundamental accounting principles and their application to management situations while developing their ability to analyze, integrate, and communicate technical information and to form ethical judgments.

The second path into the business world provides students with the conceptual background and skills needed by accounting professionals in non-public accounting settings. Graduates will complete 127 undergraduate credit hours and earn a BS degree in accounting. This four-year curriculum will allow students to integrate coursework in accounting, finance, and information systems with internship experiences. The degree is designed to provide students with the foundation to pursue the CMA (Certified Management Accountant) certification and/or an MBA degree later in their career. Increasingly, accounting graduates in corporate settings are being asked to fill the role of business analyst or internal consultant. As a result, the curriculum will focus on developing the skills needed to fulfill these roles: information

systems skills, business analysis skills, communication and collaborative skills, and critical thinking.

AC 100. Volunteer Income Tax Assistance (VITA): 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. Pass/ fail. (U)(1)

AC 203. 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: 16 hours and Division 5 Math, or sophomore standing. (U)(3)

AC 204. Introduction to Accounting II: Introduction to management accounting systems with special emphasis on cost behavior, cost determination, planning and control. Prerequisite: AC 203 and Sophomore standing. (U)(3)

AC 301. Framework of Financial Accounting Valuation: 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 junior status. (U)(3)

AC 302 Financial Accounting Research & **Application:** This course introduces the applied professional research process and offers the student the opportunity to develop effective and productive research skills at the introductory level. Students will learn to apply the research process to selected financial accounting issues, use the research findings to determine proper accounting treatments, and communicate their results in professional memos. Required for Masters in Professional Accounting courses. Prerequisites: AC 301. (U)(3)

AC 310. 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.

AC 320 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)

AC 325. 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)

AC 342. 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)

AC 401, 402, 403. Independent Study: (U) (1, 2, 3)

#### AC 406. 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 reporting conclusions are stressed. Prerequisite: AC 204. (U)(3)

AC 495. Special Topics in Accounting: Seminar in selected accounting topics. Course content will vary from semester to semester. (U)

AC 499. Honors Thesis: (U)(3)

#### College of Business

COB 101. Professional and Career Development I: This year-long course will introduce students to learning about themselves and

College of Business

their interests, skills, and strengths. It will also introduce students to their career mentors, who will help guide them through their four-year professional and career development. Prerequisite: COB Major. Pass/fail. (U)(0)

COB 201. 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 & COB 101 or COB 201. P/F. (U)(0)

COB 300. Career Planning & Development: This career seminar will focus on development of career goals and a professional-looking resume, employer identification, the interview process, and a strategic approach to job selection and career planning. Prerequisites: COB 201 and 44 hours. (U)(1)

COB 301. Professional and Career Development III: This year-long course will continue to encourage students to develop career goals n preparation for internships. Students will also develop sound job search strategies, including resume and cover letter development, networking skills, business etiquette, and interviewing skills. These offerings complement COB 300. Prerequisites: COB major & COB 201 or COB 301. P/F. (U)(0)

COB 401. 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 and COM 318; a grade of at least C- in both MS 265 and the first 300-level major course, and at least 12 hours of 300 or 400 level COB courses. (U)(3)

COB 402. 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)

#### **Economics**

EC 101. Economics and the Modern World: Examines important concepts of micro- and macroeconomic theory and analysis, with application to a variety of public policy issues, such as economic growth and development, globalization of markets, health care and the environment. Explores how economic life is intertwined with culture, politics, values and history. Does not satisfy economic principles requirements for students majoring in economics or in any business field. Not open to students who have credit for EC 231. (U)(3)

EC 231. 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: 16 hours and Division 5 Math, or sophomore standing. (U)(3)

EC 232. 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)

#### EC 332. 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)

EC 336. 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)

EC 339. 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)

EC 342. 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 EC 231. (U)(3)

EC 350. 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)

EC 351. 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)

EC 352. 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)

EC 354. Intermediate Microeconomics: Economic theory and management decision making. Specific topics include demand determinants, cost-output functions and pricing theory. Credit will not be given for both EC 350 and EC 354. Prerequisites: EC 231 and EC 232. (U)(3)

EC 391. 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)

EC 401, 402, 403. Independent Study: (U) (1, 2, 3)

EC 433. 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)

EC 434. 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)

EC 438. 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)(3)

#### EC 464. 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 162. (U)(3)

EC 495. Special Topics in Economics: Seminar in selected economics topics. Course content will vary from semester to semester. Prerequisite: EC 101 or EC 231. (U)(3)

**EC 499. Honors Thesis:** (U)(3)

#### **Finance**

FN 340. 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: AC 203, AC 204, EC 231, EC 232, MS 264, and MS 265. (U)(3)

#### FN 342. 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)

FN 347. 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) FN 350. Risk and Insurance: An explanation of the effects of pure risks on the firm and the available techniques for dealing with pure risks. The use of insurance contracts in a business setting is emphasized. Prerequisite: FN 340. (U)(3)

FN 352. 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)(3)

FN 371. 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. Prerequisite: FN 340. (U)(3)

FN 390. Financial Management: An in-depth analysis of the financial aspects of managerial decision-making, with special attention given to financing decisions. Application skills are developed through the use of practical cases. Prerequisite: FN 340. (U)(3)

FN 401, 402, 403. Independent Study: (U) (1, 2 or 3)

#### FN 451. 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)

#### FN 470. 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 & Investment Committee of Butler University's Board of Trustees. Prerequisites: FN 347, senior status, and permission of the instructor. (U)(3)

FN 471. Management of Commercial Banks: Analysis of the management policy of

commercial banks including liquidity management, liability management, asset management and portfolio management; description and analysis of the legal, economic and regulatory environments and their implications for management. Case studies are used to illustrate and develop concepts. Prerequisite: FN 340. (U)(3)

FN 495. Special Topics in Finance: Seminar in selected finance topics. Course content will vary from semester to semester. Prerequisite: FN 340. (U)(3)

FN 499. Honors Thesis: (U)(3)

#### **International Business**

#### IB 320. 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 EC 231 and EC 232.

#### IB 321. The North American Business

**Environment:** This course presents the development of the North American Free Trade Agreement (NAFTA). In particular, it analyzes the business environment in the member countries before and after the agreement while providing a comprehensive look at the economic, political and cultural implications of NAFTA. Its impact in shaping the economic landscape of North America will be presented. Prerequisite: EC 232 or EC 101 or permission of the instructor.

#### IB 323. 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 or EC 101; or permission of instructor.

IB 336. 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)

IB 367. 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.

**IB 433. 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.

#### IB 451. International Financial Management:

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. Prerequisite: FN 340.

IB 460. 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.

IB 491. 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.

#### Management

MG 101. 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)(4)

MG 201. Real Business Experience 1: This class will teach students how to develop a real business plan. The course will contain a simulation, a business plan report, a major end of semester presentation and potentially, funding for a (follow-up class) real business start-up. Prerequisite: MG 101, COB major, and sophomore level only, or permission of instructor. (U)(3)

MG 202. Real Business Experience 2: A continuation of MG 201 (formerly MG 297). Students will launch a start-up business and operate it throughout the semester. Prerequisite: MG 201, COB major, and sophomore level only, or permission of instructor. (U)(3).

MG 262. Ethics and Law in the Business Environment: An overview of the legal and ethical considerations of businesses and the government regulation of business. Takes the perspectives of business policy and individuals in business organizations. Also includes critical examination of moral issues in business, such as corporate social responsibility, the right to occupational health and safety, whistle-blowing, affirmative action, worker participation, advertising and environmental protection. Attention is given to some ethical theories and basic normative concepts. Prerequisite: MG 101 or the consent of the instructor. (U)(6)

#### MG 263. Legal Environment of Business:

The legal environment and governmental regulation of business. Emphasis on management's responsibility to operate within the constraints imposed by the legal system and governmental controls. Scope includes social responsibility and ethical considerations of business. Prerequisite: Sophomore standing. (U)(3)

MG 303. Leadership London: This course 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)

MG 311. 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)

MG 350. 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, MS 264 and Computer Skills Proficiency or MG 214 or MS 100. (U)(3)

MG 360. 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 and PS 101, SO 101 or AN 102. (U)(3)

MG 365. Business Law I: Business law subjects covering the law of torts, contracts, sale of goods and of property (personal and real). Prerequisites: Junior standing, AC 203 and (MG 262 or MG 263). (U)(3)

**MG 401, 402, 403. Independent Study:** (U) (1, 2 or 3)

MG 490. Administrative Policy: The tasks of the manager in formulating short- and long-run corporate strategy. Using the case method, a framework is developed for integrating skills learned in other required business courses. Prerequisite: Senior standing, COB 401, MG 350, MG 360, MG 365, MK 380, and FN 340. (U)(3)

MG 495. Special Topics in Management: Seminar in selected management topics. Course content will vary from semester to semester. (U)

MG 499. Honors Thesis: (U)(3)

#### Management science

MS 100. Basic Excel Skills for Business Applications: Students learn how to develop Excel spreadsheets to identify, define, and solve business problems. They develop analytical skills by considering a problem and its solution through spreadsheet applications (functions, IF statements, formatting, charting, database functions, etc.). The final examination is based on the Microsoft Office User Specialist Level 1 certification. Pass/fail only. (U)(1)

MS 264. 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: Computer Proficiency Exam or MG 214 or MS 100. (U)(3)

MS 265. Information Technology: This course explored 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 Microsoft FrontPage, Excel, and Access software skills are covered. Projects promote the application of these skills to a variety of business cases. Prerequisites: Computer Proficiency Exam or MG 214 or MS 100. (U)(3)

MS 370. 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 (SE 267). (U)(3)

MS 372. 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)

#### MS 374. E-Commerce and Internet Technology:

The course is a comprehensive research course focusing on how electronic commerce and internet technology impact business systems, management decision-making processes, and strategic planning. The focus is on how e-commerce can be used to expand market share, provide customer support, improve distribution and communication efficiencies, and function harmoniously with other business functions. Prerequisite: MS 265. (U)(3)

MS 375(W). 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)

MS 378. 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: MS 265. (U)(3)

**MS 401, 402, 403. Independent Study:** (U) (1, 2 or 3)

#### MS 465. 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: AMS 375 or AC 325 (U)(3)

**MS** 476. Web Design and Consulting: This is a conceptual and performance based course focused on designing, developing and publishing websites for the Internet, Intranets and

Extraneta. Students will investigate how websites can be constructed to support a wide variety of organizational objects. Prerequisite: MS 375 or AC 325.

MS 495. Special Topics in Management Science: Seminar in selected management science topics. Course content will vary from semester to semester. (U)

**MS 499. Honors Thesis:** (U)(3)

#### Marketing

MK 280. 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)

MK 380. 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)

MK 381. 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 380. (U)(3)

MK 385. 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)

**MK 401, 402, 403. Independent Study:** (U) (1, 2, 3)

MK 471. Advertising and Promotion Management: An exploration of basic advertising and sales promotion concepts. Examines the design, management and integration of a

223

promotional strategy within the marketing effort of the firm. Prerequisite: MK 380. (U)(3)

MK 473. 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)

#### MK 480. Marketing Management/Strategy:

The capstone marketing course. 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: MK 380, MK 385, and one additional 300 or 400 level marketing course. (U)(3)

MK 481. 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 role playing. Prerequisites: MK 381 and MK 385. (U)(3)

MK 483. 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)(3)

MK 491 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)

MS 476. Web Design and Consulting: This is a conceptual and performance based course focused on designing, developing and publishing web sites for the Internet, Intranets, and Extranets. Students will investigate how web sites can be constructed to support a wide variety of organizational objectives.

Prerequisites: MS 265. (U)(3)

MK 495. Special Topics in Marketing: Seminar in selected marketing topics. Course content will vary for the semester. (U)

MK 499. Honors Thesis: (U)(3)

#### MBA courses

#### Foundation core

**MBA 410. 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)

MBA 420. Financial and Managerial

Accounting: Conceptual introduction to financial accounting with emphasis on wealth and income measurement, cash flows and debt. Conceptual introduction to management accounting with emphasis on basic management reports, cost patterns and measurement: including marginal income and expense measurements and break-even analysis. (Z)(2)

#### MBA 425. 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)

MBA 430. 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)

**MBA 435. 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)

MBA 440. 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)

#### Graduate core

MBA 501, 502, 503. 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 and MPA degree-seeking students in good standing only; 1-3 credits by agreement with sponsoring professor. Prerequisites: MBA 410, 420, 425, 430, 435, 440. (G)(1,2,3)

MBA 505. 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 and MPA degree-seeking status, MBA 410, 420, 435, 430, 435.

MBA 510. 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 and MPA degree-seeking status, MBA 410, MBA 420, MBA 425, MBA 430, MBA 435 and MBA 505 must either be completed before taking MBA 510 or taking MBA 505 concurrently with MBA 510.(G)(3)

MBA 515. Legal & Ethical Operation of Business: Provides a basis for legal and ethical decision making in a global economy. Negotiable instruments, debtor-creditor rights and bankruptcy. Details the legal rights and ethical obligations under different business structures and different constituencies. Prerequisite: MBA and MPA degree-seeking status, MBA 410, MBA 420, MBA 425, MBA 430, MBA 435 (G)(3)

MBA 520. 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, costvolume-profit analysis, contribution approach) that are relevant to various managerial decisions (production, pricing, etc.) and related issues (behavioral implications). Prerequisites: MBA and MPA degree-seeking status, MBA 410, MBA 420, MBA 425, MBA 430, MBA 435, MBA 440, and MBA 505 must either be completed before taking MBA 520 or taking MBA 505 concurrently with MBA 520.(G)(3)

MBA 525. 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 and MPA degree-seeking status, MBA 410, MBA 420, MBA 425, MBA 430, MBA 435, MBA 440, and MBA 505 must either be completed before taking MBA 525 or taking MBA 505 concurrently with MBA 525. (G)(3)

MBA 530. Financial Management: An analysis of the theory and practice of financial management, this course expands on the topics covered in MBA 430. 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 and MPA degree-seeking status, MBA 410, 420, 425, 430, 435, 440, and MBA 505 must either be completed before taking MBA

530 or taking MBA 505 concurrently with MBA 530.(G)(3)

MBA 535. 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 and MPA degree-seeking status, MBA 410, MBA 420, MBA 425, MBA 430, MBA 435, MBA 440, and MBA 505 must either be completed before taking MBA 535 or taking MBA 505 concurrently with MBA 535.(G)(3)

MBA 540. 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 justin-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 and MPA degree-seeking status, MBA 410, MBA 420, MBA 425, MBA 430, MBA 435, MBA 440, and MBA 505 must either be completed before taking MBA 540 or taking MBA 505 concurrently with MBA 540.(G)(3)

#### MBA 545. Integrated Capstone Experience:

Designed to serve as a capstone experience in the graduate program. This course reviews key concepts from the individual disciplines (accounting, finance, marketing, leadership, production) and integrates 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. The approach relies heavily on in-depth case analysis and class discussion. Prerequisites: MBA and MPA degree-seeking status, MBA 505, MBA 510, MBA 515, MBA 520, MBA 525, MBA 530, MBA 535, MBA 540. (G)(3)

#### Concentration Curriculum Choices

MBA 551. People in Organizations: Generally, all businesses will state that human resources are its most important asset. Management of this asset is what, in large part, determines the success of the business. How people are treated affects the bottom line. Topics include performance appraisals, communications, collective bargaining and the need for "win/ win" maintaining a positive employee relation's climate, and other related subjects. Prerequisite: MBA 510. (G)(2)

MBA 552. 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: MBA 510. (G)(2)

MBA 553. 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: MBA 510. (G)(2)

MBA 556. 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: MBA 510. (G)(2)

MBA 557. 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: MBA 510. (G)(2)

MBA 561. 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: MBA 530. (G)(3)

MBA 562. 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)

MBA 563. 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: MBA 530. (G)(3)

MBA 564. Derivatives: Futures, Options and **Swaps:** The course provides an introduction to derivative markets. Specifically, students will receive a working knowledge of futures, options and swaps. This course will emphasize the use of derivative instruments in the management of financial risk exposure. Calculus is not a prerequisite for this course. This course is a MBA finance elective. Prerequisite: MBA 530. (G)(2)

MBA 567. Financial Theory and Cases: This course builds on the corporate finance theory introduced in MBA 530. 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: MBA 530. (G)(3)

MBA 573. Management Control System: This course examines the various techniques

used by managers to ensure that the decisions and behavior of people in an organization are consistent with the organization's goals and strategies. The course focuses on formal planning and budget processes, incentive systems, internal control systems, balanced scorecard and behavior problems associated with financial results control. Prerequisite: MBA 520. (G)(2)

MBA 581. 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: MBA 535. (G)(3)

MBA 582. Advertising/Promotion Manage**ment:** 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: MBA 535. (G)(2)

MBA 583. 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: MBA 535. (G)(2)

MBA 587. 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 non-parametric statistical procedures. In addition, the course places heavy emphasis on how marketing managers can effectively interact with researchers, and how marketing managers can use research results as part of the decision-making process in sustainable establishing competitive advantage. Prerequisite: MBA 535. (G)(3)

MBA 589. Special Topics: Seminar in selected topics. Course content will vary each semester. Prerequisites: MBA degree-seeking status, all Foundation courses (MBA 410, 420, 425, 430, 435, 440. (G)(1)

# MBA 590. Pharmaceutical Management Seminar I: The purpose of this course is to allow students to apply and demonstrate skills in research, analysis, and presentation. Students will design and research a project, and present the results to classmates and/ or site. Projects could include a critical analysis, or case discussions pertaining to pharmaceutical

management issues. Prerequisite: P-4 standing

in the PharmD-MBA program. (G)(1)

MBA 591. Pharmaceutical Management Seminar II: The purpose of this course is to allow students to apply and demonstrate research design, analysis, and presentation skills. Student will design a research study, collect data, analyze the data using appropriate statistical methods, and present the results to classmates and/ or site. Research studies will pertain to issues of pharmacy practice and management. Prerequisite: P-4 standing in the PharmD-MBA program. (G)(1)

MBA 592. Pharmaceutical Rotation I: An experimental course that allows students to explore new developments in the delivery and management of pharmacy services. Rotation sites will vary depending upon the area of

pharmacy practice being investigated. Prerequisite: P-4 standing in the PharmD-MBA program. (G)(4)

MBA 593. Pharmaceutical Management Rotation II: Elective Rotation in the Pharmacy Practice: An experiential course that allows students to explore new developments in the delivery and managements of pharmacy services. Rotation sites will vary depending upon the area of pharmacy practice being investigated. Prerequisite: P-4 standing in the PharmD-MBA program.

MBA 594. Special Topics: Seminar in selected topics. Course content will vary each semester. Prerequisites: MBA degree-seeking status, MBA 410, MBA 420, MBA 425, MBA 430, MBA 435, MBA 440. (G)(2)

MBA 595. Special Topics: Seminar in selected topics. Course content will vary each semester. Prerequisites: MBA degree-seeking status, MBA 410, MBA 420, MBA 425, MBA 430, MBA 435, MBA 440. (G)(3)

#### **MPA** courses

## MPA 511. 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: AC 301 and AC 302 or equivalent, and senior status. (G)(3)

MPA 512. 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: AC 301 or equivalent and senior status. (G)(3)

#### MPA 513. 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: AC 302 and senior status, or equivalents. (G)(3)

MPA 571. Financial Statement Analysis: This course helps participants develop a competitive advantage through effective financial statement analysis. It demonstrates how an understanding of accounting combined with analytical methods and tools aids business decision-making. Prerequisites: Undergraduate business degree or equivalent, or AC 203 and FN 340 or equivalent. (G)(3)

MPA 578 Advanced Auditing: A strategic analysis-based auditing course in which students learn to evaluate the client firm from its executive to its operation levels, and to use the evaluation results as the basis to assess risk and corporate performance. Prerequisite: Undergraduate degree in accounting or its equivalent. (G)(3)

#### MPA 579. Advanced Audit and 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)

228 Butler University College of Business 229



#### THE COLLEGE OF PHARMACY AND HEALTH SCIENCES

#### Mission

#### **COPHS Mission Statement:**

The mission of the College of Pharmacy and Health Sciences is to provide effective educational experiences in the health sciences. By so doing, the College facilitates the development of lifelong learners with a liberal arts foundation who are able to serve society as dedicated, competent health professionals and community leaders.

#### **COPHS Goals:**

- Provide effective undergraduate, professional, and graduate programs in the health sciences
- Develop and promote pharmacists and physician assistants as vital members of the health care team who are competent professionals able to assume responsibility for patient care and who are accountable for their actions
- Develop student, faculty, and staff leadership skills to improve health education and patient care
- Enroll students who have the potential to maximally develop knowledge, skills, and attitudes from the educational experiences provided by the College
- Provide an active learning environment that:
- promotes high expectations of accomplishment
- recognizes different learning styles
- respects diversity and develops the commitment to a personal philosophy of service
- encourages student, faculty, staff and community collaboration in teaching, service and scholarship
- motivates students to become independent learners and thinkers by enhancing their proficiency for critical thinking, problem solving, and decision-making
- incorporates experiential and service learning
- encourages life-long learning in professional, social and cultural areas
- encourages the maintenance of health in body, mind and spirit for students, faculty, staff and for the communities

#### Administration:

Mary H. Andritz, Pharm.D., dean; Bruce D.

Clayton, Pharm.D., associate dean; Bonnie K. Brown, Pharm.D., assistant dean for student affairs; John A. Lucich, M.D., program director and medical director, physician assistant program; Sudip Das, Ph.D., director of research and graduate programs in pharmaceutical sciences; Julia M. Koehler, Pharm.D., department chair of pharmacy practice; Jane M. Gervasio, Pharm.D., department vice chair of pharmacy practice.

#### **Professors:**

Mary H. Andritz, Pharm.D.; Bruce D. Clayton, Pharm.D.; Michael A. Vance, Ph.D.; Jeanne H. Van Tyle, Pharm.D.; W. Kent Van Tyle, Ph.D.

#### Associate professors:

Bonnie Brown, Pharm.D.;Henry F. Cole, Ph.D.;Nandita Das, Ph.D.; Sudip Das, Ph.D.; Dennis Gardner, Pharm.D.; Jane M. Gervasio, Pharm.D.;Todd W. Hrubey, Ph.D.; Iftekhar D. Kalsekar, Ph.D.; Laurence A. Kennedy, Ph.D.; Julia M. Koehler, Pharm.D.; John A. Lucich, M.D.; Laurie Pylitt, M.H.P.E., PA-C; Jennifer Snyder, M.P.A.S., PA-C.

