

# BALL STATE UNIVERSITY

## ACADEMIC POSTING

2013-2014

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VOLUME XLV – 12

April 18, 2014

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This posting may contain all or part of the following: new, revised, and dropped programs, courses and prefixes. The posting period begins April 21, 2014. If no demurrer is received within ten school days, the changes will be certified for implementation. *The effective date for implementing undergraduate materials posted after May 27, 2013 is Fall Semester 2014. Graduate materials posted after April 16, 2012 have an implementation date of Fall Semester 2014.*

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### GENERAL

#### Minimum Grade Requirements

##### Revised:

All degree programs require that students earn a grade-point average of at least 2.0 overall and in each major, minor, certificate, and the University Core Curriculum. Some programs—for example, teacher education—have higher minimum requirements.

### ACADEMIC PROGRAMS

##### Correction:

**Bachelor of General Studies (BGS)**

**Remove:** *Computer science:* One course emphasizing computer literacy 3 hrs

### INTERDEPARTMENTAL PROGRAMS

#### Sports Studies

#### SPORTS STUDIES (SPST)

##### Revised:

**450 Selected Topics in Sports Studies (3)** Survey and investigation of a particular topic, problem, issue, or disciplinary methodology in sports studies.

A total of 12 hours may be earned, but no more than 3 in any one semester or term.

### COLLEGE OF APPLIED SCIENCES AND TECHNOLOGY

#### Department of Family and Consumer Sciences

#### FAMILY AND CONSUMER SCIENCES: CHILD DEVELOPMENT (FCCD)

##### Revised:

**400 Internship in Child Development (3-6)** Provides the opportunity for the student to work in an internship setting to gain professional experience in child development.

*Prerequisite:* FCFC 465 and permission of the department chairperson.

A total of 6 hours of credit may be earned.

*Open only to child development students.*

#### FAMILY AND CONSUMER SCIENCES: FASHION APPAREL (FCFA)

##### Revised:

**369 Internship in Fashion Apparel Design (1-6)** Provides the opportunity for the student to work in an established internship setting to gain professional experience in one's specific area of study.

*Prerequisite:* FCFA 303 or 401; MKG 300; permission of the department chairperson.

A total of 6 hours of credit may be earned.

#### FAMILY AND CONSUMER SCIENCES: FAMILY AND CHILD (FCFC)

##### Revised:

**491 Child Study Center Administrative Practicum (3)**

Guided professional immersive learning experience working in the administrative office of a child-centered environment. Students complete 200 hours including weekly staff and monthly training meetings at the Child Studies Center.

*Prerequisite:* FCFC 100, 265 or 275, and 320.

A total of 6 hours of credit may be earned, but no more than 3 in any one semester or term.

**496 Seminar in Family Relations (1-3)** History and recent trends and developments in family-life education, career opportunities involved in family-life education, professional organizations, and ethical standards.

*Prerequisite:* permission of the department chairperson and junior or senior standing.

A total of 3 hours of credit may be earned.

**FAMILY AND CONSUMER SCIENCES:  
FASHION MERCHANDISING (FCFM)**

**Revised:**

**369 Internship in Fashion Merchandising (3-6)** Provides the opportunity for the student to work in an established internship setting to gain professional experience in one's specific area of study.

*Prerequisite:* FCFA 280 or 345 and MKG 300 or MGT 342 and permission of the department chairperson.

A total of 6 hours of credit may be earned.

**FAMILY AND CONSUMER SCIENCES:  
GENERAL (FCGI)**

**Revised:**

**369 FCS General Internship (3-6)** Provides the opportunity for the student to work in an established internship setting to gain professional experience in one's specific area of study.

A total of 6 hours of credit may be earned.

*Open only to* general family and consumer sciences majors who are juniors or seniors.

**FAMILY AND CONSUMER SCIENCES:  
PROPERTY MANAGEMENT (FCPM)**

**Revised:**

**369 RPM Internship (3 or 6)** Provides students the opportunity to work in an established internship setting to gain professional experience in residential property management.

*Prerequisite:* ACC 201 and FCPM 275 and 305 and FCFN 210; permission of the department chairperson.

A total of 12 hours of credit may be earned, but no more than 6 in any one semester or term.

**Department of Military Science**

**MILITARY SCIENCE (MIL)**

**Revised:**

**499 Independent Study in Military Science (1-3)** An opportunity to investigate a topic of particular interest to the student under the supervision of a faculty member. Extensive reading, research, analysis, and writing.

*Prerequisite:* permission of the department chairperson.

A total of 3 hours of credit may be earned.