#### Assistant professors:

Erin Albert, Pharm.D.; Jarret Amsden, Pharm.D.; Alex Ansara, Pharm.D.; Medhane Cumbay, Ph.D.; Christopher Degenkolb, Pharm.D.; Patricia Devine, Pharm.D.; Stephanie Enz, Pharm.D.; Don Frosch, M.S., PA-C.; Samuel Gurevitz, Pharm.D.; Bruce Hancock, M.S.; Joseph Jordan, Pharm.D.; Douglas Ladika, M.P.A.S., PA-C; Larry Lynn, M.D.; Carrie Maffeo, Pharm.D.; Annette McFarland, Pharm.D., Beverly Monts, Ph.D., M.D.; Nusrat Motlekar, Pharm.D.; Sarah Nisly, Pharm.D.; Angela Ockerman, Pharm.D.; Amy Owczarek, Pharm.D.; Emily Papineau, Pharm.D.; Sheel Patel, Pharm.D.; Amy Peak, Pharm.D.; Darin Ramsey, Pharm.D.; Jason T. Range, J.D.; Carriann E. Richey, Pharm.D.; Laura Ruekert, Pharm.D.; Tracy Sprunger, Pharm.D.; Kevin Tuohy, Pharm.D.; Mike Roscoe, M.S., M.P.A.S., PA-C; Kristal Williams, Pharm.D.; Nicole Wilson, Pharm.D.; Jennifer Zorn, M.S., PA-C.

#### Instructor:

Michele Schultz, PA-C

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.

In 1994, the College of Pharmacy and Health Sciences collaborated with Methodist Hospital to develop a physician assistant (PA) program. In 1997, Methodist consolidated with Indiana University Hospital and Riley Hospital for Children to form Clarian Health Partners Inc. The PA Program is jointly sponsored by Butler University and Clarian Health. The institutions which form Clarian Health have a long history of involvement in health sciences and graduate medical education.

#### Accreditation

The Butler University College of Pharmacy and Health Sciences is a member of the American Association of Colleges of Pharmacy. 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 Committee for Physician Assistant (ARC-PA).

#### 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, at least 18 years of age, and 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 the state of 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 graduate program leading to a master of science in pharmaceutical sciences degree, and a doctor of pharmacy/master of business administration program that awards both the Pharm.D. and M.B.A. 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 Admission Requirements**

Applicants to the preprofessional or profes-

sional program who are non-native English speakers are required to submit the results of the Test of Spoken English (TSE-A).

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 course work 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 Student Services Office (PB 102, (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 ten selected, critical prepharmacy courses listed below.
- No grade less than C- in any of the ten prepharmacy courses stipulated below. For the purposes of automatic advancement, none of these ten 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 ten 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.
- A score of 75 or higher (out of 100) on the attribute evaluation associated with PX100 Health Sciences Seminar and PX 325 Ethical Issues in Health Care.

Ten courses that determine the automatic advancement GPA:

CH 105	General Chemistry
CH 106	General Chemistry
MA 106	Calculus and Analytical Geometry
BI 105	Introductory Cell Biology
FYS 101	First Year Seminar
COM 102	Public Speaking
CH 351	Organic Chemistry
PX 311	Human Anatomy
PX 100	Health Sciences Seminar
PX 325	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

232

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, PB 107B.

#### **Professional Phase Application Procedure for Butler University** students not classified as Prepharmacy or Exploratory COPHS students upon entry into the University as freshman (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, PB 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 Student Services Office [PB 102, (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 February 1 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 (5) 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 2010

The college reserves the right to change the Doctor of Pharmacy curriculum at the discretion of the college faculty.

tion of the college faculty.	
First year — prepharmacy Credit ho FYS 101 First Year Seminar CH 105 General Chemistry (with lab) MA 106 Calc and Analytical Geom I Core (T&I, PCA, SW or AR)* ** PX 100 Health Sciences Seminar Total semester hours	3 5 5 3 1 17
FYS 102 First Year Seminar CH 106 General Chemistry (with lab) BI 105 Intro Cell Biology COM 102 Public Speaking Core (T&I, PCA, SW or AR)* ** CC 1P Physical Well Being+ Total semester hours	3 5 3 2 3 1 17
Second year — prepharmacy Credit h GHS 201-209 Global & Historical Studies PX 311 Human Anatomy CH 351 Organic Chemistry (with lab) PX 325 Ethical Issues in Health Care Core (T&I, PCA, SW or AR)* ** Total semester hours	3 3 5 3 17
*T&I = Text and Ideas, PCA = Perspectives in the Creative Arts., SW = The Social World, AR Analytical Reasoning **Students (except previously degreed and transfer students) must take at least one CORE course in each of the Divisions listed.)	
GHS 201-209 Global & Historical Studies BI 325 Pathogenic Microbiology	3 3

CH 352 Organic Chemistry (with lab)

	of Drug Action	5
	RX 320 Delivery of Health Care	2
	RX 324 Clinical Assessment	2
5	Total semester hours	10
,	Second professional year Credit	hours
	RX 403 Therapeutics I Case Studies	1
,	RX 411 Prin of Drug Action I	4
	RX 413 Therapeutics I	3
7	RX 415 Self-care and Health Promotion	
	RX 421 Introduction to Dosage Forms	4
•	Liberal Education Elective	3
	Total semester hours	17
	RX 404 Therapeutics II Case Studies	1
	RX 412 Prin of Drug Action II	4
	RX 414 Therapeutics II	3
7	RX 416 Self-care and	
	Health Promotion II	3
:s	RX 422 Advanced Dosage Forms	4
	RX 432 Personnel Management	3
·	Total Semester Hours	18
	Third professional year Credit	hours
,	RX 503 Therapeutics III Case Studies	1
,	RX 511 Principles of Drug Action III	4
7	RX 513 Therapeutics II	3
	RX 522 Pharmacokinetics/Biopharm	3
R	RX 527 Biostatistics and	
K	Research Design	3
	RX Professional Electives	2
E	Total semester hours	10
	RX 504 Therapeutics IV Case Studies	1
	RX 514 Therapeutics IV	3
	RX 528 Advanced Drug Information	2
,	RX 526 Pharmacy and the Law	3
	RX 523 Clinical Pharmacokinetics	3
of P	harmacy and Health Sciences	23
	II II	

PX 315 Human Physiology

Total semester hours

BI 323 Immunology

Total semester hours

RX 312 Clinical Biochemistry

RX 327 Intro to Drug Information

RX 351 Intro to Pharmaceutical Care II

RX 314 Pharmaceutical Biotechnology

RX 316 Pathophysiology

Liberal Education Elective

RX 318 Intro to Principles

(third year)

First professional year

PE 102 Lifetime Fitness Activity

PX 200 Intro to Pharmacy Practice

RX 350 Intro to Pharmaceutical Care I

17

Credit hours

RX 500 Intro to Exper Rotations	1
RX — Professional Electives	3
Total semester hours	16
Fourth professional year Credit ho	urs
RX 6 — Ten Experiential	
On-site Rotations	40
(4 hours each)	
RX 607 PharmD Senior Seminar I	1
RX 608 PharmD Senior Seminar II	1
Total hours	42

## Total Credit Hours Required for Graduation: 210

Doctor of Pharmacy with Research Emphasis. Years 1-4 as above.

Third professional year Cree	dit hours
RX 503 Therapeutics III Case Studie	es 1
RX 511 Principles of Drug Action II	I 4
RX 513 Therapeutics III	3
RX 522 Pharmacokinetics/Biopharm	ı 3
RX 527 Biostatistics and	
Research Design	3
RX Pharmaceutical Science electiv	e 2-3
RX 781 Seminars in Pharm Sci	1
Total semester hours	17-18
RX 504 Therapeutics 4 Case Studies	1
RX 514 Therapeutics 4	3
RX 528 Advanced Drug Information	n 2
RX 526 Pharmacy and the Law	3
RX 523 Clinical Pharmacokinetics	3
RX 500 Intro to Exper Rotations	
RX — Pharmaceutical Sci elective	2-3
RX 780 Current Topics in Pharm. So	ci 1
Total semester hours	16-17

#### Fourth professional year Credit hours

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 3 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
1 Ambulatory Care Rotation
2 Elective Pharmacy Practice Rotations

RX 607 PharmD Senior Seminar 1
RX 608 PharmD Senior Seminar 2
Total hours

Total Credit Hours Required for Graduation: 212

#### Master of Science in Pharmaceutical Sciences Degree

The College of Pharmacy & Health Sciences offers the Master of Science in Pharmaceutical Sciences in five areas of emphasis: pharmaceutics, pharmacology, medicinal chemistry, pharmacy administration and clinical sciences. The program involves an intensive curriculum consisting of didactic courses and thesis research. Successful completion of the MS in Pharmaceutical Sciences degree requires successful completion of at least 30 semester credit hours with not less than 6 hours of research credit. The research must be compiled into a thesis, which is presented and defended in front of the committee. Details of the program are available under the Graduate Studies section on page 291.

#### Master of Physician Assistant Studies

The College of Pharmacy and Health Sciences offers a Master of Physician Assistant Studies (MPAS) degree for those completing the requirements of the physician assistant program. PAs practice medicine under the supervision of licensed physicians, providing patient care services that would otherwise be done by physicians. PAs perform a wide range of medical duties including obtaining medical histories, performing physical examinations, developing/ implementing comprehensive diagnostic and patient management plans, providing patient education and counseling, ordering and interpreting diagnostic tests, performing therapeutic procedures and prescribing medications. PAs practice in a variety of settings and specialties, with their specific practice activities guided by the specialty of the supervising physician and the setting of the practice.

The physician assistant program requires completion of a two-year preprofessional curriculum and a three-year professional curriculum. The preprofessional curriculum, in addition to including the Butler core curriculum requirements, emphasizes college-level preparation in mathematics and life sciences. The professional phase, which begins with the third year, consists of a two-year preclinical component and a 12-month clinical component. During the pre-clinical 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 disciplines. Students have the option of taking electives in medical and/or surgical specialties, or continuing to gain additional primary care experience.

# Eligibility and Admission Requirements:

Nearing completion of approximately 50 semester hours (three semesters) of the recommended preprofessional curriculum, students may apply for admission to the PA program (i.e. the professional phase). The written application takes into account a student's academic background and record of performance and prior health-related work experience. Prior health care experience is highly recommended but not required. Transfer students from other colleges or universities are encouraged to apply and must meet the additional requirements of Butler transfer students as outlined in this Bulletin. All applicants for the professional phase of the physician assistant program must submit completed applications to CASPA (www.caspaonline.org), a centralized application processing service, by Dec. 1 in the year preceding the semester of professional phase enrollment.

A student's comprehensive GPA for all courses taken prior to admission into the PA program must be 3.0 or greater on a 4.0 scale. Preprofessional students must earn a C- or better in all required courses (including those courses used to satisfy core requirements) in the preprofessional curriculum for these courses to be considered successfully completed and thus qualifying the student for professional phase admission consideration.

Applicants undergo a screening process by the PA program and may be called for an interview. Based on this evaluation, students presenting the best overall qualifications will be offered admission into the professional phase of the program.

Only students admitted to and currently enrolled in the professional PA program of the

College of Pharmacy and Health Sciences may register for courses offered as part of the professional curriculum numbered with AP designators. Such students also must maintain their eligibility to continue in the PA Program.

#### 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. 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, 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 coursework for any professional phase year must be completed before beginning the subsequent year. Professional phase PA students must earn a grade of C or better in all courses within the professional phase for those courses to be considered successfully completed.

Any student who does not successfully complete the second year professional phase didactic course work with a grade of C or better in each course within 12 months of the time the course work was begun must complete a comprehensive written examination, perform an observed history and physical examination on a real or simulated patient and score 70 percent or better on each of these assessments before being allowed to begin clinical rotations. The student will have three opportunities, evenly-spaced over a three month period of time, to pass each of these assessments. If unsuccessful, the student will be dismissed from the College.

Any student who is absent from clinical rotations for three months or more must complete a comprehensive written examination, perform an observed history and physical examination on a real or simulated patient

and score 70 percent or better on each of these assessments before being allowed to return to clinical rotations. The student will have three opportunities, evenly spaced over a three 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 College reserves the right to change the curriculum at the discretion of the faculty.

# First Year (Pre-Physician Assistant Curriculum):

Courses (Fall Semester) Sem I	Irs
FYS 101 Freshman Year Seminar	3
CH 105 General Chemistry (with lab)	5
BI 105 Introductory Cell Biology	3
Core (T&I, PCA, SW or , AR)* **	3
CC 1P Physical Well Being+	1
PX 101 Health Sciences Seminar for PAs	1
Total Semester Hours	16

Courses (Spring Semester)	em Hrs
FYS 102 Freshman Year Seminar	3
CH 106 General Chemistry (with lab	) 5
Core (T&I, PCA, SW or AR)* **	3
COM 102 Public Speaking*	2
Core (T&I, PCA, SW or AR)* **	3
PE 102 Lifetime Fitness Activity+	1
Total Semester Hours	17

# Second Year (Pre-Physician Assistant Curriculum):

Courses (Fall Semester)	Sem Hrs
GHS 20X Global and Historical Stud	dies 3
CH 351 Organic Chemistry I (with	lab) 5
PH 107 Physics I (with lab)	4
PX 311 Human Anatomy	3
Core (T&I, PCA, SW or AR)* **	3
Total Semester Hours	18

Courses (Spring Semester) Se	m Hrs
GHS 20X Global and Historical Studio	es 3
CH 352 Organic Chemistry II (with la	ıb) 5
PX 315 Human Physiology	4
BI 325 Pathogenic Micro (with lab)	3
Elective Liberal Education Course	3
Total Semester Hours	18

*T&I = Text and Ideas, PCA = Perspectives in
the Creative Arts., SW = The Social World, AR
= Analytical Reasoning

\*\*Students (except previously degreed and transfer students) must take at least one CORE course in each of the Divisions listed.+May be taken at any time prior to graduation.

# Third Year: (Physician Assistant Curriculum):

Courses (Fall Semester) Sem	Hrs
AP 303 Physiology	4
AP 306 Research Principles	3
AP 307 Pathophysiology I	5
AP 308 Pharmacology I	3
AP 403 Social and Behavioral Medicine	3
Total Semester Hours	18

Courses (Spring Semester)	Sem Hrs
AP 304 Anatomy	5
AP 311 Research Statistics	3
AP 309 Pathophysiology II	4
AP 310 Pharmacology II	3
Total Semester Hours	15

# Fourth Year: (Physician Assistant Curriculum):

Courses (Fall Semester)	Sem Hrs
AP 401 History &	
Physical Assessment I	3
AP 421 Clinical Medicine I	5
AP 413 Therapeutics I	4
AP 406 Diagnostic and	
Therapeutic Procedures I	3
AP 409 Research Applications	2
Total Semester Hours	17

Courses (Spring Semester) Sen	ı Hrs
AP 402 History & Physical Assessment I	I 3
AP 423 Clinical Medicine II	5
AP 415 Therapeutics II	4
AP 433 Issues in Professional Practice	3
AP 407 Evidence-Based Medicine (EBM)	) 1
AP 417 Diagnostic and	
Therapeutic Procedures II	3
Total Semester Hours	19

# Fifth Year: (Physician Assistant Curriculum):

Courses (Summer I)	Sem Hrs
AP 500 Family Practice Rotation	6
AP 587 Core Content I	1
Total Semester Hours	7

Courses (Summer II)	Sem Hrs
AP 504 Internal Medicine Rotation	6
AP 588 Core Content II	1
Total Semester Hours	7

# Fifth Year: (Physician Assistant Curriculum):

Courses (Fall Semester)	Sem Hrs
AP 510 OB/GYN Rotation	6
AP 512 Surgery Rotation	6
AP 5 Elective Rotation	4
AP 501 Independent Study in EBM	1
AP 589 Core Content III	1
Total Semester Hours	18

Courses (Spring Semester) Sem H	rs
AP 542 Pediatrics Rotation	6
AP 516 Mental Health Rotation	6
AP 514 Emergency Medicine Rotation	6
AP 502 Research Presentation and Defense	2
AP 590 Core Content IV	2
Total Semester Hours	22

#### Total Hours – 192

The above clinical rotation schedule is just one of several possible sequences. Individual student rotation schedules will be determined by the clinical coordinator. All rotations are assigned within a designated radius of Butler University. Students are responsible for providing their own transportation to these sites.

#### Policy Statement on Technical Standards for the College of Pharmacy and Health Sciences

The College of Pharmacy and Health Sciences of Butler University (COPHS) is committed to treating all individuals within the university in a fair and equitable manner. To this end, all qualified individuals, including those with disabilities, will be considered for admission into the professional programs. Furthermore, it is the policy and practice of the university to comply with the Americans with Disabilities Act and Section 504 of the Rehabilitation Act of 1973. Under these laws, no otherwise qualified individual with a disability will be denied access to or participation in services, programs and activities of COPHS. Individuals are not required to disclose the presence or the nature of a disability. However a candidate/student may wish to discuss concerns about the technical standards with the relevant faculty or staff member. Depending

on the circumstances, this may include the dean or designee and/or the director of student disability services.

The following technical standards describe the essential functions that students must demonstrate in order to fulfill the requirements of the pharmaceutical and physician assistant programs and thus, are prerequisite for entrance, continuation, and graduation from the programs. Candidates/students need to possess the skills and abilities, with or without reasonable accommodations, which will allow successful fulfillment of the requirements necessary to complete the program.

COPHS will consider any candidate who demonstrates the ability to perform or learn to perform, with or without reasonable accommodations, the skills that are listed in this document. Continued enrollment and graduation will depend on the successful demonstration, again with or without reasonable accommodations, of both the knowledge and skills listed in this document as well as successful completion of academic requirements. The COPHS Academic and Professional Affairs Committee will monitor the individual student's ongoing demonstration of such knowledge and skills.

# Technical standards for admission and retention in COPHS

The College of Pharmacy and Health Sciences (COPHS) faculty has specified the following non-academic criteria ("technical standards") which all candidates/students are expected to meet, with or without reasonable accommodation, in order to participate in the education program of the college.

- OBSERVATION: The candidate/student must be able to participate actively in all demonstrations and laboratory exercises in the basic sciences and to assess and comprehend the condition of all patients assigned to him or her for examination, diagnosis and treatment. Such observations and information acquisition usually requires the functional use of visual, auditory and somatic sensation.
- COMMUNICATION: The candidate/ student must be able to communicate effectively and sensitively with patients in order to elicit information, describe changes in mood, activity and posture, assess non-verbal communications, and be able to effectively and efficiently transmit.

- information to patients, fellow students, faculty, staff and all members of the health care team. Communication skills include speaking, reading and writing, as well as the observations skills described above.
- 3. MOTOR: The candidate/student must have sufficient motor function to elicit information from patients by palpation, auscultation, percussion and other diagnostic maneuvers, be able to perform basic laboratory tests, possess all skills necessary to carry out diagnostic procedures and be able to execute motor movements reasonably required to provide general care and emergency treatment to patients. The candidate/student must possess the fine motor skills to perform the requirements of the profession.
- 4. INTELLECTUAL: The candidate/student must be able to measure, calculate, reason, analyze and synthesize. Problem solving, the critical skills demanded of healthcare providers, requires all of these intellectual abilities. In addition, the candidate/student must be able to comprehend three-dimensional relationships and to understand the spatial relationships of structures. The candidate/student must have the capacity to perform these problemsolving skills in a timely fashion.
- 5. BEHAVIORAL and SOCIAL ATTRIBUTES: The candidate/student must possess the emotional health required for full utilization of his or her intellectual abilities, the exercise of good judgment, the prompt completion of all responsibilities attendant to the diagnosis and care of patients and others. Candidates/ students must also be able to tolerate taxing workloads, function effectively under stress, adapt to changing environment, display flexibility, and learn to function in the face of uncertainties inherent in the clinical problems of many patients. Compassion, integrity, concern for others, commitment and motivation are personal qualities which each candidate/ student should possess.

#### Pre-professional health sciences courses

PX 100. 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)

#### PX 101. Health Sciences Seminar for

Pre-PAs: 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 pre-PA students only. (U)(1)(P/F)

#### PX 200. Introduction to Professional

**Practice:** An introduction to current issues in pharmacy practice with an emphasis on the appreciation for how socioeconomic and cultural diversity influence patient access to health care and health care outcomes. Prerequisite: Second preprofessional year standing in the doctor of pharmacy program. (U)(1)

PX 311. Human Anatomy for the Health Sciences: 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: BI 105 or 110, or BI 100 for non-COPHS students. (U)(3)

PX 315. 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)

PX 325. 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. (U)(3) Open to COPHS Pre-Pharmacy and Pharmacy students only or permission of instructor.