**School of Physical Education, Sport, and  
Exercise Science**

**New:**

**Pending ICHE approval**

**CERTIFICATE IN AQUATICS: INSTRUCTION,  
12 hours**

PREFIX	NO	SHORT TITLE	CR HRS
AQUA	219	Aquatic Sports Officiating	1
	301	Instructor of CPR & First Aid	2
	315	Water Safety Instructor (WSI)	3
	316	Aquatic Fitness Instructor	3
	404	Lifeguard Instructor (LGI)	3
			<hr/>
			12 hrs

**Pending ICHE approval**

**CERTIFICATE IN AQUATICS: OPERATIONS, 13 hours**

PREFIX	NO	SHORT TITLE	CR HRS
AQUA	454	Pool Operations and Maint	3
	455	Aquatic Facilities Management	3
	456	Camp Waterfront Administration	2
	457	Aquatic Facility Design	2
	458	Aquatic Leadership Development	3
			<hr/>
			13 hrs

**Pending ICHE approval**

**CERTIFICATE IN AQUATICS: SCUBA LEADERSHIP,  
12 hours**

PREFIX	NO	SHORT TITLE	CR HRS
AQUA	216	Lifeguard Training	3
	220	Open Water Scuba	2
	221	Advanced SCUBA Diver	2
	224	Divemaster	2
	260	Emergency Medical Responder	3

12 hrs

**TEACHING MAJOR IN HEALTH AND PHYSICAL EDUCATION (ALL-GRADE), 65 hours**

**Revised:**

**Health and Physical Education Teacher Education – Decision Point Requirements**

**Decision Point 1:**

- PEP 161 – satisfactory dispositions; *C* or better.
- HSC 160 – *C* or better.
- Creation of on-line portfolio.
- Fitness Test – associated with Fitness/Activity (PEP 161).
- Demonstrate adequate swim skills or take AQUA 214/215.

**Decision Point 2:**

- CASA passed.
- Overall GPA of 3.0 in at least 45 hours.
- GPA of 2.75 in major.
- HSC 290 – satisfactory dispositions; *C* or better.
- PEP 209, 227, 291 satisfactory dispositions; *C* or better.
- Fitness Test – associated with Fitness/Activity (PEP 252).
- *C* or better in 100/200-level professional education courses (EDMU 205 and EDPS 250).
- *C* or better in COMM 210.
- Approval of application for admission in teaching curriculum.
- Declaration of teaching major via Degree Works.
- Satisfactorily complete second level of portfolio review.

**Decision Point 3:**

- Overall GPA of 3.0 in at least 93 hours.
- GPA of 3.0 in major.
- Completion of Writing Proficiency Program.
- Within 9 hours of completion of content courses.
- Satisfactorily complete third level of portfolio review.
- Meet fitness testing requirements (PEP 399).
- Portfolio – plan, delivery, reflection, and leadership potential.
- HSC 295, 363, 395 – satisfactory dispositions; *C* or better.
- HSC 261, 467, and FCFN 240 – *C* or better.
- PEP 310, 394, 399, 400 satisfactory dispositions; *C* or better.
- Lesson plan (HSC 295, PEP 294/399).
- Assessment (PEP 310).
- Evidence of CPR certification.

**Decision Point 4 (after student teaching):**

- Satisfactorily complete student teaching portfolio review.
- Overall GPA of 3.0.
- GPA of 3.0 in major.
- Complete all degree requirements.
- Current state licensure testing requirements (content and pedagogy).
- Exit interview/survey.

Approval from student teaching supervisor and University supervisor for graduation.

PREFIX	NO	SHORT TITLE	CR HRS
EXSC	292	Anatomy	3
	293	Found Physiology and Exercise	3
FCFN	240	Nutrition for Educators	3
HSC	160	Fundamentals of Human Health	3
	261	Health, Sex, & Family Life	3
	290	Eval & Assess in Hlth & PE	3
	295	Rdg/Tech/Instr Strat in Hlth	3
	363	Current Issue Admin/Coord H/PE	3
	395	Meths & Curr/Tchg Hlth Ed	3
	467	Drug Dependency and Abuse	3
PEP	158	Teaching Dance and Gymnastics	2
	161	Found/Prin of Health/Phys Ed	3
	209	Intro to Teaching Physical Ed	3
	222	Field and Court Invasion Games	2
	227	Intro Adapted Physical Ed/Act	3
	232	Net and Wall Games	2
	252	Teaching Fitness Activities	3
	291	Human Development/Learn	3
	310	Formal Assess Health/Phys Ed	3
	394	Teaching Phys Educ in Elem Sch	3
	399	Teaching Phys Ed High Sch	3
	400	Curr Design in Physical Educ	2
	444	Developing Health/PE Classroom	3