#### Physician assistant (PA) courses

AP 303. Physiology for PA's: 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)(4)

AP 304. Anatomy for PA's: 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 AP303. (U)(5)

AP 306. Research Principles: This course provides an overview of the important components of quality clinical research, including the various types of research, the research process, research theory, ethical issues in clinical research principles of measurement, and foundations of research design. Prerequisite: First professional year standing in the PA program. (U)(3)

AP 307. 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)

AP 308. Pharmacology I: 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)

AP 309. Pathophysiology II: This course is a continuation of AP 307, Pathophysiology I. Prerequisite: Grade of C or better in AP 307. (U)(4)

AP 310. Pharmacology II: This course is a continuation of AP 308, Pharmacology I. Prerequisite: Grade of C or better in AP 308. (U)(3)

AP 311. Research Statistics: This course introduces the student to basic descriptive and inferential statistics including selecting the most appropriate statistical test for a given research question and data set and conducting hypothesis testing. Prerequisite: Grade of C or better in AP 306. (U)(3)

AP 401. History & Physical Assessment I: Prepares the physician assistant to do a complete history and physical examination. Prerequisite: PA fourth year standing. (U)(3)

AP 402. History & Physical Assessment II: A continuation of AP 401. Prerequisite AP 401 History & Physical Assessment I. (U)(3)

AP 403. 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 patient's 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)

AP 406. Diagnostic and Therapeutic Procedures: 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)

AP 407. Evidence-Based Medicine (EBM): This course provides the pre-clinical PA student an opportunity to acquire and develop clinical research skills essential to success in clinical rotations and professional practice. The student will learn to obtain, evaluate and apply information to solve specific clinical problems. (U)(1)

AP 409. Research Applications for Physician Assistants: In this course, the student applies previously learned principles of research and statistics by analyzing studies from the medical literature, writing an evidence-based position paper on a controversial medical topic, and actively participating in the research process. The student will be provided with a research project idea and will ten develop a research question, design a study methodology, submit a research proposal and IRB application, gather and analyze data, and write-up each of the

various sections of a thesis document. The goal of this course is to provide the student with the knowledge, skills, experience, and confidence to complete a formal Master's thesis project prior to graduation. Prerequisite: Fourth year standing in the Physician Assistant program. (U)(2)

**AP 413. Therapeutics for the Physician Assistant I:** This course prepares the physician assistant to manage drug therapy for patients in certain health care settings. Prerequisites: Fourth-year standing in the PA program or permission of the instructor. (U)(4)

AP 415. Therapeutics for the Physician Assistant II: A continuation of AP 413. This course prepares the physician assistant to manage drug therapy for patients in certain health care settings. Prerequisite: AP 413 Therapeutics for PA1, AP 421 Clinical Medicine for PA 1, AP 406 Diagnostic and Therapeutic Procedures. Co requisite: AP 423 Clinical Medicine for PA 2 or permission of instructor. (U)(4)

AP 417. Diagnostic and Therapeutic Procedures II: A continuation of AP 406, Diagnostic & 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)

**AP 421. Clinical Medicine for PA's 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)(5)

AP 423. Clinical Medicine for PAs II: A continuation of AP 421. Prerequisite: AP 421 Clinical Medicine for PAs I, AP 406 Diagnostic and Therapeutic Procedures, AP 413 Therapeutics for PAs I. (U)(5)

AP 433. Issues in Professional Practice: 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: Second

semester Fourth year standing in the Physician Assistant Program. (U)(3)

**AP 531. Elective Rotation:** This is a two-week 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. Prerequisite: Fifth year standing, (G)(4)

**AP 533 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)

**AP 540 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)

#### AP 541 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)

AP 542 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)

### AP 543 Community Mental Health Rotation (6) This is a six week rotation in a mental

**(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)

AP 544 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 non-pregnant states, and formulating management plans for conditions commonly encountered in an obstetrics/ gynecology practice. Prerequisites: Fifth year standing. **(G)(6)** 

AP 545 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)

**AP 546 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)

AP 587. 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 regular 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) with a combination of case presentations and the summative evaluation. Prerequisites: Fifth year standing within the PA program. (G)(1)

AP 588. 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 regular 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) with a combination of case presentations and the summative evaluation. Prerequisites: Fifth year standing, (G)(1)

**AP 589. 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 regular 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) with a combination of case presentations and the summative evaluation. Prerequisites: Fifth year standing. (G)(1)

**AP 590. 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 regular 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) with a combination of case presentations and the summative evaluation. Prerequisites: Fifth year standing. (G)(2)

#### **AP 640 Family Practice Elective Rotation**

(2): This is an additional two-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)(2)

**AP 641 Internal Medicine Elective Rotation** (2): This is an additional two-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)(2)

#### AP 642. Pediatrics Elective Rotation (2):

This is an additional two-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) (2)

AP 643. Community Mental Health Elective Rotation (2): This is an additional two-week rotation in either an inpatient or outpatient mental health setting. Students provide supervised care of patients being treated for various psychiatric diseases. The student will be guided in gathering clinically relevant information, recognizing common mental health problems, developing counseling techniques and mechanisms of patient referral to other healthcare providers. Prerequisites: Fifth year standing. (G)(2)

AP 644. Obstetrics/Gynecology Elective Rotation (2): This is an additional two-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 non-pregnant states, and formulating therapeutic plans for treating conditions commonly encountered in an obstetrics/gynecology practice. Prerequisites: Fifth year standing. (G)(2)

#### AP 645. Emergency Medicine Elective

**Rotation (2):** This is an additional two-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)(2)

**AP 646 General Surgery Elective Rotation** (2): This is an additional two-week rotation in a general surgery practice, where students provide supervised care for women. Patient

care activities center around assessing the reproductive system in pregnant and non-pregnant states, and formulating therapeutic plans for treating conditions commonly encountered in an obstetrics/gynecology practice. Prerequisites: Fifth year standing. (G)(2)

AP 650 Family Practice Elective Rotation

(4): This is an additional one-month 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)(4)

#### AP 651 Internal Medicine Elective Rotation

(4): This is an additional one month 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)(4)

#### AP 652. Pediatrics Elective Rotation (4):

This is an additional one-month 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)(4)

AP 653. Community Mental Health Elective Rotation (4): This is an additional one month rotation in either an inpatient or outpatient mental health setting. Students provide supervised care of patients being treated for various psychiatric diseases. The student will be guided in gathering clinically relevant information, recognizing common mental health problems, developing counseling techniques and mechanisms of patient referral to other healthcare providers. Prerequisites: Fifth year standing. (G)(4)

**AP 654. Obstetrics/Gynecology Elective Rotation (4):** This is an additional one month 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 non-pregnant states, and formulating therapeutic plans for treating conditions commonly encountered in an obstetrics/gynecology practice. Prerequisites: Fifth year standing. (G)(4)

**AP 655.** Emergency Medicine Elective Rotation (4): This is an additional one month 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)(4)

**AP 656 General Surgery Elective Rotation** (4): This is an additional one month rotation in general surgery practice, where students provide supervised care for women. Patient care activities center around assessing the reproductive system in pregnant and non-pregnant states, and formulating therapeutic plans for treating conditions commonly encountered in an obstetrics/gynecology practice. Prerequisites: Fifth year standing. (G)(4)

#### Pharmacy courses

**RX 312. Clinical Biochemistry:** 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)

RX 314. 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)

**RX 316. 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)

**RX 318.** Introduction 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: RX 312 Clinical Biochemistry, RX 316 Pathophysiology. (U)(5)

**RX 320.** Delivery of Health Care: This course introduces the pharmacy student to various health care systems and to factors that affect the access of patients to quality health care. Prerequisites: P-1 standing. (U)(2)

RX 324. Clinical Assessment: Methods of physical assessment and interviewing skills are presented. Normal anatomical, physiological, and pathophysiological processes of the human body are presented. With case illustrations, students learn selected diseases and the interrelationship between patient interview, abnormal physical and laboratory parameters and their application to the treatment and monitoring of pharmacotherapy. Prerequisites: Clinical Biochemistry and Pathophysiology; or equivalents. (U)(2)

RX 327. Introduction to Drug Information and Literature Evaluation: The course develops the basic introductory skills essential for drug information retrieval and analysis. Pre- or Corequisite RX 350. (U)(1)

RX 350. Intro to Pharmaceutical Care I: 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, MA 106, Calculus and Analytical Geometry 1. (U)(3)

RX 351. 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 1. (U)(4)

**RX 352. COPHS Departmental Honors for Student Pharmacists:** Honors students will explore research design in the pharmaceutical sciences and/or in pharmacy practice, in preparation for work on the Honors Thesis.

A research question is selected and examined utilizing laboratory experimentation, clinical experimentation, and/or review of the published literature. A written summary the question and results achieved will be assessed. Fulfills the departmental honors course requirement for the University Honors Program. (U)(1)

#### RX 353. Preparation for Honors Research:

An introduction to the basic concepts and skills needed to conduct research in the pharmaceutical sciences or pharmacy practice. This course fulfills the departmental honors course requirements for the Honors Program. Prerequisite: University Honors Program students only. (U)(2)

**RX 403.** Therapeutics I Case Studies: A case-based approach to the development and monitoring of therapeutic plans for selected diseases. Must be taken concurrently with RX 413. Prerequisite: RX 324. (U)(1)

**RX 404.** Therapeutics II Case Studies: A case-based approach to the development and monitoring of therapeutic plans for selected diseases. Corequisite: RX 414. Prerequisite: RX 413. (U)(1)

**RX 411. Principles of Drug Action I:** The course creates the drug knowledge base that can be applied to solve therapeutic problems of patients. Selected drug categories are considered. Prerequisites: RX 314, RX 318. (U)(4)

**RX 412. Principles of Drug Action II:** The course is intended to create 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: RX 314, RX 318. (U)(4)

RX 413. 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: RX 324, Pre or Corequisite: RX 403, RX 411. (U)(3)

**RX 414. Therapeutics II:** This is a continuation of Therapeutics 1 and is a consideration of the pathophysiology and therapy of selected diseases that are commonly managed. Emphasis

is placed on the provision of pharmaceutical care through the selection of appropriate therapy, therapeutic monitoring, and the prevention and identification of adverse drug reactions and interactions. Prerequisite: RX413 with grade of C or higher; Pre- or Corequisite RX412, RX404. (U)(3)

#### RX 415. 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: None. (U)(2)

**RX 416. Self-Care and Health Promotion II:** A continuation of Self-Care and Health Promotion 1. Prerequisite: RX 415, Self-Care and Health Promotion 1. (U)(3)

**RX 421. 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: RX 351 (U)(4)

**RX 422.** 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 (RX 421). (U)(4).

**RX 432.** 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).

#### RX 500. Introduction to Experiential Rotations:

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)

RX503. Therapeutics III Case Studies: A case-based approach to the development and monitoring of therapeutic plans for selected diseases. Corequisite: RX 513. Prerequisite: RX 414. (U)(1)

**RX 504.** Therapeutics IV Case Studies: A case-studies approach to the development and monitoring of therapeutic plans for selected diseases. Corequisite: RX 514. Prerequisite: RX 513. (U)(1)

**RX 511. 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: RX 318 Intro to PDA, RX 314 Pharmaceutical Biotechnology. (U)(4)

**RX 513.** 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: RX 414, RX 404 with a grade of C or higher. Pre or Corequisite: RX 403, RX 511, RX 503, RX 523 (U)(3)

**RX 514. Therapeutics 4:** This is a continuation of Therapeutics 3 with emphasis placed on selection of appropriate therapy, therapeutic monitoring and identification of adverse drug reactions and interactions for selected diseases. Prerequisite: RX 513 with a grade of C or higher. Corequisite: RX 504. (U)(3)

**RX 522.** 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: RX 412 and 421. (U)(3)

RX 523. 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: RX 511, 513. and 522(U)(3)

**RX 526. Pharmacy and the Law:** Examines the legal constraints on pharmacy practice including state and federal laws and regulations. Laws affecting the business of pharmacy are ex-

amined along with legend drug and controlled substance laws. Issues of ordering, storage, distribution and counseling are discussed. Agency inspections and malpractice liability are explored. Prerequisite: P-3 standing. (U)(3)

#### RX 527. 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 or enrollment in the PA program. (U)(3)

RX 528. 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 327 and P3 standing in the doctor of pharmacy program. (U)(2)

**RX 550.** Clinical Pharmacokinetics: A course focused on clinical problem-solving skills. The course will utilize small-group learning focused around analyzing and evaluating patient cases. The course will teach skills to apply the didactic knowledge base to the problems of drug therapy management. Prerequisites: RX 511, RX 513. Corequisite: RX 523. (U)(3)

**RX 600. Honors Thesis:** Pharmacy and Health Sciences: This course is for students interested in pursuing departmental honors in pharmacy or health sciences. Prerequisite: Approval of COPHS Academic Affairs Committee. (U)(1)

RX 601/602/603. 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, 2, 3)

RX 607. 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 pass/fail offerings. Prerequisite: P-4 standing in the pharmacy program. (P/F)(1)

RX 608. Doctor of Pharmacy Senior Seminar II: Students will improve formal presentation skills by observation and practice. Each student will prepare and present to faculty and peers a series of presentations including a formal seminar presentation and a poster presentation. Presentation preparation includes a critical review of the literature and case discussions pertaining to issues of pharmacy practice. Seminars are pass/fail offerings. Prerequisite: P-4 standing in the pharmacy program. (P/F)(1)

**RX 609/610/611. 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)(1/2/3)

**RX 612.** Clinical Drug Development: This course provides students with in-depth knowledge of the pharmacist's regulatory role in drug development and clinical investigation. Prerequisite: Permission of instructor. (U/G)(3)

**RX 613.** 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)

**RX 614. 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: RX 713 Biostatistics and Research Design or permission of instructor. (U/G)(3)

RX 615: Introductory Medical Spanish: The course is designed to facilitate communication between patients and pharmacists in the Spanish language. Emphasis will be placed on developing a functional medical vocabulary and on using it to assess patient health and to provide patient information. Prerequisite: two years of high school or one semester of college Spanish (SP 101 or SP 102). (U)(3)

**RX 616:** 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)

**RX 617.** Advanced Medical Spanish: The course is designed to enhance basic Spanish fluency with a focus on facilitating patient communications in Spanish. The prerequisite for this course is completion of the Introduction to Medical Spanish course or completion of the Spanish placement exam with placement at the 200 level or higher. U)(3)

**RX 618. 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 PharmD P-2 courses or permission of instructor. (U)(3)

**RX 622. 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)

**RX 623.** Introduction to Pharmaceutical Research: An introduction to basic principles of pharmaceutical research including formation of hypothesis, literature search, scientific writing and regulatory affairs. By permission only. (U)(2)

**RX 624. Biopharmaceutical Analysis:** Theory and practice of bioanalytical techniques in chemical and molecular biology based analyses. By permission only. (U)(3)

**RX 625.** Advanced Drug Delivery: Critical assessment of drug carrier systems, including transport of drug molecules across membranes. By permission only. (U)(3)

**RX 626.** Neuropharmacology: Chemical agents that affect the function of the central nervous system. The possible mechanisms of drug action are covered based upon anatomical, histological and physiological functions of the

brain and spinal cord. Lectures and student presentations. Prerequisite or corequisite: Principles of Drug Action 3 or permission of the instructor. (U/G)(3)

**RX 627. Industrial Pharmacy: 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. By permission only. (U)(3)

**RX 628. Cardiovascular and Renal Pharma- cology:** A course focusing on drugs that affect that cardiovascular and renal systems. Current

therapeutics and some experimental agents in development are included in the discussions. Advanced projects are required for graduate credit. Prerequisite or corequisite: Principles of Drug Action III or permission of instructor. (U/G)(3)

**RX 629.** Clinical Endocrinology: The naturally occurring hormones and synthetic compounds that affect the endocrine system. Current concepts of endocrine drug mechanisms are discussed together with the neural regulation of endocrine function. Prerequisite: Principles of Drug Action II or permission of instructor. (U/G)(3)

**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 the instructor. (U/G)(3)

**RX 631. Molecular Pharmacology:** Discussion of receptor pharmacology with emphasis on the structure, functions, and signal transduction of receptors. By permission only. (U)(3)

RX 632. 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)

**RX 633.** Current Topics in Pharm Sci: Discussion of current research topics in pharmaceutical sciences. By permission only. (U)(1)

**RX 634. Seminars in Pharmaceutical Sciences:** Presentation of research topics in

pharmaceutical sciences by graduate students, faculty and guest speakers. By permission only. (U)(1)

RX 640. Entrepreneurship in Pharmacy

**Practice:** This course presents alternate practice options in light of future health care delivery systems with an emphasis on identification of and financing and management of new practice types. Opportunities will be explored and business portfolios developed. This is a course designed for the pharmacist interested in the private practice of pharmacy. Prerequisites: Completion of all fourth-year Pharm D. coursework, or permission of instructor. (U/G)(2)

**RX 641. Pediatric Pharmacotherapy:** A course dealing with drug therapy in the pediatric population including neonates, infants, children and adolescents. This course prepares the student to evaluate pediatric drug therapy regimens. Prerequisite: Completion of all fourth year Pharm.D. courses or permission of the instructor. (U/G)(3).

**RX 642.** Geriatric Therapeutics: A study of the physiologic and pharmacokinetic changes that occur with aging and how these changes affect drug therapy. Management of disease will be discussed and evaluated. This course will provide the student with knowledge for making therapeutic decisions in the elderly. Prerequisite: Completion of all fourth-year Pharm.D. courses or permission of instructor. (U/G)(3)

**RX 643.** The Many Faces of HIV: This course enables student pharmacists to understand the HIV process and its effects on a diverse patient population, to study and discuss the multifactorial aspects of HIV/AIDS treatment, and to develop an appreciation for wellness and alternative therapies. Role-play, panel presentations, field trips, and other instructional methods are used. Prerequisite: Completion of all fourth year Pharm.D. courses or permission of instructor. (U)(3).

RX 644. 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: RX 413, RX 414. Pre- or Co-requisite: RX 513. (U)(3)

- **RX 645.** 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)
- **RX 648. Prescription Compounding:** Inquiry into the regulatory, quality assurance, stability and patient specific consideration that go into prescription compounding. The development and preparation of pharmaceutical dosage forms into compounded prescriptions. (U/G)(3)
- **RX 650.** 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)
- **RX 651.** Administration, Management and Law Rotation: This rotation provides the student pharmacist the opportunity to develop skills in fiscal, organization and personnel management of the pharmacy and to better understand the law regulating pharmacy practice. Prerequisite: P-4 standing (U)(4)
- **RX 652.** 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)
- **RX 653.** Advanced Clinical Community Practice Rotation: This rotation provides the student pharmacist with further experience in application of therapeutic principles to the patient in the community pharmacy setting. Prerequisite: P-4 standing. (U)(4)
- **RX 654.** 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)
- **RX 655. 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)
- **RX 656.** Alternative And Complementary Medicine 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)
- **RX 657. 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)
- **RX 658. 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)
- **RX 659.** 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)
- **RX 660.** 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)(4)
- **RX 661. Community Practice Rotation:** This course is concentrated on the basic operational skills necessary for practice in a community pharmacy setting. This rotation will satisfy the 250 hour requirement for community practice. The primary focus of activities will be on distribution and work flow in a community setting. (U)(4)
- **RX 662. 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)

- **RX 663.** Disease State Management 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)
- **RX 664. 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.
- **RX 665.** Emergency Medicine and 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)
- **RX 666.** 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)
- **RX 667. 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)
- **RX 668. 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. Successful completion of a General Medicine Rotation is the prerequisite. (U)(4)
- **RX 669. HIV Rotation:** The goal of this rotation is the development of a holistic approach for the care of HIV/AIDS patients. Prerequisite: P-4 standing. (U)(4)
- **RX 670.** 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)

- **RX 671. 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)
- **RX 672. Infectious Disease 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)
- **RX** 673. **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)
- **RX 674.** 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)
- **RX 675.** 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)
- **RX 676.** Institutional Practice Rotation: This course is concentrated on the basic operational skills necessary for practice in an institutional pharmacy setting. This rotation will satisfy the 250 hour requirement for institutional practice. The primary focus of activities will be on distribution and work flow in an institutional setting. (U)(4)
- **RX 677. 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)
- **RX 678. 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)

- **RX 679. 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)
- **RX 680.** Pain Management Rotation: This rotation provides the student pharmacist experience with the management of acute and chronic pain, including adjuvant therapy. Prerequisite: P-4 standing. (U)(4)
- **RX 681. 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)
- **RX 682.** Pediatric Pharmacy 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)
- **RX 683.** Pharmaceutical Marketing and 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)
- RX 684. 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)
- **RX 685.** Pharmacokinetics Rotation: This rotation provides the student pharmacist experience in the monitoring of pharmacokinetically-administered medications. Prerequisite: P-4 standing. (U)(4)
- **RX 686.** Pharmacy Systems and Technology 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)
- **RX 687. Poison Control and Toxicology Rotation:** This rotation develops the student

- pharmacist's knowledge and problem-solving skills in the application of therapeutic principles to the care of patients who have ingested, or have otherwise been exposed to, toxic substances. Prerequisite: P-4 standing. (U)(4)
- **RX 688. 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)
- **RX 689. 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)
- **RX 690.** 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)
- RX 691. Radiopharmaceuticals 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)

#### RX 692. Rural and Indigent Care Rotation:

This rotation provides the student pharmacist with an understanding of the special considerations involved in the delivery of health care in the rural setting and to indigent populations. Prerequisite: P-4 standing. (U)(4)

- **RX 693.** 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)
- **RX 694.** 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)
- **RX 695. 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)

- **RX 696. Women's Health Rotation:** This rotation develops the student pharmacist's understanding of the special needs associated with medical conditions affecting female patients. Prerequisite: P-4 standing. (U)(4)
- RX 698. Washington, D.C. Rotation: The rotation experience provides an opportunity to participate in a 3-month learning opportunity in the Washington DC area arranged through the Butler-Washington Semester Intern Program. The experiential learning portion of this program is arranged individually based on specific student interests. The College requires that students participating in this program also enroll in P0 355 or AH 110/AH 202 and at least one 1-credit hour Washington seminar course. Prerequisite: P-4 standing. (U) (12). P/F.
- RX 699. Special Topics: 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)
- RX 700. 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)
- **RX 701/702. 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)
- **RX 703/704. 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)
- **RX 705/706. 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)
- **RX 711. Management and Regulation:** The course will acquaint students who have not pre-

viously earned a pharmacy degree with laws and regulations which govern pharmacy and with management concepts essential to pharmacy. (G)(3)

**RX 713. Biostatistics and Research Design:** Principles of good research design and factors adversely affecting the outcome or interpretation of research data. A consideration of statistical methods applicable to health sciences research with emphasis on the selection of appropriate statistical tests and commonly encountered selection and interpretation errors. (G)(3)

**RX** 714. Principles of Medicinal Chemistry: An explanation of drug activity on a chemical basis with particular emphasis of the conformation of neurotransmitters and drugs at the receptor. A consideration of prodrugs as they relate to the three phases of drug action also is presented. (G)(3)

RX 735. 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. Areas of application 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: RX 713 Biostatistics and Research Design. (G)(3)

RX 741. Synthetic Methods of Organic Chemistry 1: The utilization of oxidations, reductions, condensations and alkylations in the preparation of organic compounds. Reaction mechanisms and stereochemical detail are presented whenever applicable. Prerequisite: Organic Chemistry, undergraduate by permission of instructor. This course is offered in the fall of even numbered years. (G)(3)

RX 743. Synthetic Methods of Organic Chemistry 2: The use of acylations. Beliminations involving a cyclic transition state, carbenes, nitrenes, hydroborations, Diels-Alder, and 1, 3-dipolar cycloadditions in the preparation of organic compounds. The synthesis of selected drugs also is presented. Prerequisite: Organic Chemistry, undergraduate by permission of instructor. This course will be offered in the fall of odd-numbered years. (G)(3)

252

RX 745. Advanced Pharmaceutical Analysis: An advanced course in pharmaceutical analysis. Emphasis is placed on the theory and practice of the chemical and instrumental methods used in the official analysis of pharmaceuticals including raw materials and finished dosage forms. Special emphasis also is placed on the interpretation and evaluation of experimental data and importance of quality assurance. Prerequisite: Permission of instructor. (G)(3)

**RX 764. Pharmacology Techniques:** A laboratory course that introduces the student to a variety of methodological and instrumented techniques commonly encountered in pharmacological research. Prerequisite: Permission of the instructor. Four laboratory hours per week. (G)(2)

RX 766. 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: RX 626 Neuropharmacology. (G)(1)

**RX** 772. **Regulatory Affairs:** This course provides the student with in-depth knowledge of the regulatory process and with a working knowledge of existing legislation pertaining directly to the pharmaceutical industry. Prerequisite: RX 711 Management and Regulation. (G)(3)

**RX** 773. Pharmacy 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. (G)(3)

RX 774. Pharmacy Foundations in Economics: Examines the workings of markets, including product, labor, and financial markets and how prices, wages and interest rates are determined. The economy as a whole also is considered with a focus on unemployment, inflation, government monetary and fiscal priorities. (G)(3)

**RX 780.** Current Topics in Pharm Sci: Discussion of current research topics in pharmaceutical sciences. (G)(1)

**RX 781. Seminars in Pharm Sci:** Presentation of research topics in pharmaceutical sciences by graduate students, faculty and guest speakers. (G)(1)

**RX 782.** Ethics in Research: Discussion and case based approaches in the ethics of research, publication, and reviewing of manuscripts and grants. Include core instructional areas recommended by the NIH Office of Research Integrity. (G)(1)

**RX 783.** 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)

**RX 784.** Exp Design & Data Analysis: Approaches in experimental design and statistical analysis of data. (G)(2)

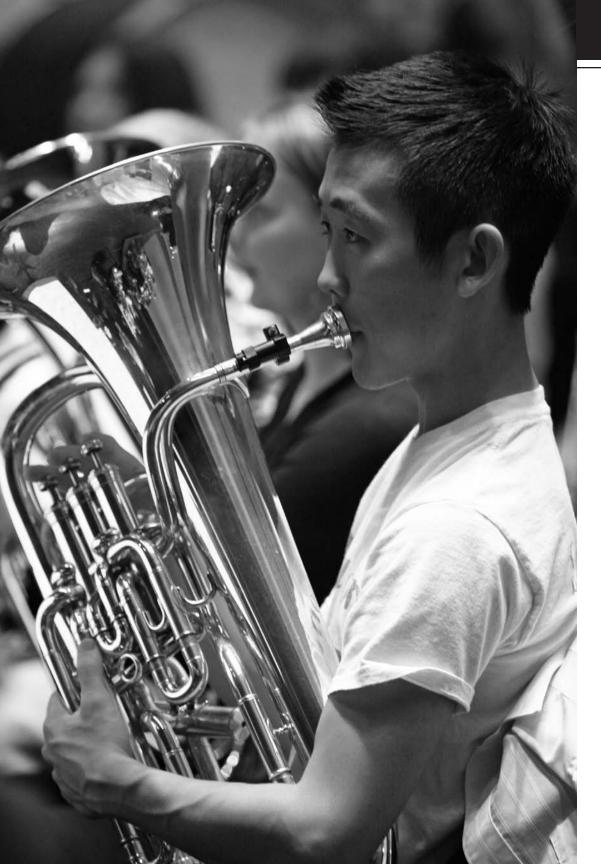
**RX 785. Biopharmaceutical Analysis:** Theory and practice of bioanalytical techniques in chemical and molecular biology based analyses. Prerequisite: BS level background in Analytical Chemistry. (G)(3)

**RX 786.** Advanced Drug Delivery: Critical assessment of drug carrier systems, including transport of drug molecules across membranes. Prerequisite: Instructor's permission. (G)(3)

**RX 787. 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)

**RX 788. Molecular Pharmacology:** Discussion of receptor pharmacology with emphasis on the structure, functions, and signal transduction of receptors. Prerequisite: Instructor's permission. (G)(3)





## JORDAN COLLEGE OF FINE ARTS

Jordan College of Fine 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.

The primary mission of the college is to educate students in the arts as professions by means of its undergraduate and graduate programs. Such an education integrates training in the arts as disciplines while developing a lifetime commitment to creativity and communication, nurturing the view of the arts as interrelated and responsible to society.

All undergraduate degrees are enhanced by a required study of the liberal arts and sciences through Butler's core curriculum. Certain degrees offered by the College associate professional education with a broader selection of the liberal arts and other disciplines.

The further mission of the College is to educate all University students in a fuller appreciation of the arts. Introductory, interdisciplinary and honors courses, plus programs leading to minors, help realize this goal, as do performances of the college and at Clowes Memorial Hall. Performances at the University have the related purpose of connecting the college to the larger community.

Jordan College of Fine 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:

Peter Alexander, Ed.D., dean; Michelle Jarvis, M.A., associate dean

#### **Professors:**

Peter Alexander, Ed.D.; James Robert Briscoe, Ph.D.; Marek Cholewa, Nikolai Rimsky-Korsakov Conservatory; Kenneth Creech, Ph.D., Fairbanks Chair in Communications; Stanley E. DeRusha, M.M.; Robert Grechesky, Ph.D.; Andrea Gullickson, D.M.A.; Michelle Jarvis, M.A.; Stephan Laurent, M.F.A.; James Mulholland, M.M.; Cynthia Pratt, M.F.A.; Owen W. Schaub, Ph.D.; Michael Schelle,

Ph.D.; Laurence Shapiro, M.M.; Diane Timmerman, M.F.A.

#### **Associate Professors:**

Larry Attaway, B.M.; Daniel Bolin, Ed.D.; Nancy Davis Booth, M.F.A.; Timothy R. Brimmer, D.A.; Davis Brooks, D.M.A.; Lisa Brooks, D.M.A.; Christine A. Buck, M.A.; Richard Clark, M.M.; Penny Dimmick, D.A.; Frank Felice, Ph.D; Jeffrey Gillespie, Ph.D.; William Grubb, D.M.A.; Mary Katherine Kelton, D.M.A.; Gail Lewis, D.M.A.; Henry Leck, M.M.; Susan McGuire; Wendy Meaden, M.F.A.; Julianne Miranda, M.M.; David Murray, M.M.; Ann Savage, Ph.D.; Douglas E. Spaniol, D.M.A.; Eric Stark, D.M.; Susan Zurbuchen, M.A.;

#### **Assistant Professors:**

Elaina Artemiev, PhD.; Kathleen Boyd, D.M.A.; Allison Harthcock, Ph.D.; Rose Kleiman, M.A.R.; Robert Koharchik, M.F.A.; Elizabeth Mix, Ph.D.; Gautam Rao, M.F.A.; Derek Reid, B.A.; Tong Wang, M.F.A.; Melvin Jones, Ph.D.; Matthew Pivec, D.M.A.; Sarah Eyerly, Ph.D.; Leah Gautier, M.F.A.

### **Artist-in-Residence in percussion:** Jon Crabiel, M.A.

#### Visiting Assistant Professors:

Mary Anne Scott, B.M.

#### Lecturers:

Cutler Armstrong, M.S.; Chris Jacek, M.A.; Jim Odom, M.S.

#### **Staff Members:**

LuAnn Baker, Catherine Bringerud, Laura Byram, Sarah Conte, Rissa Guffey, Mark Harris, Jan Hendricks, Patrick Hurley, Vonna Knapp, Kathy Lang, Nataly Lowder, Maggie McGlynn, Daniel Peelor, Joy Rogers, Cathy Sipe, John Sparkman, Glen Thoreson, Jan Thornburgh, Karen Thickstun, Mary Tresize, Maren Urness, Delane Wood

#### Undergraduate degree programs

- Bachelor of Arts in Dance Pedagogy
- Bachelor of Arts in Media Arts (Electronic Media Studies, Recording Industry Studies, Digital Media Production)
- Bachelor of Arts in Music
- Bachelor of Arts in Theatre
- Bachelor of Fine Arts in Dance Performance
- Bachelor of Music in Music Education

- (choral-general, instrumental-general or area)
- Bachelor of Music in Performance (piano, voice, or orchestral instrument)
- Bachelor of Music in Piano Pedagogy
- Bachelor of Music in Composition
- Bachelor of Science in Arts Administration (music, theatre, or general concentrations)
- Bachelor of Science in Dance Arts Administration

#### Admission

All students must submit a Jordan College of Fine Arts (JCFA) departmental 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. A personal interview and audition or portfolio presentation and interview is also available for theatre majors. An interview is required for all arts administration and media arts majors.

Collegiate students who want to transfer into a Media Arts major must present a cumulative GPA of at least 2.3.

Information on fall and spring audition dates and requirements are available online at www.butler.edu/jcfa.

Please note that all students who wish to be considered for JCFA 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 Fine Arts.

- All students in the college must fulfill core curriculum requirements of the University.
- Forty upper-division credit hours (300–400) 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 JCFA majors are expected to attend arts events in their discipline and related areas throughout their tenure at Butler.

#### Graduate degree programs

- Master of Music in Composition
- Master of Music in Conducting (choral or instrumental)
- Master of Music in Music Education
- Master of Music in Music History
- Master of Music in Music Theory
- Master of Music in Performance (piano, voice, or orchestral instrument)
- Master of Music in Piano Pedagogy

#### Art

#### Minor

• Digital Illustration Minor

#### Courses:

#### ART 105. 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 introductions 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, and between objects and key episodes in political, social and intellectual history. (U)(3)

# **ART 107. Introduction to 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. (U)(3)

**ART 202. Introduction to Illustration:** An introduction to the fundamentals of illustration. The course introduces fundamental principles, a range of illustration media and techniques, and an appreciate of the history and practice of illustration. (U)(3)

#### ART 205. History of Illustration and

**Graphic Design:** This course will provide an overview of the significance and historical development of both illustration and graphic design. The course is also designed to explore the relationship between design production and history, and to help students develop a critical awareness of and vocabulary for illustration and graphic design. (U)(3)

**ART 208. Graphic Design I:** This course provides an introduction to basic graphic design concepts. Students are introduced to a range of design problems that vary in scope and perspective. (U)(3)

**ART 216. Introduction to Photography:** An exploration of electronic still photography as an art form. Digital manipulation, historical photographic sources and electronic still cameras are studied. (U)(3)

**ART 380/381/382. Special Seminar:** Work in the special seminar will be centered on a specific aspect of studio art, art history, or visual culture. (U) (1, 2, 3)

AH 302. Renaissance Art: Renaissance art of the 15th and 16th centuries, with special emphasis on the work of Donatello, Michelangelo, Raphael, and Titian. Prerequisites: CC 212. (U)(3) [Also allow prereq of AH 202 taken in previous 3 years (not published)]

**AH 303. Baroque Art:** Baroque and Rococo art of the 17th and 18th centuries throughout Europe, emphasizing the flamboyant Counter Reformation art of Italy and Flanders and the middle-class Protestant art of Rembrandt and Holland. Prerequisites: AH 110, 202 or permission of the instructor. (U)(3)

**ART 304. Sequential Art and Book Illustration:** An exploration of sequential art and illustration methods and practices. The course encompasses the study of techniques used in creating sequential art in genres such as graphic novels, comic books, conic strips, children's books and story boards for animation. (U)(3)

ART 305. Animation and Digital Imaging: An exploration of animation and digital imaging methods and practices. The course encompasses the study of techniques used in creating animation and digital art using techniques such as hand drawn animation, Flash animation, claymation and stop-motion video. (U)(3)

AH 306. Art of the 20th Century: Artistic development of the 20th century (fauvism, cubism, expressionism, futurism, abstract expressionism, pop and op art, minimal art, color-field painting and new realism. Prerequisites: AH 110, AH 202 or permission of the instructor. (U)(3)

**AH 400/401/402. Independent Study:** An opportunity for the qualified student to pursue some investigative work upon his or her own initiative. Permission required. (U) (1, 2, 3)

#### **Arts Administration**

The mission of the Department of Arts Administration is to prepare undergraduate student for a future in the management of non-profit arts and community organizations. The program is designed to provide students with 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 students with essential workplace training and education. Arts Administration student have participated in internships in 21 states, the District of Columbia and 5 foreign countries.

#### Administration:

Susan Zurbuchen, M.A., department chair

#### 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 Dance Arts Administration

#### Courses:

AA 201. 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)

**AA 281. Special Topics:** Special topics courses will focus on specific aspects of the arts. Topics will vary; courses are open to all students. (U)(1)

**AA 282. Special Topics:** Special topics courses will focus on specific aspects of the arts. Topics will vary; courses are open to all students. (U)(2)

**AA 283. Special Topics:** Special topics courses will focus on specific aspects of the arts. Topics will vary; courses are open to all students. (U)(3)

**AA 301. 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. (U)(3)

**AA 371. Experiential Learning:** An opportunity for qualified students to undertake supervised field experience with an arts or related nonprofit organization. (U)(1)

**AA 372. Experiential Learning:** An opportunity for qualified students to undertake supervised field experience with an arts or related nonprofit organization. (U)(2)

**AA 373. Experiential Learning:** An opportunity for qualified students to undertake supervised field experience with an arts or related nonprofit organization. (U)(3)

AA 381, 382, 383. 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)(1, 2, 3)

**AA 400. Internship Preparation:** Preparation and selection of internship, including resume, cover letter, computer skills and literacy for the workplace, and approval of internship site. (U)(0)

**AA 401.** Arts Administration Seminar: Work in the seminar class will focus on trends in the non profit arts world; emphasis on marketing, promotions, and fundraising. Course includes guest speakers. (U/G)(3)

AA 450 W. Arts Administration Senior Seminar: Capstone course focusing on timely issues in the field of arts administration. Significant writing assignments as related to arts administration. (U)(3)

**AA 475. Internship in Arts Administration:** On-the-job experience in an arts agency directly related to the student's degree objectives.

related to the student's degree objectives. Prerequisites: AA 301, junior standing and permission of the department chair. (U)(6)

**AA 481, 482, 483. 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, 2, 3)

#### Dance

Continuing a 50-year tradition of excellence in ballet, the mission of the Department of Dance of Jordan College of Fine Arts at Butler is to be a national center of excellence in dance, training serious and talented dance students in the foundation of traditional dance techniques with a central, but non-exclusive focus on ballet; combining professional proficiency and artistic depth with a broad liberal arts education; and preparing students for future careers in many areas of the art of dance.

The Department of Dance is a fullyaccredited member of the National Association of Schools of Dance (NASD).

#### Administration:

Michelle Jarvis, M.A., department chair; Larry Attaway, B.M., assistant chair

#### Majors and minors

- B.F.A. in Dance Performance
- B.A. in Dance Pedagogy
- 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 of 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 technique courses, performance and dance academics in addition to required courses in related areas such as music and theatre and of 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. An audition is required, but only students with sophomore status and above are eligible to audition for the minor.

# Courses in dance for non-majors

**DA 100. Dance Training for Athletes:** Specifically designed for athletes who wish to improve their overall performance in any chosen sport or physical activity. Geared toward improving an athlete's coordination, flexibility, strength, endurance, balance, agility and general motor skills. Three meetings per week. (U)(2)

**DA 101. Beginning Ballet I (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. (U)(1)

**DA 102. Beginning Ballet II (non-majors): Continuation of DA 101:** 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)

**DA 103, 104. Beginning Jazz (non-majors):** Basic jazz styles and forms for non-majors. No prerequisite. Two meetings per week. (U)(1)

**DA 105, 106. Intermediate/ Advanced Jazz** (**non-majors):** Intermediate/Advanced jazz styles and forms for non-majors. Two meetings per week. (U)(1)

**DA 107, 108. 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)

**DA 201, 202. Intermediate Ballet (non-majors):** Intermediate ballet technique in the recognized classic form for students who have had some previous training. (Not applicable to dance major; open to all other students). Two meetings per week. (U)(1)

**DA 207, 208. Intermediate Modern Dance** (**non-majors**): Continuation of DA 108 for non-majors who wish to further their modern dance training, including some dance repertory. Two meetings per week. (U)(1)

DA 301, 302. Intermediate Ballet (non-majors): Continuation of DA 202 for non-majors who wish to further their ballet training. Three meetings per week. (U)(2)

**DA 401, 402. Intermediate/Advanced Ballet** (non-majors): Continuation of DA 302. Intermediate/Advanced level of ballet technique for non-majors. Three meetings per week. (U)(2)

#### Courses in dance for Majors

**DA 109. 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. Pass/fail. (U)(0)

DA 110. 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: DA 109. Pass/fail. (U)(0)

#### Ballet technique for majors

DA 111, 112. Ballet Technique I — Freshman

DA 113, 114. Ballet Technique II — Freshman

DA 115, 116. Ballet Technique III — 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)

**DA 117, 118. Ballet Technique IV:** Advanced level of ballet technique. (See description under DA 115, 116.) Ladies will take the complete class on pointe during three of the five weekly meetings. (U)(2)

DA 119, 120. Ballet Technique — Men: Advanced level of ballet technique geared specifically for the male dancer. Class meets three times per week. Concurrent registration in DA 410 02 is required for the other two days. Prerequisite: Male dance major. (U)(1)

**DA 127. 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)

**DA 128. Men's Allegro Technique I:** Continuation of DA 127. Two meetings per week. Prerequisite: DA 127. (U)(1)

DA 211, 212. Ballet Technique I — Sophomore

DA 213, 214. Ballet Technique II — Sophomore

DA 215, 216. Ballet Technique III — Sophomore

(See description under DA 115, 116)

DA 217, 218. Ballet Technique IV: Advanced level of ballet technique. (See description under DA 117, 118.) Ladies will take the complete class on pointe during three of the five weekly meetings. (U)(2)

DA 219, 220. Ballet Technique — Men: Advanced level of ballet technique geared specifically for the male dancer. Class meets three times per week. Concurrent registration in DA 410 02 is required for the other two days. Prerequisite: Male dance major. (U)(1)

**DA 227. Men's Allegro Technique II:** Specific allegro technique for men: multiple turns, beats and grand allegro steps. Two meetings per week. Prerequisite: DA 128. (U)(1)

DA 228. Men's Allegro Technique II: Continuation of DA 227. Two meetings per week. Prerequisite: DA 227. (U)(1)

DA 315, 316. Ballet Technique III — Junior: See description under DA 115, 116. (U)(2)

#### DA 317, 318. Ballet Technique IV:

Advanced level of ballet technique. (See description under DA 115, 116.) Ladies will take the complete class on pointe during three of the five weekly meetings. (U)(2)

DA 319, 320. Ballet Technique — Men: Advanced level of ballet technique geared specifically for the male dancer. Class meets three times per week. Concurrent registration in DA 410 02 is required for the other two days. Prerequisite: Male dance major. (U)(1)

**DA 327. Men's Allegro Technique III:** Specific allegro technique for men: multiple turns, beats and ground allegro steps. Two meetings per week. Prerequisite: DA 228. (U)(1)

DA 328. Men's Allegro Technique III: Continuation of DA 327. Two meetings per week. Prerequisite: DA 327. (U)(1) **DA 410. Ballet Technique:** Same as DA 415, DA 416. One section of the course meets MWF, the other TR and TBA for one hour of credit. By placement only. (U)(1)

**DA 415, 416. Ballet Technique III — Senior:** Advanced level of ballet technique. (See description under DA 115, 116.) By placement only. Meets five times per week. (U)(2)

DA 417, 418. Ballet Technique IV — Senior: Advanced level of ballet technique. (See description under DA 117, 118.) Ladies will take the complete class on pointe during three of the five weekly meetings. (U)(2)

DA 419, 420. Ballet Technique — Men: Advanced level of ballet technique geared specifically for the male dancer. Class meets three times per week. Concurrent registration in DA 410 02 is required for the other two days. Prerequisite: Male dance major. (U)(1)

**DA 427. Men's Allegro Technique IV:** Specific allegro technique for men: multiple turns, beats and grand allegro steps. Two meetings per week. Prerequisite: DA 328. (U)(1)

**DA 428. Men's Allegro IV:** Continuation of DA 427. Two meetings per week. Prerequisite: DA 427. (U)(1)

# Pointe and pas de deux, variations

DA 121, 122. Pointe I - Freshman

**DA 221, 222. Pointe I— Sophomore:** The specialized study of ballet technique as applied to pointe work. For dance majors only. Two meetings per week. (U)(1)

DA 123, 124. Pointe II — Freshman

**DA 223, 224. Pointe II** — **Sophomore:** Intermediate/advanced level of pointe technique for dance majors. By placement only. Two meetings per week. (U)(1)

DA 321, 322. Pointe III

**DA 421, 422. Pointe III:** Advanced level of pointe technique for dance majors. By placement only. Two meetings per week. (U)(1)

**DA 125, 126. Pas de Deux I:** First-year partnering technique. Required of male dance majors, by invitation only for female dance majors. (U)(1)

**DA 225, 226. Pas de Duex II:** Second-year partnering technique. Required of male BFA dance majors, by invitation only for female dance majors. One meeting per week. (U)(1)

DA 325, 326. Pas de Deux III: Intermediate/ Advanced technique of supported adagio and advanced repertoire required of male BFA dance majors. By invitation only for male BA and BS dance majors and female dance majors. One meeting per week. (U)(1)

**DA 423.** Classical Variations: Learning and analyzing standard solo variations from the 19th- and 20th- century ballet repertoires with special emphasis on pointe technique. One meeting per week. By consent of the instructor. (U)(1)

**DA 424. Classical Variations:** Learning and analyzing standard solo variations from the 19th- and 20th- century ballet repertoires with special emphasis on pointe technique. One meeting per week. By consent of the instructor. (U)(1)

**DA 425, 426. 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)

#### Modern and improvisation

**DA 131. Modern Technique I:** First year modern technique for dance majors. Three hours per week. No Prerequisite. (U)(1)

**DA 132. Modern Technique II:** First year modern technique for dance majors. Three hours per week. Prerequisite: DA 131. (U)(1)

**DA 231. Modern Technique II:** Second-year modern technique for dance majors. Three hours per week. Prerequisites: DA 131, DA 132. (U)(1)

**DA 232. Modern Technique II:** Second-year modern technique for dance majors. Three hours per week. Prerequisite: DA 231. (U)(1)

**DA 233. Improvisation I:** Exploration of basic improvisational skills as they apply to movement. Emphasis on individual freedom and creative expression. One meeting per week. Prerequisite: Sophomore dance major status. (U)(1)

**DA 234. Improvisation II:** Continuation of DA 233, introductory contact improvisation and group relationships. Prerequisite: DA 233. (U)(1)

**DA 331. Modern Technique III:** Third-year technique for dance majors. Three meetings per week. Prerequisites: DA 231, DA 232. (U)(1)

**DA 332 Modern Technique III:** Third-year technique for dance majors. Three meetings per week. Prerequisites: DA 331. (U)(1)

**DA 431. Modern Technique IV:** Fourth-year modern technique for dance majors. Three meetings per week. Prerequisites: DA 331, 332. (U)(1)

**DA 432. Modern Technique IV:** Fourth-year modern technique for dance majors. Three meetings per week. Prerequisites: DA 431. (U)(1)

#### Other dance techniques

**DA 141. Jazz I:** Contemporary jazz for dance majors with emphasis on Simonson technique. Two meetings per week. (U)(1)

**DA 142. Jazz I:** Contemporary jazz for dance majors with emphasis on Simonson technique. Two meetings per week. Prerequisite: DA 141 (U)(1)

**DA 241. Jazz II:** Second-year jazz technique for dance majors. Three meetings per week. Prerequisites: DA 141, DA 142. (U)(1)

**DA 242. Jazz II:** Second-year jazz technique for dance majors. Three meetings per week. Prerequisite: DA 241. (U)(1)

**DA 247. 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)

**DA 248. Character Dance** — **Spanish:** The study of Spanish dance from Castillian and Flamenco techniques with emphasis on individual and group performance. Two meeting per week. Prerequisite: DA 247. (U)(1)

**DA 341. Jazz III:** Third-year Jazz technique for dance majors. Three meetings per week. Prerequisites: DA 241, DA 242. (U)(1)