65 hrs

Demonstrates competent swimming skills or takes AQUA 214 or 215. Demonstrates CPR and first aid certification

**ALL-GRADE EDUCATION PROGRAM**

PREFIX	NO	SHORT TITLE	CR HRS
Education core, 27 hours			
EDAL	470	Student Teaching: All-Grade (6-7)	7
EDFO	420	Soc, Hist, Phil Found of Ed	3
EDMU	205	Intro to Multicul Ed	3
EDPS	250	Human Growth Development	3
	390	Educational Psychology	3
EDJH	385	Prin of Tchg in Mid Schl	3
EDSE	465	Elective Student Teaching (3 or 5)	5

27 hrs

See Professional Education Assessment/Decision Points, P. 374, for additional information.

**MASTER OF SCIENCE IN EXERCISE SCIENCE, 33-38 hours**

**Admission requirements**

Applicants must meet the admission requirements of the Graduate School; have bachelor's degrees from regionally accredited institutions in education, physical education, biology, or other appropriate majors; have grade-point averages (GPA) of at least 2.75 on a scale of 4.0; and submit transcripts, three letters of recommendation, resumes, and the

exercise science application form. Applicants for the exercise science degree must obtain approval from a review board in the area of specialization. Requirements include a GPA of at least 2.75 on a 4.0 scale and the Graduate Record Examination (GRE) general test. Students with satisfactory scores on the GRE will be considered for admission to the program. Any deficiencies must be made up through course work taken in addition to degree requirements.

**Degree requirements**

Students must complete a minimum of 33 hours of graduate courses including 6 hours of a thesis project (THES 698) for the master of science degree. Students must take a final oral examination covering the thesis to be given by the thesis committee.

**Biomechanics, 33 hours**

Core requirements, 15 hours

EXSC	616	Motor Control	3
	634	Mechan Analysis of Movement	3
	651	Lab Techniques in Biomechanics	3
	652	Clinical Biomechanics	3
	655	Advanced Biomechanics	3

Research requirements, 12 hours

EXSC	611	Research Methods (Thesis) (3)	
EDPS	641	Statistical Methods (3)	
THES	698	Thesis (1-6)	12

6 hours from directed electives

BIO	548	Biometry (3)	
CS	699	Reading and Honors (3)	
EDPS	642	Intermediate Statistics (3)	
EXSC	603	Exercise Physiology 1 (3)	
	604	Resistance Training and Cond (3)	
	633	Seminar in Exercise Science (1-6)	6
			33 hrs

**Exercise Physiology, 33-38 hours**

Core requirements, 12 hours from

EXSC	603	Exercise Physiology 1	3
	623	Exer Test and Interpretation	3
	630	Exercise Physiology 2	3
	637	Applied Physiology	3

Directed electives, 6-10 hours from

CHEM	563	Principles of Biochemistry 1 (3)	
	564	Principles of Biochemistry 2 (3)	
	or		
	560	Essentials of Biochemistry (4)	
EXSC	633	Seminar in Exercise Science (1-6)	6-10

Research requirements, 9 hours from

EXSC	611	Research Methods (Thesis) (3)	
THES	698	Thesis (1-6)	9

Electives, 6-7 hours from

BIO	557	Molecular Biology (4)	
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EDPS	641	Statistical Methods (3)	
	or		
	642	Intermediate Statistics (3)	
EXSC	634	Mechan Analysis of Movement (3)	
PHYS	514	Cardiovascular Physiology (3)	6-7
			33-38 hrs

**WORKPLACE WELLNESS INTERDISCIPLINARY (WWIN)**

**Revised:**

**496 Seminar in Workplace Wellness (1-6)** Seminar topics will be identified, focusing on current issues in workplace wellness. Using the seminar format, will include research, discussion, and dissemination of information gathered in a given topic.

A total of 6 hours of credit may be earned.

**Department of Technology**

**TECHNOLOGY: CONSTRUCTION TECHNOLOGY (TCST)**

**Revised:**

**299X Special Topics in Construction Management (1-9)**

Special topics relevant to the construction management profession. Course titles will be announced before each semester.

A total of 9 hours of credit may be earned.

**490 Independent Study in Construction Management (1-9)**

Academic project directed by a Construction Management faculty member. Written proposal must be approved by program director prior to term of study.

*Prerequisite:* sponsorship by a CM faculty member and written proposal must be approved by CM program director prior to term of study.