**DA 342. Jazz III:** Third-year Jazz technique for dance majors. Three meetings per week. Prerequisites: DA 341. (U)(1)

**DA 343. Tap I:** The study of tap dance technique, from the basic rhythms and time steps to material designed for performance and teaching. Emphasis on individual and group performance. Three meetings per week. No prerequisite. (U)(1)

**DA 344. 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. Prerequisite: DA 343. Three meetings per week. (U)(1)

DA 429, 430. Contemporary Partnering: Advanced study through practical work in the principles related to contemporary partnering in the 21st century, including: balance, counterbalance, resistance, strength building and weight distribution. Prerequisite: Completion of DA 325 or DA 326; enrollment in DA 425/426 preferred, mandatory for male dancers. (U)(1)

#### **Performance**

**DA 151. 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)

**DA 152. Butler Ballet** — Freshman: Continuation of DA 151. Prerequisite: DA 151. (U)(1)

**DA 251. 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: DA 152. (U)(1)

**DA 252. Butler Ballet — Sophomore:** Continuation of DA 251. Prerequisite: DA 251. (U)(1)

DA 255, 355, 455. 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 Fine Arts among others. Each performance is an individual project with participation by audition only. Permission of the dance department is required. Prerequisite: DA 151 and DA 152, sophomore status. (U)(1)

#### DA 256, 256, 456. 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 Fine Arts among others. Each performance is an individual project with participation by audition only. Permission of the dance department is required. Prerequisite: DA 151 and DA 152, sophomore status. (U)(1)

**DA 311. Performance Lab:** Laboratory course for dance majors to serve as performers for student choreographers in Choreography 3, DA 453. No prerequisite. (U)(1)

DA 351. 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: DA 252 or consent of department chair. (U)(2)

**DA 352. Butler Ballet** — **Junior:** Continuation of DA 351. Prerequisite: DA 351 or consent of department chair. (U)(2)

**DA 451. 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: DA 352 or consent of department chair. (U)(2)

**DA 452. Butler Ballet** — **Senior:** Continuation of DA 451. Prerequisite: DA 451 or consent of department chair. (U)(2)

#### Performance Attendance

DA 190. Performance Attendance: New Students/Freshmen dance majors and secondary dance majors will attend 10 performances per academic year, four to six will include post-performance discussions in appropriate dance classes. Annual distribution includes two to three in theatre, three to four in music and

the remainder in dance, art museum visits, art exhibitions and/ or arts-related lectures. Pass/ Fail credit. (U)(0)

**DA 290. Performance Attendance:** Sophomore dance majors and secondary dance majors will attend eight performances per year, two to three per each discipline in theatre, music, dance, art museum visits, art exhibitions and/or arts-related lectures. Pass/ Fail credit. Prerequisite: DA 190. (U)(0)

**DA 390. Performance Attendance:** Junior dance majors and secondary majors will attend six performances per year, two per each discipline but not including performances in the field of dance. The disciplines include theatre, music, art museum visits, art exhibitions and arts-related lectures. Pass/Fail credit. Prerequisite: DA 290. (U)(0)

**DA 490. Performance Attendance:** Senior dance majors and secondary majors will attend six performances per year, two per each discipline but not including performances in the field of dance. The disciplines include theatre, music, art museum visits, art exhibitions and arts-related lectures. Pass/Fail credit. Prerequisite: DA 390. (U)(0)

#### Dance academics

**DA 161. 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)

**DA 162. 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)

**DA 166. 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)

**DA 261. Laban Movement Analysis:** Elementary concepts in the major 20th century theory of movement: exploration of the aspects of shape,

space and efforts (movement qualities). No prerequisite. (U)(2)

**DA 262. Laban Movement Analysis in Choreography:** Application of Laban Movement Analysis to choreography. Prerequisite: DA 261. (U)(2)

DA 263. 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. No prerequisite. (U)(1)

DA 264. Music for Dance — Class and Choreography: The relationship of music to dance as applied to ballet class and to choreography. Two meetings per week. Prerequisite: DA 263. (U)(1)

**DA 361.** 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: DA 233, DA 261. (U)(2)

**DA 362. Choreography II:** Choreographic skills involving music and small ensembles (duets). Prerequisite: DA 361, DA 264. (U)(1)

**DA 365. 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)

**DA 366. 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)

**DA 453. Choreography III:** Advanced level of choreography for small and large groups. Two meetings per week. Prerequisite: DA 362. (U)(1)

DA 454. Senior Production Project: Production, rehearsal and public presentation of the choreographic project which began in DA 453. Prerequisite: DA 453. (U)(2)

DA 465, 466. 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: DA 261, DA 361 and DA 366. (U)(1)

**DA 467. Design and Construction of Dance Costume:** Basic principles involved in the preparation of design and construction of costumes for dance. Lecture and laboratory. (U)(3)

**DA 468. Applied Dance Costuming:** The execution and construction of designed costumes for dance. Laboratory. Prerequisite: consent of instructor. (U)(3)

#### Pedagogy, special studies

#### DA 471. Teaching Analysis of Classical

**Technique:** A practical and theoretical study of basic ballet techniques, preparing the student teacher for instructing beginning ballet. Two meetings per week. Prerequisites: Junior BA Dance major or Senior BFA, BS Dance major. (U)(2)

DA 472. Teaching Analysis of Intermediate and Advanced Classical Techniques: Teaching intermediate and advanced ballet techniques to skilled performers and teachers. Prerequisite: DA 471. (U)(2)

DA 474. Teaching Analysis of Modern Techniques: Pedagogy of modern techniques (theory and practice) in one or more of the following techniques: Graham, Limon, Horton, etc. Prerequisites: DA 471, DA 331. (U)(2)

#### DA 476. Teaching Analysis of Jazz

**Techniques:** Pedagogy of jazz techniques (theory and practice) utilizing the Symonson technique. Prerequisites: DA 241, DA 242, DA 471. (U)(2)

DA 477, 478. Dance Teaching Practicum: Observation and teaching in selected school situations as a correlated school activity. Prerequisites: DA 472, DA 474 or DA 476 and consent of department chair. (U)(2)

#### DA 481, 482, 483. Independent Study: An opportunity for the qualified student to pursue some investigative work upon his or h

pursue some investigative work upon his or her own initiative. Approval of department chair required. (U) (1, 2, 3)

**DA 491, 492, 493. 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, 2, 3)

**DA 499. Honors Thesis:** See section dealing with graduation honors. (U)(3)

#### Media arts

The Department of Media Arts offers programs designed to prepare graduates for a life in a media related profession. The department seeks to foster an understanding and appreciation of the role of media arts in our global society. The department does not train narrowly focused vocationally oriented students; rather, it educates future leaders, educators, and innovators.

#### Administration:

Kenneth Creech, Ph.D., Fairbanks Chair in Communications and department head

Majors and minors: The department offers courses leading to a major in media arts, with degrees in digital media production, electronic media, and recording industries. The department also offers minors in all of the media arts degree plans.

Requirements: Applicants are admitted to the program on the basis of academic acceptance by the university and an interview or essay.

#### Courses

#### MDA 103. Electronic Media Performance:

This course focuses on the techniques of announcing, script interpretation, microphone use, and on-camera presentation. (U)(3)

**MDA 104. Electronic News Writing:** This course introduces the student to the techniques of gathering, writing and editing news for broadcast media. The emphasis is on broadcast style, basic aspects of writing news for radio and television and broadcast news operations. (U)(3)

#### MDA 105. Introduction to Media Studies:

This course is designed for students interested in becoming critical consumers as well as producers of media. Starting with a historical perspective of the development of various media forms, students will explore the broad landscape of media including radio, television, print, digital, web, film and more. (U)(3)

MDA 106. Survey of Digital Media: An introduction to the concepts, techniques and trends in digital media. This course introduces the student to the world of multimedia

creation. Students learn to use some of the basic tools of digital media. The goal of the course is to teach concepts and techniques. Non-majors must have permission of the Media Arts department chair. (U)(3)

MDA 108. Graphic Design I: This course provides an introduction to basic graphic design concepts. Students are introduced to a range of design problems that vary in scope and perspective. Prerequisite: MDA 107 or permission of the instructor. (U)(3)

MDA 109. 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) [WAS MDA 102]

**MDA 130. Production Lab:** Students participate in labs supporting the development of programming for distribution by the department. (U)(1)

MDA 201. 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 Media Arts Department Chair. (U)(3)

#### MDA 202. Multi-Camera Studio Production:

An introduction to the in-studio video production process. Basic camera operation, directing and editing procedures will be covered. This class meets in a lecture-lab format. Sign up for one of the related labs (LAA, LBB, LCC). Nonmajors must have permission of the Media Arts Department Chair. (U)(3)

MDA 203. 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: MDA 104. (U)(3)

MDA 211. The Auteur Director: The auteur theory suggests that the greatest cinema is a result of the personal vision of one person, the director. This course examines the career of a specific director. Students view selected films from the director's works and study particular auteur characteristics. (U)(3)

MDA 212. Writing for the Electronic Media: Mechanics of writing for broadcasting, cable

and non-broadcast audio and video. Topics include commercials, continuity, news writing and program material. (U)(3)

MDA 215. 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: MDA 202 or permission of the instructor. (U)(3)

#### MDA 218. Digital Media Proj Des/Mgmt:

This course builds the foundation for the creating and authorizing digital media for all delivery systems through successful planning and project management. Prerequisite: Senior standing. (U)(3)

#### MDA 219. Design for the World Wide Web:

The course focuses on concepts and techniques of creating elements of a web site, posting the site tot the Web and maintenance of the site. Prerequisite: MDA 106. (U)(3)

MDA 220. Audio Lab: Independent Study: This lab is designated as an opportunity for students who have completed MDA 201 to hone basic audio recording, mixing, and editing skills. Prerequisite: Non-majors must have permission of the instructor. (U)(1)

MDA 252. Theory and Techniques of Sound Recording: The second audio production course. Emphasis on developing critical listening skills, microphone techniques, outboard gear, digital and analog recording and digital recording. Prerequisites: MDA 201 or permission of the instructor. (U)(3)

MDA 265. Media Literacy: From a media literacy perspective, students will develop an understanding of media production, products and audiences; the constraints media systems operate within, and cultural implications of media and media systems. Prerequisite: Sophomore or higher standing. Non-majors must have permission of Media Arts Department Chair. (U)(3) [WAS MDA 365]

MDA 290. Seminar in Media Arts: A group or individual study of problems, achievements, and opportunities in the fields of digital production, media & cultural studies, electronic journalism, or recording industry studies. Class will be conducted through research, discussion, and/or individual reports. (U)(3)

MDA 300. Honors Special Project: Preparation for honors thesis proposal. Taken in conjunction with any 300 or 400 level MDA course. Students' independent inquiry that goes beyond current course curriculum and individualized interactions with instructors are encouraged. Fulfills departmental honors course requirement. Prerequisites: junior honors status. (U)(0)

MDA 302. Video Production II: Advanced studio production techniques including graphics, lighting and production of program material. Prerequisite: MDA 202. Non-majors must have permission of department chair. (U)(3)

MDA 303. Advanced Reporting: 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: MDA 104, MDA 203 or permission of the instructor. (U)(3)

MDA 304. Producing Television News: Techniques of producing, shooting, and editing news for television. Prerequisite: MDA 202. Non-majors must have permission of department chair. (U)(3)

MDA 305. 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: MDA 202 and 215. (U)(3)

MDA 306. 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: MDA 106, 201, 202, 205, 215, 219 and junior standing. (U)(3)

MDA 308. Graphic Design II: Students are introduced to concepts and projects designed to further refine visual thinking and build upon basic constructs through applied projects. Prerequisites: MDA 208. (U)(3)

MDA 310. Directing the Narrative: 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 MDA 202 and MDA 305 in the production of a substantial final project. Prerequisites: MDA 202 and MDA 305. (U)(3)

**MDA 311. 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)

**MDA 320. 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. (U)(1)

MDA 330. Production Lab: Students participate in labs supporting the development of programming for distribution by the department. Can be taken concurrently with MDA 331. (U)(1)

**MDA 331. Operations Lab:** Students will participate in the operation of departmental television facilities. (U)(1)

MDA 333. Performance Lab: Students participate in on-air experiences for the department using departmental facilities. Prerequisite: MDA 103. (U)(1)

MDA 352. 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: MDA 102 or permission of instructor. (U)(3)

MDA 353. Audio for Video and Television: Practical applications of all aspects of sound from pre- to post-production; location sound; boom audio and love miking techniques; music editing and sound design. Prerequisite: MDA 201, 225, 252, and 352. (U)(3)

#### MDA 354. 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: MDA 252 or permission of instructor. (U)(3)

MDA 366. Media & Identity: Coupled with an examination of America's recent history with regard to gender, race, class and sexual orientation, from a critical-cultural perspective, students will explore both mainstream and non-mainstream media's role in the construction of and challenges to identity. Prerequisite: Junior or senior standing. (U)(3)

MDA 367. Media & Cultural Theory: This course surveys the development of mass communication and cultural theory and current trends in the field. Prerequisite: Junior or senior standing. (U)(3)

MDA 368. Media & 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)

MDA 390. Seminar in Media Arts: A group or individual study of the problems, achievements, and opportunities in the fields of digital production, media & 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 department chair. (U)(3)

**MDA 400, 401, 402. Independent Study:** An opportunity for the qualified student to pursue some investigative work on his or her own initiative. Permission of department chair and instructor. (U)(1, 2, 3)

MDA 404. News Ethics for the Electronic Media: This course introduces the student to the study of ethics and its application to the daily operation of news in the electronic media. (U)(3)

MDA 406. Multimedia Design and Production II: This course would build upon the foundation created in MDA 306. Students will learn and practice with more advanced tools used in multimedia authoring to meet the producers communication goal. Students will create and author multimedia for a variety of communication channels (i.e. Web, CD-ROM, and DVD). Prerequisite: MDA 306. (U)(3)

MDA 415. Advanced Video Editing: This continues to develop concepts, techniques and principles introduced in MDA 215. Prerequisite: MDA 215. (U)(3)

MDA 418. Design for the World Wide Web I: This course introduces the student to designing media for the Web. It focuses on basic concepts and techniques of creating the various elements of a web site, posting the site to the Web and maintenance of the site. Prerequisites: MDA 106 and 218. (G)(3)

MDA 432. Law and Regulation of the 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 Media Arts Department Chair. (U)(3)

MDA 452. Entertainment Media and the Law: A survey of the major legal and business issues encountered by professional 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 Media Arts Department Chair. (U)(3)

MDA 454. Seminar in Recording Industry: This is the capstone course for the Recording Industry Studies major. In this course, students will work together to complete a large scale group project based on their knowledge and experience gained throughout their Butler careers Prerequisite: MDA 352. For Senior majors and minors only. (U)(3)

MDA 455. In-training: On-the-job experience in a facility directly related to the student's degree objective. Prerequisite: senior status. Majors only with approval and approval of department chair. (U)(3)

MDA 457. Digital Media Project Design & 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: MDA 106, 201, 202, 205, 215, 219, 306, 406 and Senior standing. For Senior majors only. (U)(3)

#### MDA 465 W. Media & Cultural Criticism:

From a critical-cultural perspective, this course explores the study of popular media, including television, film, and the world-wide-web. Through extensive critical writing and reading in media criticism and theory, students will examine issues relating to audience reception, production and authorship. Prerequisites: Junior or senior standing, MDA 365 or permission of instructor. (U)(3)

#### MDA 466. Audience Reception & Fandom:

Using qualitative research methods (data collection, field work, interviewing), students will explore the relationship of audiences and fans with mediated texts. Prerequisites: MDA 366, MDA 367 and senior standing or permission of instructor. (U)(3)

MDA 468. Women & 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)

MDA 470. Sports, Media & 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)

MDA 475. Internship in Media Arts: Onthe-job experience in a facility directly related to the student's degree objectives. Prerequisites: junior or senior standing, 25-30 credits in Media Arts courses and approval of the department chair. Majors only. (U)(6)

MDA 485. Internship in Media Arts: Onthe-job experience in a facility directly related to the student's degree objectives. Prerequisites: junior or senior standing, 25-30 credits in Media Arts courses and approval of the department chair. Majors only. (U)(9) MDA 490. Seminar in Media Arts: A group or individual study of the problems, achievements, and opportunities in the fields of digital production, media & 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 department chair. (U)(3)

#### Music

The mission of the School of Music is to provide the highest quality education in music within the university's liberal arts focus to both music majors, who are preparing for a professional career in music, and non-majors, who are enriching their human spirit. The faculty is committed to the musical development of each student in a challenging, nurturing environment through excellence in teaching, performance, scholarship and creativity, while serving the global community.

The School of Music is a fully accredited member of the National Association of Schools of Music (NASM).

#### Administration:

Daniel P. Bolin, Ed.D., chair; Doug Spaniol, D.M.A., assistant chair

Music preparation: The entrance requirements in all fields of music are similar to those adopted by the National Association of Schools of Music. An audition is required for majors. No audition is required for minors. Applicants are admitted to the program on the basis of academic acceptance by the university and an audition.

# Undergraduate degree programs:

- Bachelor of Arts in music
- Bachelor of Music in music educationchoral/general and instrumental/general (four-year program)
- Bachelor of Music in music education area (five-year program)
- Bachelor of Music in performance (orchestral instrument, piano and voice major)
- Bachelor of Music in piano pedagogy
- Bachelor of Music in composition
- Bachelor of Science in arts administration

#### Concentration in Jazz Studies

The Concentration in Jazz Studies may be earned concurrently with any music degree, although it is designed primarily for the BA degree. The concentration requires twenty-four (24) credit hours, of which twenty-one (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 BA degree. At Least 50% 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 Fine Arts to students who are not enrolled in a music major. It consists of twenty-four (24) semester hours, of which fourteen to sixteen (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 Fine Arts to students who are not enrolled in a music major. It consists of twenty-four (24) semester hours, of which twenty-two (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 chief executive of the School of Music.
- Each student who makes use of a universityowned 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 School of Music office.

#### Graduate degree programs:

- Master of Music in Composition
- Master of Music in Conducting (choral or instrumental)
- Master of Music in Music Education
- Master of Music in Music History
- Master of Music in Music Theory
- Master of Music in Performance (piano, voice or orchestral instrument)
- Master of Music in Piano Pedagogy

# Master of Music Degrees with a Double Major

Students may also earn a Master of Music (MM) 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 MM Degrees with a Double Major (PDF) 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 on-line (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.

#### **Applied Music**

Instruction is offered in the following for either undergraduate or graduate credit for music majors:

Bassoon Harp Trombone Cello Harpsichord Tuba Clarinet Horn Trumpet Contrabass Organ Viola Euphonium Percussion Violin Flute Voice Piano Guitar Saxophone

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.

**AM 011. Keyboard Skills I:** Basic piano techniques, sight-reading, transposition, improvisation, theory, ear training and repertoire analysis. For dance majors only. (U)(1)

**AM 012. Keyboard Skills II:** Continuation of AM 011. For dance majors only. Prerequisite: AM 011 or consent of the instructor. (U)(1)

AM 013. Keyboard Skills III: Continuation of AM 012 with emphasis on harmonization, analysis of repertoire, piano ensemble and contemporary techniques. For dance majors only. Prerequisite: AM 012 or consent of the instructor. (U)(1)

AM 014. Keyboard Skills IV: Continuation of AM 013. For dance majors only. Prerequisite: AM 013 or consent of the instructor. (U)(1)

**AM 021. 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)

AM 022. Keyboard Skills II: Continuation of AM 021. This course does not count toward piano requirements on degree programs. Prerequisite: AM 021 or consent of the instructor. (U)(1)

AM 023. Keyboard Skills III: Continuation of AM 022 and AM 021 with emphasis on harmonization, analysis, score reading, accompanying, transposition, piano ensemble and contemporary techniques. This course counts toward piano requirements on degree programs. Prerequisite: AM 021 or AM 022 or consent of the instructor. (U)(1)

**AM 024. Keyboard Skills IV:** Continuation of AM 023. This course counts toward piano requirements on degree programs. Prerequisite: AM 023 or consent of the instructor. (U)(1)

AM 125. 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)

**AM 126. Guitar Class II:** A continuation of AM 125, with emphasis on more advanced techniques. (U)(1)

**AM 127. 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)

**AM 128. 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)

**AM 130. 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)

**AM 131. Beginning Piano Class:** Introductory course for beginning pianists taught in a group setting. (U)(1)

**AM 132. Group Piano II:** Group Piano II is for non-JCFA students who have completed AM 131 or who already have late elementary piano skills. This course is designed to continue to develop skills in playing the piano. Prerequisite: AM 131 or consent of the instructor. (U)(1)

**AM 134. 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)

AM 151. Bassoon Reed-Making I: An introduction to the complete process of making German-style bassoon reeds. This is a "handson" 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)

AM 222. Voice Major Lab: For music and arts administration (music) majors for whom voice is the principle 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. (U)(0)

AM 251. 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, AM 131, or consent of instructor. (U)(1)

AM 298. Applied Studio Class: The Studio Class is an important component of private applied study wherein common issues such as repertoire, public performance, and career development are explored. Concurrent registration in major or secondary applied music is required. (U)(0)

**AM 299. 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. (U)(0)

**AM 300. 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. Prerequisite: AM 299 Upper Divisional Examination. (U)(0)

#### AM 351. 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, AM 251, or consent of instructor. (U)(1)

**AM 400. 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. Prerequisite: AM 299 Upper Divisional Examination. (U)(0)

AM 422. Voice Major Lab: For music and arts administration (music) majors for whom voice is the principle 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. Prerequisite: AM 299 Upper Divisional Examination. (U)(0)

**AM 450. Advanced Conducting:** Advanced conducting techniques, with emphasis on style, analysis and programming. Prerequisites: MT 311 and MT 321 or MT 322 and permission of department chair. (U)(2)

#### AM 497. 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: AM 299, concurrent enrollment

in 400-level applied music, permission of instructor. (U)(2)

**AM 498. Applied Studio Class:** The Studio Class is an important component of private applied study wherein common issues such as repertoire, public performance, and career development are explored. Concurrent registration in major or secondary applied music is required. (U)(0)

#### AM 551. Bassoon Reed-Making IV:

Advanced study of German-style bassoon reedmaking focused on making reeds for graduatelevel 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, AM 351, or consent of instructor. (U)(1)

**AM 600. Advanced Conducting:** Advanced conducting techniques, with emphasis on style, analysis and programming. (G)(2)

AM 622. Voice Major Lab: For music and arts administration (music) majors for whom voice is the principle 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)

**AM 698. Applied Studio Class:** The Studio Class is an important component of private applied study wherein common issues such as repertoire, public performance, and career development are explored. Concurrent registration in major or secondary applied music is required. (G)(0)

**AM 709. Recital:** Preparation and presentation of the required graduate recital. Applied major must be completed concurrently or earlier. The recital is graded P/F by a faculty committee. (G)(0)

**AM 710. 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 instructor. (G)(0)

**AM 799. Final Comprehensive Exam:** Required of all graduate students in performance or

conducting at the end of the final semester of study. The exam is oral and will cover the major components of the student's coursework and the final recital program. Examination to be graded P/F by a faculty committee. (G)(0)

#### Ensemble

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

ES 101, 301, 501. Chamber Music: (U/G)(1)

**ES 102, 302, 502.** Chamber Music: Guitar: (U/G)(1)

**ES 103, 303, 503. Chamber Music:** Arthur Jordan Saxophone Quartet: (U/G)(1)

ES 104, 304, 504. 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/G)(1)

ES 105, 305, 505. Madrigal Singers: A select chamber choir specializing in a cappella repertoire from the 15th/16th centuries. The Madrigal Singers also perform works from other style periods suitable for small vocal ensemble with or without instrumental accompaniment. Performs at annual Madrigal Dinners. Open to all Butler students through annual auditions. (U/G)(1)

ES 106, 306, 506. 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/G)(1)

ES 108, 308, 508. New Music Ensemble: A performing group devoted to the growing literature of works for groups of mixed instruments and for voice. Registration requires the permission of the instructor. (U/G)(1)

**ES 109, 309, 509. Baroque Ensemble:** A performing group devoted to the works of the Baroque period in mixed combinations of strings, winds, keyboard and voice. Registration requires the permission of the instructor. (U/G)(1)

**ES 113, 313, 513. Accompanying:** Practical training in accompanying through regularly scheduled class work and assigned studio participation. Prerequisite: Completion of piano class requirement or permission of the instructor. (U/G)(1)

**ES 116, 316, 516.** 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. The band performs concerts regularly in magnificent Clowes Memorial Hall. (U/G)(1)

**ES 117, 317, 517. University Choir:** A choir of mixed voices, open to all university students who are interested in choral singing. (U/G)(1)

ES 119, 319, 519. University Marching Band: Rehearsals of music and drill in connection with athletic events. Open to all university students. (U/G)(1)

ES 120, 320, 520. 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/G)(1)

**ES 121, 321, 521.** University Basketball **Band:** (U/G)(1)

**ES 122, 322, 522.** University Symphony: An organization with standard symphonic instrumentation performing works from traditional and contemporary literature. (U/G)(1)

**ES 124, 324, 524. 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. (U/G)(1)

**ES 125, 325, 525. Women's Glee Club:** Open to all soprano and alto singers. (U)(1)

**ES 126, 326, 526. Men's Glee Club:** Open to all tenor, baritone and bass singers. (U/G)(1)

**ES 127, 327, 527. 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/G)(1)

**ES 423, 523. 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/G)(1)

**ES 530, 531. 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, 2)

#### Music education

NOTE: Student Teaching: Student teaching with the guidance of the cooperating teacher and university supervisors. Students register through the College of Education for ED 425 and 426.

ME 101. Foundations in Music Education I: An introduction to the field of music education and the music education program at Butler University. On site experiences with K-12 students is required. Additionally, students will experience basic musicianship through Dalcroze and Laban activities. (U)(2)

ME 102. Foundations in Music Education II: A continuation of ME 101 with additional work in instrumental and vocal techniques and conducting. Continuation of field experiences and work in Dalcroze and Laban pedagogies. (U)(2)

ME 160, 360, 560. Practicum in Music Education: Supervised observation and participation in a teaching setting with K-12th grade 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/G)(1)

ME 161, 361, 561. Practicum in Music Education: Supervised observation and participation in a teaching setting with K-12th grade 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/G)(2)

**ME 190. Percussion Techniques I:** 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)

ME 191. Upper Strings Techniques: Teaching techniques and materials of the violin and viola. The class includes a performance lab and will meet two days per week for 50 minutes. (U)(1)

ME 290. Lower Strings Techniques: Teaching techniques and materials of the cello and string bass. The class includes a performance lab and will meet two days per week for 50 minutes. (U)(1)

ME 291. Brass Techniques 1: Teaching techniques and materials of the brass instruments The class includes a performance lab and will meet two days per week for 50 minutes. (U)(1)

ME 299. 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)

#### ME 325. 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 AM 299 and ME 299. (U)(3)

ME 326. 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 ME 424 or ME 426. Prerequisite: successful completion of AM 299 and ME 299. (U)(2)

#### ME 335. Vocal Jazz Pedagogy & 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)

ME 345, 545. 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 & video media, and MIDI technologies. Graduate students complete more rigorous parallel modules and portfolios. (U/G)(2)

ME 346, 546. Advanced Digital Arts for Music Educators: 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: Exploring the Digital Arts: Music or instructor consent. (U/G)(3)

ME 351. 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)

ME 380, 381, 382. Special Seminar: A course that addresses a specific aspect of music education. (U)(1, 2, 3)

#### ME 390. Clarinet and Flute Techniques:

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)

ME 391. Double Reed and Saxophone Techniques: 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)

ME 392. Brass Techniques II: Teaching techniques and materials of brass instruments. This class is a continuation of ME 291 and will explore brass instruments and techniques more fully. This class includes a performance lab and will meet two days per week for 50 minutes. (U)(1)

ME 393. Percussion Techniques II: Teaching techniques and materials of percussion instruments. This class is a continuation of ME 190 and will cover percussion instruments and techniques not discussed in ME 190. This class includes a performance lab and will meet two days per week for 50 minutes. (U)(1)

ME 400, 401, 402. 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, 2, 3)

ME 407. Instrumental Pedagogy & Repertoire: 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, practicum experiences within the instrumental techniques classes and elsewhere, and a final paper for graduate credit. (U/G)(2)

ME 411. 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)

**ME 412. 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)

ME 413. Teaching the Young Singer: This course will teach the fundamentals of healthy vocal production, and how to analyze and correct vocal problems in middle school and high school singers. Students will also learn how to find, evaluate and effectively teach solo music in the public school or private studio setting. Prerequisite: junior, senior or graduate standing. (U/G)(2)

ME 414. 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)

**ME 416. Piano Teaching Internship:** Piano teaching, under supervision, in a variety of settings and levels. Prerequisite: permission of instructor. (U/G)(1)

ME 417. Piano Pedagogy — Organization and Materials: An investigation of teaching materials at all levels of instruction. Information regarding studio organization and business practices. Development of functional skills. (U/G)(3)

**ME 418. Piano Pedagogy** — **Technique:** A consideration of the physiological manifestations of piano technique and its pedagogy. Development of functional skills. (U/G)(3)

ME 419. Piano Pedagogy — Psychology of Teaching: A discussion of learning, teaching and motivation theories applied specifically to piano instruction. Development of functional skills. (U/G)(3)

ME 420. 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. Development of functional skills. (U/G)(3)

ME 421. 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)

ME 423. Dalcroze Eurythmics in the Classroom: An introduction to the techniques of teaching music through movement. The development of piano improvisation to be used with movements. Prerequisite: functional piano skills. An extra project is required for graduate credit. (U/G)(2)

ME 424. 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 ME 326 and ME 425. Prerequisite: successful completion of AM 299 and ME 299. (U)(2)

ME 425. 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 ME 424 or ME 426. Prerequisite: successful completion of AM 299 and ME 299. (U)(1)

ME 426. 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 ME 326 and ME 425. Prerequisite: successful completion of AM 299 and ME 299. (U)(2)

**ME 432. 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: ME 325. (U/G)(2)

ME 443. Wind Instrument Repair: Minor repairs of wind instruments. What to do and what not to attempt in repairing. (U/G)(1)

ME 453. Music Materials for Special Education: Materials and techniques for the music education of the special learner. Observation of music in special education classes. (U/G)(3)

ME 480. 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 (ED 425 and ED 426) is required. (U)(1)

ME 481. Classroom Management Techniques for Music Special Education: Analysis of behavior and the use of music to produce behavioral changes in the special learner. Development of programs. An extra project will be required for graduate credit. (U/G)(3)

**ME 499. Honors Thesis:** (U)(3)

ME 511. 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)

**ME 521. Workshop in Piano Pedagogy:** Presentation of a three-hour public workshop for piano teachers dealing with teaching techniques and materials. (G)(2)

ME 530, 531, 532. Independent Study: An opportunity for the qualified student to pursue some investigative work upon his or her own initiative. Permission of the department chair and instructor. Prerequisite: graduate status. (G) (1, 2, 3)

ME 552. 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)

ME 580, 581, 582. 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 working together to collect and interpret all available material. Prerequisite: senior or graduate status. (G) (1, 2, 3)

**ME 636. Evaluation and Adjudication:** Criteria basic to contest and festival preparation, performance, evaluation, adjudication. (G)(1)

ME 657. Seminar in Instrumental Techniques: Modern procedures involved in teaching band and orchestral instruments. Methods of tone production and development of technical facility will receive emphasis. Prerequisite: Graduate status. (G)(2)

ME 661. Supervision and Administration of Music Education: The problems of curriculum and curriculum planning, the improvement of instruction, scheduling and budget planning. Special emphasis upon leadership qualities and public relations for the music program. Prerequisite: Graduate status. (G)(2)

ME 759. Thesis: A scholarly paper embodying the results of the student's research in some field of music education. (G)(3)

**ME 799. Final Comprehensive Exam:** Required of all graduate students in music education or piano pedagogy at the end of the final semester of study. The exam is oral and will cover the major components of the student's coursework and thesis, if applicable. Examination to be graded P/F by a faculty committee. (G)(0)

# Modern language diction

ML 106. Modern Language Diction: Phonetic training for accurate pronunciation of French, German and Italian. For non-music majors only. (U)(3)

ML 206. English & German Diction for Singers: Phonetic training for accurate pronunciation and artistic performance of English and German vocal literature according to the rules governing standard stage diction/ Bühnenaussprache. Training includes application of the International Phonetic Alphabet. (U)(2)

ML 208. Italian & French Diction for Singers: Phonetic training for accurate pronunciation and artistic performance of Italian and French vocal literature according to the rules governing puro italiano and la diction soutenue. Training includes application of the International Phonetic Alphabet. (U)(2)

### ML 306. 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: ML 206 or permission of instructor. (U)(1)

ML 308. 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: ML 206 or permission of instructor. (U)(1)

ML 400. 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)

## Music lyric theatre

MLT 110. Lyric Theatre Workshop: An integrated forum for the performance of music theatre in its varied forms: opera, musical theatre, cabaret and review. One full length, staged production will be offered each year, alternating between opera and musical theatre, with scenes from operas and musical theatre on alternating semesters. Membership by audition, freshman or sophomore status. (U)(1)

MLT 201. Acting I — Foundations in Acting: The singer/actor's introduction to the fundamentals of acting. Prerequisite: JCFA major or permission of instructor. (U)(2)

MLT 202. Acting II — Creating a Character: The singer's introduction to the fundamentals of character development. Prerequisite: MLT 201 or permission of the instructor. (U)(2)

MLT 203. Acting III — Period Expressions: The singer's introduction to the styles and expressions of a variety of theatrical periods and styles. Emphasis will be on scene work utilizing period movement, costuming, make-up, voice and presentation style. Prerequisite: MLT 202 or permission of instructor. (U)(2)

MLT 301. Musical Theatre I: This course acquaints students with the basic elements of song and character analysis required to effectively perform the song literature of the musical theatre. Prerequisite: MLT 201 or TH 110 or an equivalent college acting course, or audition or permission of the instructor. (U)(2)

MLT 302. Musical Theatre II: This course acquaints students with the process of creating a musical character. Prerequisite: MLT 301 or permission of the instructor. (U)(2)

MLT 303. Musical Theatre III: This course acquaints students with the process of preparing a musical theatre role and audition techniques. Prerequisite: MLT 302 or permission of the instructor. (U)(2)

**MLT 310. Lyric Theatre Workshop:** An integrated forum for the performance of

music theatre in its varied forms: opera, musical theatre, cabaret and review. One full-length, staged production will be offered each year, alternating between opera and musical theatre, with scenes from operas and musical theatre on alternating semesters. Prerequisite: membership by audition, junior or senior status. (U)(1)

## MLT 400. Lyric Theatre Senior Showcase:

This course serves as the culmination of the Lyric Theatre concentration. The student will conceive, produce and perform a performance piece which encompasses the student's integrated skills in singing, acting and dance. (P/F)(U)(1)

## MLT 510. Lyric Theatre Workshop: An

integrated forum for the performance of music theater in its varied forms: opera, musical theatre, cabaret and review. One full-length, staged production will be offered each year, alternating between opera and musical theatre, with scenes from operas and musical theatre on alternating semesters. Prerequisite: membership by audition, graduate status. (G)(1)

# Music history

MH 110. Music: A Living Language: 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. (U)(3)

## MH 305. Music History and Literature I:

A study of the evolution of music from its primitive origins through the Middle Ages and Renaissance. (U)(2)

# MH 306. Music History and Literature II:

A study of the evolution of music from the Baroque Era through the Classical Period. (U)(3)

# **MH 307. Music History and Literature III:** A study of the evolution of music in the 19th

A study of the evolution of music in the 19th and 20th centuries. (U)(3)

MH 308. World Music: Basic concepts of ethnomusicology and a survey, including class performance. Repertories include Japanese Gamelan, Indian Raga, Sub-Saharan, Islamic African, and South\American music. U.S. jazz and blues will also be viewed. Prerequisite: MT202. (U)(2)

MH 380, 381, 382. Special Seminar: A research course in music history with students and faculty working together to collect and interpret material. (U) (1, 2, 3)

## MH 400, 401, 402. 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, 2, 3)

MH 405. American Music: Music in the United States from the 17th century to the present. Course limited to music majors. Prerequisite: MH 306 or concurrent registration. (U/G)(3)

## MH 406. 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)

MH 408. The History and Literature of Jazz: Historical development of jazz styles, from their folk origins through contemporary experimental styles. (U/G)(2)

MH 410. Final Music History Paper: The culminating project for the emphasis in music history. P/F. (U)(0)

MH 412. The Art Song: The rise of the art song. A study of the works of the leading composers in the idiom. (U/G)(3)

MH 415. Piano Literature I: A survey of the solo literature of the piano and its predecessors, beginning with early clavier music and continuing through Beethoven. Emphasis on Bach and the Viennese classic composers. Prerequisite: Senior status or permission of instructor. (U/G)(3)

MH 416. Piano Literature II: A survey of Romantic and 20th century piano literature, beginning with Schubert and continuing through Bartók, Schoenberg, and post-1950 compositions. Prerequisite: Senior status or permission of instructor. (U/G)(3)

#### MH 430. 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)

MH 431. Woodwind Repertoire: In this course, students will become familiar with woodwind solo and chamber repertoire, study specific works in detail, examine various influences on the development of the repertoire, and discuss issues relating to concert programming, interpretation, and pedagogy. A final paper is required for graduate credit. (U/G)(3)

## MH 440. Survey of American Musical

**Theatre:** A history and survey of the significant repertoire and style development in American Musical Theatre. Students will carefully examine the book, lyrics and music of masterworks, as well as attend and critique live performances. Prerequisite: junior standing or consent of instructor. (U/G)(3)

## MH 441. Special Studies in Opera Literature:

Examination of selected operatic literature drawn from local and regional professional-quality productions. Two to 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 standing or consent of instructor. (U/G)(3)

MH 442. 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 17th through the 20th centuries. Prerequisite: junior standing or consent of instructor. (U/G)(3)

MH 451. Survey of the Symphony: The evolution of the symphony from the Mannheim group to modern times. Prerequisite: MH 306. Offered alternate years. (U/G)(3)

MH 452. Survey of Chamber Music: Chamber music from Haydin to the present with particular consideration of the piano trio and the string quartet. Prerequisite: MH 306. Offered alternate years. (U/G)(3)

MH 453. History of Film Music: Survey of film music from the early 20th-Century 'silents' to the 'Golden Age' (1933-1949), the 'Silver Age' (1950-1980), and contemporary films. Also included are studies of music for animation (features, cartoons), 1930-1940's movie house serials, experimental films and documentaries, 'art films', and 20th-Century European cinema (German, Italian, French, Japanese, Scandinavian). (U/G)(3)

MH 454. History of Rock and Rock: This course investigates the roots of rock music (minstrel shows, jazz, blues, etc.), provides an in-depth look at rock's golden age (the 1950's) 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)

**MH 499. Honors Thesis:** (U)(3)

MH 500. 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)

MH 501. Music of the Renaissance: Music and musicians from the Burgundian School in the 15th century to the vocal and instrumental music of the late 16th century. Prerequisite: graduate status. (G)(3)

MH 502. Music of the Baroque Era: Music and musicians through the vocal and instrumental forms from the end of the 16th century to the middle of the 18th century. Prerequisite: graduate status. (G)(3)

MH 503. 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)

MH 504. 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)

#### MH 505. 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)

#### MH 506. Post-Modern Music, 1945-Present:

Contemporary music with emphasis on avantgarde 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) MH 510. Seminar in Choral Literature: This course will study the choral music of 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. (G)(2)

MH 520. 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)

MH 530, 531, 532. 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, 2, 3)

MH 580, 581, 582. 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, 2, 3)

**MH 613. The Concerto:** The evolution of the modern concerto with emphasis placed on those written for the piano and the violin. Prerequisite: graduate status. (G)(2)

**MH 621. Aesthetics:** Principles of aesthetic theory in all art forms with specific application to music. (G)(2)

**MH 729. Thesis:** A scholarly paper in some field of music history and literature. Prerequisite: graduate status. (G)(3)

## MH 799. 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)

# Music theory

282

MT 100. 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)

**MT 101. Theory I:** An introduction to the principles of music analysis, including functional harmony, part writing and form. Prerequisite: MT 100 or permission of instructor. (U)(3)

MT 102. Theory II: An introduction to the principles of music analysis, including functional harmony, part writing and form. Prerequisite: MT 101 or permission of instructor. (U)(3)

MT 104. Musical Skills for the Recording Industry: The course includes a review of music fundamentals and continues with practical application in jazz theory/harmony, popular and folk music. Prerequisites: MT 100 or successful completion of the music theory placement exam required. (U)(4)

MT 105. Functional Piano Skills I: This is designed as the 1st semester of a two semester sequence. These courses replace MT 305. Students will take MT 105 and MT 106 in their freshmen year. The course is intended for Keyboard Majors. It will cover transposition, modulation, accompaniment, sight reading, improvisation, and open score reading. (U)(2)

MT 106. Functional Piano Skills II: This is designed as the 2nd semester of a two semester sequence. These courses replace MT 305. Students will take MT 105 and MT 106 in their freshmen year. The course is intended for Keyboard Majors. It will cover transposition, modulation, accompaniment, sight reading, improvisation, and open score reading. (U)(2)

MT 111. Aural Skills 1: Singing, writing and auditory recognition of melodic and harmonic materials, melodies and rhythms. Prerequisite: MT 101 or concurrent enrollment in MT 101. (U)(1)

MT 112. Aural Skills 2: Continuation of MT 111. Prerequisites: MT 111 and concurrent enrollment in or successful completion of MT 102. (U)(1)

MT 119. Introduction to Composition: A basic introduction to composition through the study and "imitation" of selected composers and styles. Technique, craftsmanship and attention to artistic and practical detail are emphasized through weekly assignments and a final, large chamber composition. For compo-

sition majors only. Prerequisite: permission of instructor. (U)(3)

MT 201. Theory 3: Advanced theory including counterpoint and chromatic harmony. Prerequisites: MT 102 and MT 111. (U)(3)

MT 202. Theory IV: Advanced theory including counterpoint, chromatic harmony, and 20th century analysis. Prerequisites: MT 112 and MT 201. (U)(3)

MT 211. Aural Skills 3: Signing, writing and auditory recognition of more complex melodic, harmonic and rhythmic materials. Prerequisites: MT 112 and concurrent enrollment in or successful completion of MT 201. (U)(1)

MT 212. Aural Skills 4: Continuation of MT 211. Prerequisites: MT 211 and concurrent enrollment in or successful completion of MT 202. (U)(1)

MT 219. Composition: Introduction to the larger forms of the 18th and 19th centuries; beginning exercises and study of the problems in the use of contemporary techniques and structures. For composition majors only. Prerequisite: MT 119 or permission of instructor. (U)(3)

MT 303. Band Arranging: Ranges, transposition, color and technical nature of the instruments of the concert band; basic principles of band arrangement; texture and balance of standard instrumental combinations. Prerequisite: MT 202. (U)(2)

MT 305. Keyboard Harmony: Studies at the keyboard in transposition, modulation, simple accompaniment, improvisation and easy score reading. Prerequisite: MT 202. (U)(3)

MT 307. Choral Arranging: Arranging folk songs for the various combinations of voices available in the school and professional fields; choral effects; accompaniment writing. Prerequisite: MT 202. (U)(2)

MT 308. Orchestration: Ranges, transposition, color and technical nature of the orchestral instruments; basic principles of orchestral writing; texture and balance of standard orchestral combinations. Prerequisite: MT 202. (U)(3)

**MT 311. Basic Conducting:** The fundamentals of conducting, including the basic beat patterns

and the accepted methods of indicating meter, tempo, volume and style. Prerequisite: MT 202. (U)(2)

MT 313. 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: MT 202. (U)(3)

MT 317. Counterpoint: Contrapuntal techniques from late Renaissance through 20th century. Selected representative composers will be included with emphasis on works of J.S. Bach. Prerequisite: MT 202. (U)(3)

MT 319. 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. Prerequisites: MT 202 or permission of the instructor. (U)(3)

MT 321. Instrumental Conducting: The fundamentals of instrumental conducting with emphasis on style and interpretation. Prerequisite: MT 311. (U)(2)

MT 322. 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: MT 311. (U)(2)

MT 333. Jazz Theory: This course will focus on understanding jazz improvisation through the study of harmony, chord and scale function, form, rhythm, meter, and articulation as they relate to the jazz idiom. Transcribed solos by jazz masters will be studied. Prerequisite: MT 102. (U)(2)

MT 335. 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)

MT 338. Jazz Styles: A study of jazz improvisation innovators, styles of improvisation, selection of a performer to transcribe, and a project focusing on a performer of the student's instrument. Prerequisite: MT 333. (U)(2)

MT 339. 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: MT 333. (U)(2)

MT 380, 381, 382. Special Seminar: A research course in music theory with students and faculty working together to collect and interpret available material. (U)(1, 2, 3)

## MT 400, 401, 402. 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, 2, 3)

MT 404. Commercial Arranging: Arranging for small and large studio bands and orchestras; practice in arrangement layout and the writing of backgrounds, ensembles, introductions, interludes, modulations and codas. Prerequisites: MT 303, 308 or the equivalent as acceptable to the instructor. (U/G)(2)

## MT 406. 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: MT 202 or equivalent. (U/G)(3)

MT 408. 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)

MT 409. Final Composition Project: The culminating project for the emphasis in composition. Pass/ Fail. (U)(0)

MT 410. Final Music Theory Paper: The culminating project for the emphasis in music theory. P/F. (U)(0)