A total of 9 hours of credit may be earned.

**697 Independent Study in Construction Management (0-6)**

Advanced academic project directed by a construction management faculty member. Written proposal must be approved by program director prior to term of study.

A total of 6 hours of credit may be earned.

**698 Advanced Topics in Construction Management (0-6)**

Advanced study of special topics in construction management.

A total of 6 hours of credit may be earned.

**TECHNOLOGY: DEPARTMENT (TDPT)**

**Revised:**

**299X Experimental/Developmental Topics (3 or 6)** Topics relevant to the discipline. Course titles will be announced

before each semester.

A total of 6 hours of credit may be earned.

**369 Cooperative Education in Technology (1-3)** A planned continuous placement in a technology-related position that integrates and applies course content to the workplace. A paid work and learning experience for manufacturing engineering technology, industrial technology, and graphic arts management majors.

*Prerequisite:* permission of the work experience coordinator.

A total of 3 hours of credit may be earned.

## TECHNOLOGY: GRAPHIC ARTS/PRINTING (TGRA)

### Dropped:

**282 Digital Imaging 2 (3)**

### Revised:

**285 (282) Digital Imaging 2 (3)** Focuses on the development of skills in pagination and file preparation for print and cross media graphics. Students will develop skills in Adobe InDesign while covering topics including: preflighting, imposition, layout, print settings, fonts/typography, and print workflows. Included will be topics on digital toner, and digital ink jet.

## COLLEGE OF ARCHITECTURE AND PLANNING

### Department of Urban Planning

#### URBAN PLANNING (PLAN)

##### New:

**613 Qualitative Methods and Social Justice (3)** This is a theory and methods course that focuses on the study of socio-cultural issues pertaining to urbanism and planning methods from a qualitative perspective. Theoretically, the course exposes students to urban social theory and cultural studies, particularly how class, race, gender, and other socio-cultural divisions affect urban development. It focuses on social justice and inclusive planning that acknowledges diversity. Methodologically it exposes the students to qualitative methods, especially participant observation, ethnography, interviewing and other ways to plan with communities.

##### Revised:

**620 Human Impact Analysis (2)** Fiscal, macroeconomic, social, and political impact analyses of development decisions and distributive consequences through incidence analysis.

Consequences: public budgets, household income/consumption/investment, jobs, and community health/welfare. Shifting electoral consequences of new/displaced residential populations on political agendas of decision-makers. Urban indicators as measures of community well-being and distress.

**621 Environmental Impact Analysis (1)** Techniques for assessing environmental impacts, including environmental inventory, rapid assessment, environmental impact analysis, land suitability analysis, risk assessment, build-out analysis, modeling for environmental sustainability, and the review of environmental regulations at all levels of government.

**696 Planning Capstone Research Methods 2 (1)** Selection and application of research methods to topic; collection and preliminary analysis of data.

**697 Planning Capstone Research Methods 3 (1)** Rigorous analysis of data and formulation of the paper/report, demonstrating topic definition, research methods, preliminary conclusions, and implications of the same.

## MILLER COLLEGE OF BUSINESS

### Revised:

#### MAJOR IN BUSINESS ADMINISTRATION, 69 hours

PREFIX	NO	SHORT TITLE	CR HRS
Miller College of Business core, 42 hours			
ACC	201	Principles of Accounting 1	3
	202	Principles of Accounting 2	3
BL	260	Principles of Business Law	3
ECON	201	Elementary Microeconomics	3
	202	Elementary Macroeconomics	3
	221	Business Statistics	3
FIN	300	Principles of Finance	3
ISOM	135	Business Information Systems	3
	249	Foundations of Business Comm	3
	351	Operations Management	3
MATH	132	Brief Calculus	3
MGT	300	Managing Behavior in Org	3
	491	Bus Policy and Strategy Mgt	3
MKG	300	Principles of Marketing	3
			42 hrs
Finance, 6 hours			
FIN	445	Financial Statement Analysis	3
RMI	270	Principles of Risk Mgt & Ins	3
Marketing, 6 hours from			
ECON	301	Intermediate Microeconomics (3)	
MKG	310	Consumer Behavior (3)	
	325	Professional Selling (3)	
	345	Procurement and Supply Mgt (3)	
	400	Product Management (3)	
	410	Marketing Channels (3)	

420 Integrated Mkg Communications (3) 6

Information Systems and Operations Management,  
6 hours from

ISOM 300 Project Management (3)  
355 Quality Mgt & Lean Six Sigma (3)  
452 Inventory, Warehousing & Negot (3)  
453 Manufacturing Plan & Control (3)  
456 Info Tech & Business Analytics (3)  
460 Global Logistics & Transp Mgt (3) 6