MT 419. Composition: Exercises in the larger musical forms of the 18th and 19th centuries; problems in the use of contemporary techniques and structures. For composition majors only. Prerequisite: 9 hours of MT 219 or permission of the instructor. (U)(3)

MT 420. Electronic Composition: Composition of music employing electronic means; this may include recording, sampling, sequencing, MIDI topics and other types of electroacoustic techniques. Prerequisite: MT 440-441. (U)(3)

### MT 440. Introduction to Electronic Music:

Introduction to the topic of electronic music; its history, its underlying principles and science, and an introduction to composing music in a recording studio. Basic editing, musique concrete and synthesis are emphasized. Prerequisites: MT 202 or consent of the instructor. (U/G)(2)

#### MT 441. Advanced Electronic Music:

Continuation of MT 440 – advanced topics focus on compositional techniques, advanced computer sequencing, interactive media composition and some theatrical sound design. Prerequisite: MT 440. (U/G)(2)

MT 444. Jazz Improvisation 1: A practical course in the development of improvisational skills, as well as the concepts necessary in the jazz tradition. Prerequisite: MT 202. (U/G)(2)

MT 445. Jazz Improvisation 2: A continuation of Jazz Improvisation 1. Transcription, song memorization, and CD reviews become the focus. Prerequisite: MT 444. (U/G)(2)

**MT 499. Honors Thesis:** (U)(3)

## MT 509. 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: MT 202 or equivalent. (G)(3)

MT 510. 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: MT 202 or equivalent. (G)(3)

## MT 511. Text and Music Analysis: This

course explores the interrelationships between text and how they are set to music. Students learn how to analyze poetry/ prose, as well as how to analyze both tonal and post-tonal vocal works. Emphasis is placed on how the music and the text inform each other. Prerequisite: MT 202 or equivalent. (G)(3)

MT 513. Analysis in Relation to Performance: A study of musical structure as a basis for understanding the content and presentation of standard literature. Prerequisite: MT 202 or equivalent. (G)(3)

MT 517. 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: MT 317 or equivalent. (G)(3)

MT 530, 531, 532. 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, 2, 3)

## MT 550. 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)

MT 580, 581, 582. 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, 2, 3)

MT 603. Graduate Conducting Seminar: Score study and practical application of advanced conducting techniques. (G)(1)

## MT 604. Advanced Keyboard Harmony 1:

Studies at the keyboard in the realization of figured and unfigured basses, melody harmonization and advanced score reading. Prerequisite: successful completion of piano placement exam or permission of the instructor. (G)(2)

MT 605. Advanced Keyboard Harmony II: A continuation of MT 604; solo improvisation. Prerequisite: MT 604. (G)(2)

MT 619. Advanced Composition: Composition in the larger musical forms, employing complex textural and formal procedures. Prerequisite: 9 credits of MT 419 or permission of the instructor. (G)(3)

MT 620. Advanced Electronic Composition: Advanced techniques in the composition of

electronic music, emphasis on larger forms, computer music, production and other advanced techniques. Prerequisite: MT 440 & 441 or consent of instructor. (G)(3)

MT 708. 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)

MT 709. Thesis: Composition: An original composition in on of the larger forms. (G)(3)

MT 710. Thesis-Composition: An original composition in one of the larger forms. Concurrent registration in laboratory required. (G)(3)

MT 729. Thesis: Theory: A scholarly paper in some field of music theory. (G)(3)

## MT 799. 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. (U)(0)

## Theatre

The Department of Theatre is dedicated to the exploration of the ever-evolving practices of international theatre through a structured approach to the histories, theories, techniques and processes of performance.

The Department of Theatre is fully accredited by NAST (The National Association of Schools of Theatre).

#### Administration:

Owen W. Schaub, Ph.D. Interim department chair

## Majors and minors:

- B.A. in Theatre
- B.S. in Arts Administration/Theatre concentration
- The College of Education offers a K-12 Theatre Arts Licensure program which B.A. Theatre students are eligible to take.
- Minor in Theatre

Requirements: 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 and related courses in other departments. The B.S. in Arts Administration/Theatre concentration requires completion of a total of 128 credit hours. The Licensure in Teaching requires an additional 41 credit hours in the College of Education and specific testing requirements for admission to the program and licensure for the State of Indiana.

The minor in theatre requires 24 credit hours in theatre, 10 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.

#### Courses

#### TH 100. 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 pass/fail course and must be successfully completed four times to meet graduation requirements in the theatre major. Open to Theatre majors only. (U)(0)

TH 105. Theatre as a Visual Art: To provide freshman theatre majors with a foundation for the principles of design in stage productions. In addition to regular class sections, students will be required to attend theatre productions in the region and exhibitions at local art galleries. Required of all Freshman Theatre majors. Open to Theatre majors only. (U)(3)

TH 110. Introduction to Acting: Scene study including basic techniques of performance with experience in preparation and presentation. For non-majors. (U)(3)

TH 111. 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)

TH 112. Acting II: Fundamentals of performance preparation. Includes the preparation

and class presentation of a series of scenes selected from major theatrical works. Prerequisite: TH 111. Audit only with consent of instructor. (U)(3)

TH 113. The Idea of Theatre: Introductory foundation course exploring the theory and practice of performance. Required of all freshmen theatre majors. Open to Theatre majors only. (U)(2)

TH 114. The Idea of Theatre II: Viewing and critical analysis of professional theatre productions in the region. Required of all freshman theatre majors. Open to Theatre majors only. (U)(2)

TH 115. Introduction to Acting II: This course is intended for the non-theatre major who wishes to further pursue the craft of acting. The student may wish to pursue acting as an avocation, or to apply the skills (focus, vocal and physical control and specificity, relaxation and readiness) to another area of interest. Prerequisite: TH 110. (U)(3)

TH 123. Makeup: Exploration of twodimensional modeling techniques as an aspect of character portrayal. Open to Theatre majors only. (U)(2)

TH 200. Production Fundamentals: Introduction to the study and practice of theatrical production. Exploration of the inter-relationship of theatrical production design and technology to performance. Laboratory experience included. Open to Theatre majors only. (U)(2)

TH 201. Stage Movement: Designed to enhance the beginning actors coordination, motor skills, and kinesthetic ability. Includes study of preparation, relaxation and concentration techniques for actors. Limited to Theatre majors or permission of instructor. (U)(1)

TH 202. Voice for the Actor I: Vocal production techniques for theatrical performance with an emphasis on the speaking voice. Limited to Theatre majors. (U)(2)

TH 203. Voice for the Actor II: Vocal production techniques for theatrical performance with an emphasis on the speaking voice. Prerequisite: TH 202. (U)(2)

TH 204. 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)

TH 205. Vocal Music for Theatre Majors II: Course will address music skills and repertoire appropriate for musical theatre auditions. Prerequisite: TH 204 or permission of the instructor. (U)(2)

TH 210. Stage Movement II: Expanding on skills and methods taught in Stage Movement. Prerequisite: TH 201 (U)(1)

TH 212. Stage Movement III: Advanced Stage Movement techniques and skills. Prerequisite: TH 201 and TH 210. (U)(1)

TH 213. Acting III: Analysis of the verse structure of Shakespeare and his contemporaries with application in language usage through performance. Prerequisites: TH 111, 112. (U)(3)

TH 220. 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)

TH 231. 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: TH 200 or permission of instructor. (U)(3)

TH 232. 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)

TH 233. 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)

#### TH 300. Professional Theatre Practices:

Development of professional rehearsal, performance and production techniques and discipline. Enrollment in this course is required of juniors or seniors in the theatre program.

This is a pass/fail course and must be successfully completed four times to meet graduation requirements in the theatre major. Open to Theatre majors only. (P/F)(0)

TH 302 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)

TH 314. Acting III: Development of preparation and performance skills in acting, with an emphasis on character study and ensemble acting for the modern theatre. Prerequisites: TH 111, 112, 213. (U)(3)

TH 316. Theatre & Film: This course explores the influence of theatre on film narrative and imagery. Topics include: Shakespeare on Film; Fellini and the Circus; Expressionist Film; Character-based improvisation in the films of Mike Leigh; Asian Theatre Techniques in Film.

TH 320. 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)(2)

TH 322. History of Theatre I: Development of early European theatre and drama from antiquity to Moliére. (U)(3)

TH 323. History of Theatre II: Development of American theatre and drama from the colonial period to 1917 and the rise of the art theatre. (U)(3)

TH 324. Survey of Historical Costume: An historical survey of dress and how it relates to theatrical costuming. (U)(3)

TH 325. 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. Prerequisite: TH 105. Open to Theatre majors only. (U)(3)

TH 326. Advanced Makeup Projects: Creating and executing makeups involving advanced and complex techniques. Prerequisite: TH 123.

JORDAN COLLEGE OF FINE ARTS

- **TH 330. 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: TH 200, 231, 232. (U)(2)
- **TH 331. Scenography:** Advanced problems in theatre technology; new materials, production planning and introduction to scenography. Prerequisite: TH 105 and TH 231. (U)(3)
- **TH 332. Stage Lighting II:** Advanced technology and design for drama, dance and opera. Also lighting for various physical theatre types. Prerequisite: TH 232. (U)(3)
- **TH 333. Play Analysis:** Form and structure of the written play as it relates to acting, directing and the staged production. Open to Theatre majors and minors only. (U)(3)
- **TH 335. Principles and Practice of Children's Theatre:** The literature of children's theatre with particular emphasis on theatre forms for children in grades 1–8. (U)(2)
- TH 380, 381, 382. 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, 2, 3)
- **TH 385W. Dramatic Literature II:** This writing intensive 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)
- **TH 400, 401, 402. 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, 2, 3)
- TH 403, 404, 405. 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, 2, 3).
- **TH 410. Acting Seminar 1:** Advanced study in one acting technique. Prerequisite: Junior

288

- or Senior status. Open to Theatre majors only. Repeatable for grade X2. (U) (3)
- TH 411. 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 TH 111, 112, 231, 232 and 333. (U)(3)
- **TH 412. 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: TH 411. (U)(3)
- TH 414. Seminar in Theatre Management: An introductory study of managerial functions and practices in theatre arts. Prerequisite: junior or senior. (U)(3)
- **TH 416. Acting Seminar II:** In-class preparation and presentation of major plays with emphasis on character study, development and execution. Ensemble acting is stressed. Prerequisites: TH 314 and junior or senior standing. Repeatable for grade X2. (U)(3)
- **TH 417. Drama Research:** Research and writing of a term paper on some aspect of the theatre or drama. Prerequisite: junior or senior status. (U)(2)
- **TH 419.** 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)(2)
- **TH 420. Audition and Portfolio:** Performance: Development of audition & 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. (U)(2)
- **TH 421. Audition & 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. (U)(2)
- **TH 422. History of Theatre 3:** Development of European theatre and drama from the English Restoration to World War 1. (U)(3)
- **TH 423 W. History of Theatre 4:** This writing intensive course explores the development of American theatre and drama from the immediate post World War 1 era to the new millennium. (U)(3)
- **TH 424. History of Theatre 5:** Development of European theatre and drama in the 20th century. (U)(3)
- **TH 426 W. Playwriting & 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)

- **TH 482. 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)
- **TH 496. Internship in Theatre:** Professional internship with equity theatres under the supervision of departmental faculty and the staff. Repeatable X2. (U)(3)
- **TH 498. 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)
- **TH 499. Honors Thesis:** Prerequisite: approval of instructor Open to Theatre majors only. (U)(3)



# GRADUATE STUDIES

Graduate education has been an integral part of Butler University since 1932. Over the years, programs have evolved to meet the growing needs of an increasingly educated and diverse society. Graduate offerings may lead to advanced degrees or new professional credentials, and graduate level courses are offered in a number of departments for personal enrichment.

#### **Contact Information**

Office of Graduate Admission Butler University 4600 Sunset Avenue Indianapolis, IN 46208-3485 Local: (317) 940-8100 Toll free: (888) 940-8100 Fax: (317) 940-8150 E-mail: 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 web site, or you may contact any of the colleges or departments listed below:

#### College of Liberal Arts and Sciences

Master of Arts in English (Jordan Hall, Room 308, 940-9859) Master of Fine Arts in Creative Writing (Jordan Hall, Room 308, 940-9859) Master of Arts in History (Jordan Hall, Room 349, 940-9680)

## College of Education

(Graduate Studies Office, Jordan Hall, Room 246, 940-9501)

Educational Administration programs: Master of Science in Education Administration Experiential Program for Preparing School Principals (EPPSP)

Effective Teaching and Leadership Program (METL): Master of Science in Education School Counseling: Master of Science in School Counseling

#### College of Business

(Holcomb Building, Room 130, 940-9221) Master of Business Administration Master of Professional Accounting

#### Jordan College of Fine Arts

(Lilly Hall, Room 138B, 940-9656) Master of Music in:

Composition

Conducting (choral or instrumental)

Music Education

Music History

Music Theory

Performance (piano, voice or orchestral

instrument)

Piano Pedagogy

MM Degree with a double major

### College of Pharmacy and Health Sciences

(Pharmacy Building, Room 107, 940-9323) Master of Science in Pharmaceutical Sciences, Concentrations: pharmaceutics, pharmacology, medicinal chemistry, pharmacy administration and clinical sciences

Master of Physician Assistant Studies

## **General Information**

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 Admission. An official transcript with a baccalaureate degree posted must be mailed directly from the issuing institution to the Office of Admission. Applications and supporting materials must be received one week prior to the first day of the term.

If a non-degree student chooses to enter a graduate degree program, the student must complete a graduate degree-seeking application and follow the application procedures for that graduate program. Check with the Office of Admission for exact dates.

A maximum of 12 graduate credit hours completed as a non-degree student may be applied toward the selected degree program. Prospective students should check with 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. In the case of some programs, admission also is based upon scores received on standardized tests such as the Graduate Record Examination (GRE), the Miller Analogies Test (MAT) and the Graduate Management Admission Test (GMAT). These test scores are valid for five years.

Students whose first language is not English must demonstrate English proficiency by one of the methods listed below, 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.

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.

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. The following must be submitted by all candidates to be considered for admission to Butler University's graduate programs:

- 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 (internetbased test), or 550 (paper-based 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 wish 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. Grades of A or B must have been received and the courses must be acceptable to the student's 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

From the date when the first graduate course to be applied toward the degree 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.

Grade point average: Students must achieve a grade average of B or better in all graduate courses attempted. No course with a grade below a C is deemed to satisfy the degree requirements. While grades below 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 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: A full time student must be taking a minimum of 9 and a maximum of 12 credits of graduate eligible courses per semester. 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 4 years would be 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 in the program must take a minimum of 3 credits per semester and complete all degree requirements within a maximum of 7 years, with the didactic coursework being completed within 5 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 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.

## 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 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 and maintain approved health insurance during the course of study. There is no assurance of financial assistance for any admitted applicant.

The freedom to leave the program, for any reason and at any time, will be available to all students; however, untimely withdrawal from the program causes financial and emotional distress to the university community. Therefore, to protect the university's investment, it is the policy that any student accepting the stipend as graduate assistant is expected to complete the MS program. Any such student leaving the program prior to completion and without compelling 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 involves an intensive curriculum consisting of didactic courses and thesis research. Successful completion of the MS in Pharmaceutical Sciences degree will require at least 30 semester credit hours with not less than 6 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)

RX 780. Current Topics in Pharmaceutical Sciences: (G)(1)

RX 781. Seminars in Pharmaceutical Sciences: (G)(1)

Each student will be enrolled in 1 credit hour of Current Topics in Pharmaceutical Sciences or Seminar in Pharmaceutical Sciences per semester, for a minimum of 4 total credits in the program. Each student is required to present at least two seminars as part of his/ her Masters program, one of which may be the thesis defense. Students must enroll in RX 781 during the semester when their seminar presentation will take place, and RX 780 during the remaining semesters. Regardless of the course that they are enrolled in, all graduate students are required to attend all graduate seminars presented in COPHS.

RX 782. Ethics in Research: (G)(1) RX 783. Introduction to Pharmaceutical Research: (G)(2) RX 784. Experimental Design and Data Analysis: (G)(2) RX 785. Biopharmaceutical Analysis: (G)(3)

#### **Elective Courses**

RX 627. Pharmacology for Science Majors
— II Prerequisite: RX 625. (U-G)(3)
RX 628 Cardiovascular & Renal
Pharmacology: (U-G)(3)
RX 630. Advanced Toxicology: (U-G)(3)
RX 786. Advanced Drug Delivery: (G)(3)
RX 787. Industrial Pharmacy — Preformulation & Product Development: (G)(3)
RX 788. Molecular Pharmacology: (G)(3)

Additional elective courses will be included as per the recommendation of the Research and Graduate Review Committee. A non-pharmacy major student is advised to take Pharmacology for Science Majors. Additionally, 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.

## Transfer of credits

Not more than nine graduate-level credits relevant to the student's program of study may be transferred from an accredited United States Master's program. A petition must be submitted to the Director of the Graduate Program with the details of the syllabus, topics and name of the instructor(s) for review by the appropriate committee. Graduate credits taken more than five years ago will not be considered for transfer.

# Academic progress

Academic progress of the M.S. students will be evaluated by the Research and Graduate Review Committee. Master's students must maintain a minimum cumulative GPA of 3.00 for satisfactory continuation of study. Students with a cumulative GPA below 3.00 will be placed on probation. Any appeal for non-research course grade dispute 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 Dean. A decision of the thesis committee on the thesis and the thesis defense will be considered final.

## Research proposal

A research proposal summarizing the goals, objectives and a timeline of the research project must be submitted within 6 months 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 students' interest, it is not advisable to involve them in any classified or proprietary research.

## **MS** Thesis

Each student is required to submit a thesis prepared on the research findings. The thesis should be compiled following the format provided.

## **Publication**

The research project should aim at publication of the findings in peer reviewed research journals and submission of the work as preliminary data for extramural funding by the research advisor.

## Thesis defense

The student will present an open seminar and appear for an oral examination by the thesis committee. The committee will recommend the graduation of the student to the Dean of COPHS subject to satisfactory completion of the didactic courses and other requirements.

## **Professional Conduct Code**

Above and beyond all guidelines mentioned above, the Professional Conduct Code, as outlined in the Butler University College of Pharmacy and Health Sciences Student Handbook, will be applicable for each student.

# Student ownership of intellectual property

For students who work with one or more employees (faculty and/or staff) of the University, with or without compensation by the University or an external source, if the work of the employee(s) is (are) considered "substantial use," then the work performed by the student shall be considered as involving

"substantial use" of University resources under this policy. This statement applies to "substantial use" as it relates to all intellectual property rights, including Inventions, Software, and Copyrightable Works. Thus, for example, all patent rights arising from a student's participation in a faculty member's research project performed using University resources shall be considered to have been developed with "substantial use" as it relates to Patents, and, in accordance with this Policy, shall belong to the University and the faculty member as per the US Patent Law as it applies to the institution and the inventor, respectively. 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, all copyright rights arising from the student's participation shall be considered to have been developed with "substantial use" as it relates to Copyrightable Works, and, in accordance with this Policy, shall belong to the University and the faculty member as per the U.S. Patent Law as it applies to the institution and the inventor, respectively; however, the student may be included as one of the inventors at the recommendation of the faculty member, upon approval of the Dean.

# College of Liberal Arts and Sciences

## Master of Arts; Master of Fine Arts English – MA, MFA 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" section) students should refer to the application for admission for additional materials needed for specific programs.

# College of Education

**Admission:** In addition to the general requirements of all candidates for graduate admission (see "applying for graduate admission" section) students should submit the following materials

to the Office of Admission:

- GRE score of 875 or higher or MAT scaled score of 396 or higher. Exceptions:
  1) Students who have already completed a master's degree; or 2) students whose undergraduate cumulative GPA is 3.0 or higher, or 3) students who have 15 hours graduate work with a 3.5 or higher.
- Additional materials required as indicated on the Application for Graduate Admission.

# College of Business Master of Business Administration (MBA)

The master of business administration degree program is designed to provide an understanding of

- leadership, including sensitivity to a changing workforce and the effects of diversity in decision making,
- legal and ethical behavior and the impact of government regulation on business,
- the influence of political and social environments on business, and
- the international economy.

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" section), 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

296

- November 15 for spring term
- March 15 for summer term

# Three components comprise the MBA curriculum:

The program requires 33 graduate credit hours. Students also may have to complete up to 10 hours of foundation courses, depending upon grades and the currency of business-related courses in their undergraduate curriculum.

Foundation courses provide the necessary background and competency in functional areas to prepare for the graduate core courses.

Graduate core courses offer an integrated framework on contemporary leadership perspectives and management practice. Analytical tools and ethical aspects of decision making are discussed and debated. International business considerations are an important part of the coursework and at least one international course is required of all MBA students. The objective is to provide the student with an integrated management educational experience appropriate for leaders in a dynamic business environment and a growing international economy.

Concentrations offer focused study in international business, finance, marketing or leadership.

# Master of Professional Accounting (MPA)

The master of professional accounting degree program is designed to prepare the student to successfully enter the public accounting industry and to ready them for the CPA exam by enabling them to satisfy the 150 hours of post-secondary education requirement.

Admission: The MPA admission process and deadlines are the same as the MBA program.

# College of Pharmacy & Health Sciences

# Master of Science in Pharmaceutical Sciences degree

The College of Pharmacy & Health Sciences (COPHS) at Butler University 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, pharmaceutical sciences or other appropriate degrees. Following admission, any applicant identified to be deficient by the Research & Graduate Review committee with a bachelor's level background in chemical or biological sciences will be required to take courses in the respective areas in addition to the MS in Pharmaceutical Sciences requirements.

## Requirements:

- Bachelor's Degree in appropriate discipline with a minimum 3.00 GPA or equivalent (official transcript required).
- Aptitude tests (official scores must be received from Educational Testing Services, NJ).
- Test of English as Foreign Language (TOEFL)(not required of anyone with a US Bachelor's degree). Either (i.) or (ii.):
  - Computer Based Test (CBT): Minimum total score of 213 with minimum scaled score of 21 on each of the Listening and Structure/Writing sections.
- Internet Based Test (iBT): Minimum total score of 79 with minimum score of 21 on each of the Listening, Writing and Speaking sections.
- Graduate Record Examination (GRE).
   Each applicant is required to submit a GRE score.
- A brief resume
- A personal statement indicating a specific area of research interest and career goals.
- Three letters of recommendations 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 would be immediately responded to either by the Admissions Office or the Department of Pharmaceutical Sciences; however, the formal application could ONLY be made to the Admissions 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 Graduate Program at COPHS, in discussion with the interested research faculty, will send the recommendations to the Admissions Office.

Master of Physician Assistant Studies

– See the College of Pharmacy and
Health Sciences' chapter for more
information.

## Jordan College of Fine Arts Master of Music

Composition

Conducting (choral or instrumental track)
Music Education (thesis or non-thesis track)

Music History

Music Theory

Performance (piano, voice or orchestral instrument)

Piano Pedagogy (thesis or non-thesis track)

# MM Degrees with a Double Major

Students may also earn an MM 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 MM Degrees with a Double Major on the website.

### A. Admission Requirements

Applications for graduate admissions in music must be completed by February 15. Students applying after February 15 may be considered if space is available. Standard admission requirements (included for every degree plan):

 The School of Music Graduate Application, is available online from the school of music. The application should be mailed directly to the School of Music Director of Graduate Studies.

GRADUATE 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 on-line. 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%) 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 a 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 Street; 317-257-7546.) Butler's GRE code is 1073.
- 5. Three letters of recommendation. The letters must be on letterhead stationery 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 (computer-based 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 Admissions 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 United States Bureau of Citizenship and Immigration Services and the U.S. Department of State require non-immigrant 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 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.

**Music Theory:** A representative analysis paper from the applicant's undergraduate music theory work is required and should be submitted to the Director of Graduate Studies along with the School of Music application. In addition, the applicant must arrange for a personal interview with the music theory faculty of the School of Music.

**Performance:** An audition is required; an audition tape, preferably a videotape, 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 videotape or DVD demonstrating teaching abilities, must be sent to the School of Music Director of Graduate Studies, postmarked no later than one week before the audition date.

# B. MM 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. Sight-reading 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 Admissions 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 and music theory 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 are required to take the appropriate exams, including Butler University graduates.
   More information concerning these exams is sent to all incoming students.

## E. 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 admissions 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 on-line or from the School of Music office.





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# Adjunct faculty

To implement its academic program, the University depends primarily on its regular faculty. However, when either need or an unusual opportunity arises, it invites outstanding people whose specialized knowledge and experience qualify them to teach certain courses. The following are representative of the adjunct and part-time faculty at Butler University.

Marc Allan, M.A., adjunct instructor in iournalism

**Jill Alsop,** M.A., adjunct instructor in Spanish Thomas Alsop, M.A., adjunct instructor in Spanish

Edwin Arellano, M.A., M.B.A., adjunct instructor in Spanish

Shannon Austin, Au.D., adjunct instructor in communication sciences & disorders

Kimberly Beck, Ph.D., adjunct assistant professor in pharmacy

Eric Bedel, MBA, adjunct instructor in management

Arnold Bienstock, M/A., adjunct instructor

Missy L. Blue, R.Ph., J.D., adjunct assistant professor of pharmacy

Scott Bridge, M.S., adjunct instructor in media arts

Nicholas Brightman, M.M., adjunct instructor in saxophone

Anna Briscoe, M.M., adjunct instructor in piano Richard Brown, M.S., adjunct instructor in physics and astronomy and associate director, J.I. Holcomb Observatory and Planetarium

Andrea Bruce, adjunct instructor in dance Melissa Buck, M.S., adjunct assistant professor in pharmacy

Shannon Cagle-Dawson, B.S., adjunct instructor in media arts

Daniel Calanni, M.B.A., adjunct instructor in Spanish

Glenn Carlstrand, M.A., adjunct instructor in communication studies

James R. Cassin, M.S., adjunct instructor in media arts

Sally Childs-Helton, Ph.D., adjunct instructor

Mark Cisneros, Ph.D., executive in residence

Anne Clark, M.D., executive in residence Sarah Conte, M.F.A., adjunct instructor in theatre

Loretta Contino, M.M., adjunct instructor in flute

Thomas Crouch, M.B.A., adjunct instructor in finance

Elizabeth Crow, M.A., adjunct instructor of Spanish

Tom Crow, M.A., adjunct instructor of Spanish Stacy Dawkins, B.S., PA-C; adjunct instructor in health sciences

Joseph Daily, MBA, adjunct instructor in management information systems

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Jeremiah P. Farrell, M.A., assistant professor emeritus of mathematics

Thomas Flynn, J.D. adjunct instructor in sociology

Mark Foglesong, Ph.D., executive in residence **Ed Friel,** BS, executive in residence

David Futrell, Ph.D., adjunct instructor in management

Tom Gerber, M.M., adjunct instructor in harpsichord and music history

Mark Gilgallon, M.M., adjunct instructor in voice

William Gilmartin, M.A., adjunct instructor in classical studies

Ron Gress, B.S., executive in residence **Ingeborg Groot,** adjunct instructor in Business English to International Students

**Jane Hachiya-Weiner**, adjunct instructor in

Mark Harris, B.S., adjunct instructor in media

Ralph Hatcher, M.D., adjunct assistant professor of pharmacy and health sciences

Kristine Healey, B.S. adjunct assistant professor of pharmacy

Kimberly Hennessee-Sherman, A.B.D., adjunct instructor in sociology

Craig Hetrick M.M., adjunct instructor in percussion

Troy Hill, B.A., adjunct instructor in journalism Heather Hinton, D.M.A., adjunct instructor in organ

Katherine Hitchens, Pharm.D., adjunct assistant professor in pharmacy

Sarah Hittle, Pharm.D., adjunct assistant professor of pharmacy

Richard Hofstetter, J.D., adjunct instructor of

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Gregory Imboden, M.M., adjunct instructor in woodwinds

Rhoda Israelov, M.S., executive in residence Steven Keltner, B.S., PA-C, adjunct instructor in health sciences

Robert Kirk, Ph.D., adjunct instructor in economics

John Kissling, adjunct instructor in risk management

Constance Koharchik, B.A., adjunct instructor in theatre

Theodore Kuhn, M.A., adjunct instructor in economics

Keith Kunda, D.A., adjunct instructor in music theory

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Jennifer Quinn McCann, adjunct assistant professor of pharmacy

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Christina Mineo, M.S., adjunct instructor in journalism

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Doug Moses, M.B.A., adjunct instructor in accounting

Patrick Murphy, Ph.D., adjunct assistant professor of pharmacy

Wendy Muston, B.M., adjunct instructor in harp David Neitzel, MBA, adjunct instructor in accounting

- **Nicole Nichols,** B.B., adjunct professor in media arts
- Ron Nobles, M.M., adjunct instructor in music William O'Donnell, M.A., adjunct instructor in management
- **Richard Osborne,** Ph.D., adjunct instructor in music theory
- **Anna Owsley,** B.S., adjunct instructor in dance **Lynne Perkins Socey,** M.F.A., adjunct instructor in lyric theatre and music
- **Marvin Perry,** M.M., adjunct instructor in cornet/trumpet
- **Deidre Pettinga,** M.B.A., adjunct instructor in marketing
- **Amanda Place,** adjunct assistant professor of pharmacy
- **Megan Query-Roth,** M.S.W., adjunct instructor of sociology
- Marvin Recht, BBA, executive in residence Ralph V. Reiff, M.Ed, adjunct instructor in athletic training
- **Steven Rickards,** D.M.A., adjunct instructor in voice
- **Timothy Robinson,** J.D., adjunct instructor in business law
- **Chris Rockey,** B.S., adjunct assistant professor in health sciences (physician assistant program)
- **Jared Rodin,** M.M., adjunct instructor in trombone
- **Achille Rossi,** B.M. adjunct instructor in clarinet
- **Rosanna Ruffo,** Kirov Ballet School diploma, adjunct instructor in dance
- **Robert Rush,** MBA, adjunct instructor in finance
- **Leonice Santamaria,** Ph.D., adjunct instructor in Spanish
- **Janet Sauer,** M.A., adjunct instructor in management information
- **Stephen Schelonka,** MBA, adjunct instructor in accounting
- **Robert F. Schultz,** M.A. adjunct instructor in journalism
- **Eric A. Scudder,** B.A. adjunct instructor in journalism
- **Michael B. Sells,** D.M.A., adjunct instructor in voice; professor emeritus
- **Kenneth Shepard,** B.S., adjunct instructor in dance
- **Jeffrey Short,** B.A., adjunct instructor in journalism
- **Bill Simmons,** B.A., adjunct instructor in dance and theatre
- **Michael Simmons,** MBA, adjunct instructor in marketing

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  Malcolm Smith, D.M.A., adjunct instructor
  in oboe
- **Michelle Stigter,** M.A, adjunct instructor in German
- **Sheridan Stormes,** M.M., adjunct instruction in vocal diction
- **Jason Strachman,** MBA, adjunct instructor in management
- **Margaret Stratford,** Pharm.D., adjunct assistant professor in pharmacy practice
- **Jane Surges,** MS, executive in residence
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- **Karen Thickstun,** M.M., adjunct instructor in music
- **Sue Ann Thompson,** M.A. adjunct instructor in Spanish
- **Glen Thoreson,** B.F.A., adjunct instructor in
- **Jerry Toomer**, Ph.D., executive in residence **Jeramy Townsley**, M.A., adjunct instructor in sociology
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- **Robert Warhurst,** Pharm.D., adjunct assistant professor in pharmacy
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- Barbara Howes, Science Librarian. B.A. Indiana University, 1974; M.L.S. ibid, 1975; M.B.A. Butler University, 1986
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322

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Director, Butler Institute for Research and Scholarship Director, Center for Citizenship and Community

Dean, College of Business Dean, College of Education

Interim Dean, College of Liberal Arts and Sciences Associate Dean, College of Liberal Arts and Sciences Dean, College of Pharmacy and Health Sciences

Dean, Jordan College of Fine Arts

Dean, Libraries

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Program coordinator

Director, student disability services Director, Office of Post-Graduate Studies Director, Center for Faith and Vocation

Program coordinator

Registrar

Associate Registrar

Director, internship and career services

Associate director

Manager, employer development

Assistant director Program coordinator

Coordinator, on-campus employment On-campus interview and office coordinator

Vice President, Student Affairs Assistant to the Vice President Associate director of student affairs

Dean of student services
Dean of student life
Director, diversity programs

Assistant director Assistant director Director, dining service

Director, counseling and consultation services

Staff psychologist Director, health services Associate director Primary physician

Coordinator, health education & outreach programs

Director, recreation
Assistant director, aquatics

Assistant director, challenge education & outdoor recreation

Assistant director, fitness

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Judith Harper Morrel
Stuart Glennan
Mary Andritz
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Terese Schurger

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Director, programs for leadership and service education

Associate director Assistant director Assistant director

Office manager Director, residence life Assistant director

Operations assistant

Coordinator, Residential College

Coordinator, Ross Hall Coordinator, Schwitzer Hall

Director, Greek life and orientation programs

Director, athletic bands

Spirit coordinator, cheerleaders and mascot

Vice President, Finance

Assistant to the Vice President, Finance

Controller

Executive director, financial planning and budgeting

Vice President, Operations

Assistant to the Vice President, Operations

Butler University Police Department

Chief and Director of Public Safety

Assistant chief

Director, maintenance Director, housekeeping

Vice President, Enrollment Management

Assistant to the Vice President, Enrollment Management

Executive director, financial aid

Director of admission Manager, bookstore

Vice President, University Advancement

Assistant to the Vice President, University Advancement

Executive director, university relations

Executive director, alumni and development programs

Director, public relations

Director, print marketing and communications Director, web marketing communications Director, conferences and special events Executive director, major and planned gifts

Executive director campaign programs

Director, donor relations and development communications

Director, constituent management Director, alumni & parent programs

Senior director, corporation & foundation relations

Director, development & alumni services Director, development -annual giving Director, constituent management

Major gifts officer Major gifts officer Major gifts officer

Executive Director, Human Resources Management

Josh Downing

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Caroline Huck-Watson

Iulie Pakenham Meg Haggerty Frank Council Mary Ann Huser Karla Cunningham Doug Howell Chris O'Donnell Diedra Tate **Ieff Tyner** Julia Joshel Becky Druetzler

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John Page Michael Kaltenmark Michele Miller Beatrice Cork Susan Perry

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Assistant to Chief Information Officer, IR Director, administrative computing Director, instructional technology Director, networks and systems

Executive Director, Clowes Memorial Hall

Operations manager Box office manager Business manager Event manager Director, Athletics

Assistant to the Director, Athletics

Associate athletic director, internal operations Assistant athletic director, facilities and events Associate athletic director, external operations

Associate athletic director, sports marketing and promotion

Associate athletic director, sports information

Assistant athletic director, eligibility and compliance

Jonathan Small Jane Riggins Scott Kincaid Lisa Symons Kathleen Wilkey Julianne Miranda Joe Indiano Elise Kushigian Karen Steele Shelia Sharp Lisa Whitaker Lee Davis Barry Collier Julie Porep

Tom Crowley Carl Heck **TBD** 

Joe Gentry James S. McGrath

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BUTLER UNIVERSITY TRUSTEES, FACULTY AND ADMINISTRATION 325 324



# Subject Abbreviation Index

## Course descriptions for the subjects below start on the noted page.

Page	Subject	Course Description	Page	Subject	Course Description
259	AA	Arts Administration	156	MA	Mathematics
216	AC	Accounting	224	MBA	Master Business
258	AH	Art History			Administration
		(converting to ART)	266	MDA	Media Arts
34	AI	Air Force ROTC	275	ME	Music Education
272	AM	Applied Music	221	MG	Management
121	AN	Anthropology	280	MH	Music History
241	AP	Physician Assistant	223	MK	Marketing
258	ART	Art	279	ML	Modern Language Diction
175	AS	Astronomy	279	MLT	Music Lyric Theatre
126	BI	Biology	228	MPA	Master Professional
217	COB	Business			Accounting
2	CC	Core Curriculum	222	MS	Management Science
130	CH	Chemistry	282	MT	Music Theory
134	CLA	Classical Studies	200	PE	Physical Education
160	CN	Chinese	174	PH	Physics
135	COM	Communication Studies	168	PL	Philosophy
139	CS	Computer Science	176	PO	Political Science
260	DA	Dance	180	PS	Psychology
143	DD	Dual Degree Engineering IUPUI	240	PX	PreProfessional Health Science
218	EC	Economics	170	RL	Religious Studies
196	ED	Education	245	RX	Pharmacy
144	EN	English	34	RZ	Army ROTC
274	ES	Ensemble	141	SE	Software Engineering
160	FL	Foreign Languages	187	SO	Sociology
219	FN	Finance	164	SP	Spanish
161	FR	French	114	ST	Science, Technology
107	FYS	First Year Seminar			and Society
151	GE	Geography	285	TH	Theatre
107	GHS	Global and Historical Studies			
133	GK	Greek			
162	GR	German			
108	GS	Gender Studies			
28	HN	Honors Courses			
148	HS	History			
220	IB	International Business			
107	ID	Interdisciplinary			
152	IL	Irwin Library			
152	IM	Individualized Major			
110	IS	International Studies			
164	IT	Italian			
153	JR	Journalism			
104	LC	Learning Resource Center			
133	LT	Latin			



# **INDEX**

Class standing, 100

Classical studies, 132-134

(METL), 204

College of Business, 73-79, 213-229

Master of Business Administration, 215-216

College of Education, 79-83, 193-210, 295-296

Effective Teaching and Leadership Program

Experiential Program for Preparing School

Principals (EPPSP), 80-81, 204

Graduate programs, 203-210

School counseling program, 204

Master of Professional Accounting, 216

#### Student teaching, 83, 194-195, 198-200 Transition points, 193-194 Academic programs, 7, 25-35 College of Liberal Arts and Sciences, 63-73, Majors, degrees, concentrations, 7 117-190, 295 Minors, 9 College of Pharmacy and Health Sciences, Accounting, 78, 214, 216-217, 296 41-42, 89-94, 231-254, 296-297 Actuarial science, 69, 155-159 Communication studies, 66, 134-139 Adjunct faculty, 318 Computer purchases, 33 Admission, 37-43 Computer resources, 32-33 Advanced placement, 37-38, 105 Computer sciences & software engineering, Advising program, 104 139-142 African studies, 120 Concentrations, 7-8 Anthropology, 120-124 Core curriculum, 1-7, 107 Art, 258-259 Counseling and Consultation Services (CCS), 19 Arts administration, 259-260 Counseling scholarship, 83 Associate's degree, 105 Cultural requirement, 7 Astronomy, 70, 172-176 Atherton Union, 19-20 D Athletic grant-in-aid, 51 Dance, 38, 83-84, 260-266 Athletics department, 22, 27, 94-97 Dean's list, 100 Audit for Enrichment, 43 Awards, 33-34, 51, 54-97 Degree status, 43, 105 Degrees, 7-8 Departmental honors, 29-30 В Disability services, 25 Band, 20 Division of student affairs, 19 Biological sciences, 64-65, 124-128 Doctor of Pharmacy Professional Degree, 232-236 Board of trustees, 303-304 Dual-Degree Engineering Program, 67, Business services, 48 142-143, 173-174 Butler awards, 33 Butler Grant, 52-53 $\mathbf{E}$ $\mathbf{C}$ Economics, 66-67, 79, 142, 215, 218-219 Education, 79-83, 193-210, 295 Campus, 9-10 Educational placement, 193 Career services, 26 Emeriti faculty, 321-322 Center for Citizenship and Community, 15 Emeriti trustees, 304-305 Center for Faith and Vocation, 16 Engineering, 67, 142-143, 173-174 Certification for teaching a foreign language, 159 Engineering dual-degree program (EDDP), Change and Tradition, 2-3 67, 142-143, 173-174 Chemistry, 65-66, 128-132 English, 67-68, 143-147, 160 Chinese, 150, 160-161

F

Federal parent (PLUS), 53 Federal Pell Grant, 52 Federal Perkins Loan, 53 Federal Stafford Loan, 53 Fees, 45-48 Finance, 215, 219-220 Financial aid counselors, 51

English language and literature, 143-147

Environmental programs, 21-22

Exploratory studies, 104-105

First-time students, 37-41 Multisensory Learning Facility (MLF), 27 Philosophy, 70, 166-170 S Food service, 19-20 Speakers Lab, 26 Physical education, 3 Scholarships, 31, 41, 51-97 Foreign languages, 70, 119, 132-134, 159-166 Student-athletes, 27 Physical Well Being, 3, 6, 200-203 Science, technology and society, 113-115 French, 70, 161-162, 279 Study tables, 25, 103 Physician assistant, 42, 236-245 Service learning, 15-16, 19 Physics, 70, 172-176 Freshman Academic Scholarship Program, Writers' Studio, 26 Social Security number, 101 40, 51, 62 Learning outcomes, 1 Police department, 21 Social work, 183-185 Political science, 70-71, 176-179 Learning Resource Center (LRC), 25, 103-105 Sociology, 73, 183-190 G Leave of absence policy,52 Post-Graduate studies, 30 Sociology and/or criminology, 73, 183-190 Librarians, 321 Pre-dentistry, 30 Gender studies, 107-109 Spain Program, 14 Libraries, 31-32 Pre-law, 30 German, 162-164, 279 Spanish, 14, 70, 164-166, 248, 263 Lilly Science Library, 32 Pre-medicine, 30 Global and Historical Studies, 2-3, 5, 107 Speakers Lab, 26-27 Living-Learning Centers, 40-41 Pre-optometry, 30 Grade reports, 100 Speaking Across the Curriculum Requirement, 7 Loans,53 Pre-pharmacy, 40 Grading system, 99 Speech requirement, 2 Pre-physical therapy, 30 Graduate admission, 291-300 Spirit programs, 20 M Pre-professional health sciences, 240 Graduate programs, 120 Stafford Loan, 53 Pre-seminary, 31 Graduate student time limitations, 293 MBA courses, 224-228 Student identifier, 21, 101 Pre-veterinary medicine, 30 Graduation, 101 Majors, 7-8 Student organizations, 20 Programs for Leadership and Grants, 33-34, 51-52 Management, 221-222 Student affairs, 19 Service Education (PuLSE), 19 Greek life, 20-21 Management science, 222-223 Student-athletes, 27 Psychology, 71-72, 180-182 Marketing, 79, 223-224 Study abroad, 13 Public and Corporate Communication, 182-183 H Master of Business Administration (MBA), Financial aid, 52 215-216, 293-294 Tuition, 45 Health and Recreation Complex, 22 R Master of Professional Accounting (MPA), 296 Study tables, 25, 103 Health Services, 19 Math Lab, 26 Recreation, 21-22 Subject abbreviation index, 327 Health professions, 30 Mathematics, 69-70, 155-159 Refund schedule, 47 History, 68, 147-151 Media arts, 84-85, 266-270 Registration, 100 History of Butler, 11-13 Minors, 9 Religion, 72, 166-172 Holcomb awards, 34 Teacher certification, 105 Modern Language Center (MLC), 27 Renewed enrollment, 42, 292-293 Honors programs, 27-30 Teaching faculty, 305-318 Modern languages, literatures and cultures, Repeat policy, 100 Housing, 20, 45-46 Technology, 32-33, 113-115 Requirements, 1-7 70, 159-166 Theatre, 38, 89, 279-280, 285-289 Morton-Finney Leadership Program, 21, 59 Butler Cultural requirement, 7 Transcripts, 100 MPA courses, 228-229 College, 105 Independent study, 100 Transfer credit, 105 Multicultural Resource Center, 21 Core, 1-7 Indianapolis community requirement, 7 Transfer students, 41-42, 45, 105 Multisensory Learning Facility (MLF), 27 Distribution, 3-6 Transition points, 193 Individualized major program, 152 Music, 38, 85-89, 270-285, 297-300 Divisions, 3-6 Tuition, 45-48 Information technology, 32 First-Year Seminar Program, 2, 5 Institute for Research and Scholarship, 33 Tutoring, 25 N General, 1-2 International Student Exchange Program, 13-14 Global and Historical Studies, 2-3, 5, 107 National achievement scholarship, 51-52 U International studies program, 109-112 Indianapolis Community requirement, 7 National merit, 51-52 Internship, 26 University administration, 323-325 Physical Well Being, 3, 6 Non-degree-seeking admission, 42-43 Irwin Library, 31-32 University Honors, 27-29 Pilot Core 5-7 Italian, 164, 279 Urban affairs, 185-186 Speaking Across the Curriculum  $\mathbf{O}$ Requirement, 7 Office of Admission, 37-43  $\mathbf{V}$ Speech, 2 Jordan College of Fine Arts, 27, 38, 51, 83-89, Office of Post-Graduate Studies, 30 Victim advocate, 21 Writing Across the Curriculum Office of Residence Life, 20 257-289, 297-300 Visiting campus, 37 Requirement, 7 Office of Student Affairs, 19 Audition awards, 51 Volunteerism, 19 Residence halls, 20 Overseas Study, 13-14 Journalism, 68-69, 153-155 Fees, 45-46 W-ZTechnology, 32-33 P L Washington Semester Program, 14-15 Residence Life, 20 Pass/fail option, 100 Learning assistance/academic success, 25-26, Withdrawals, 48 ROTC Programs, 34-35 Payment terms, 46 103-104 Writers' Studio, 26 Pell Grant, 52 Math Lab, 26 Writing Across the Curriculum Requirement, 7 Perkins Loan, 53 Modern Language Center (MLC), 27 Pharmacy, 41-42, 89-94, 231-254, 294-297

330