Management and Human Resources, 6 hours from

BUSA 369 BUSAD Internship (3)  
ECON 331 Labor Economics (3)  
MGT 241 The Entrepreneurial Experience (3)  
361 Managing Human Resources (3)  
363 Employee Development (3)  
365 Employment Law (3)  
467 Leadership Change & Talent Mgt (3)  
RMI 330 Employee Benefits & Ret Plan (3) 6

International, 3 hours from

ECON 351 International Economics (3)  
FIN 352 Global Finance (3)  
INTB 265 Intro to International Bus (3)  
MGT 301 International Mangement (3)  
MKG 470 International Marketing (3) 3

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69 hrs

It is possible for a student, in consultation with a faculty advisor, to design an individual program to meet specific academic interests. This program will be designated as a business administration major.

To pursue this program, students must have sufficient mathematical preparation to meet the prerequisite for ECON 221. The prerequisite for ECON 221 is a C or better grade in MATH 111 or a passing grade in MATH 132, 161, 162, 165, or 166. MATH 132 simultaneously substitutes for the University Core Curriculum math requirement. The prerequisite for ISOM 135 is ISOM 125 or equivalent.

## Department of Economics

### ECONOMICS (ECON)

#### Revised:

**348 Health Economics (3)** Examines how institutions and incentives affect the health care choices people make. Topics include the demand and supply of medical care, the effects of health insurance, professional licensing, pharmaceutical regulations, and government involvement in health care.

*Prerequisite:* ECON 201.

## Department of Finance and Insurance

### FINANCE (FIN)

#### Revised:

**497 Independent Study in Finance (3)** Designed for academically qualified students who want to study some phase of finance. An intensive individualized program of reading, researching, or analyzing various finance topics under the guidance of a faculty member.

*Prerequisite:* FIN 301, 410, 420; senior standing; permission of the department chairperson.

A total of 6 hours of credit may be earned, but no more than 3 in any one semester or term.

### REAL ESTATE (RE)

#### Revised:

**497 Independent Study in Real Estate (3)** Designed for the academically qualified who wish to study some phase of real estate. Intensive individualized program of reading, research, or analysis of various real estate topics under the guidance of a faculty member.

*Prerequisite:* permission of the department chairperson.

A total of 6 hours of credit may be earned, but no more than 3 in any one semester or term.

## Department of Information Systems and Operations Management

### INFORMATION SYSTEMS AND OPERATIONS MANAGEMENT (ISOM)

#### Revised:

**249 Foundations of Business Communication (3)** Provides pre-business majors with a cornerstone course designed to develop the interpersonal, analytical, written, and presentation skills needed to succeed in upper division courses and on the job. ISOM 249 is to be taken prior to or concurrent with those courses that complete the admission requirement to the Miller College of Business.

*Prerequisite:* ISOM 125 or equivalent; ENG 104; sophomore standing.

## Department of Marketing and Management

#### Revised:

### MAJOR IN MARKETING, 69 hours

*Not open to professional selling majors.*

PREFIX	NO	SHORT TITLE	CR	HRS
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Miller College of Business core, 42 hours

ACC	201	Principles of Accounting 1	3	
	202	Principles of Accounting 2	3	

BL	260	Principles of Business Law	3
ECON	201	Elementary Microeconomics	3
	202	Elementary Macroeconomics	3
	221	Business Statistics	3
FIN	300	Principles of Finance	3
ISOM	135	Business Information Systems	3
	249	Foundations of Business Comm	3
	351	Operations Management	3
MATH	132	Brief Calculus	3
MGT	300	Managing Behavior in Org	3
	491	Bus Policy and Strategy Mgt	3
MKG	300	Principles of Marketing	3
			<hr/>
			42 hrs

Core requirements, 12 hours

MKG	310	Consumer Behavior	3
	325	Professional Selling	3
	350	Marketing Research & Analytics	3
	480	Marketing Strategy	3
			<hr/>
			12 hrs

15 hours from

BUSA	300	Int Sustainability in Business (3)	
MKG	330	Retail Management (3)	
	345	Procurement and Supply Mgt (3)	
	369	Professional Practice in Mkg (3)	
	375	Social Media Marketing (3)	
	400	Product Management (3)	
	410	Marketing Channels (3)	
	420	Integrated Mkg Communications (3)	
	425	Seminar in Adv Prof Selling (3)	
	427	Sales Management (3)	
	429	Sales Technology Application (3)	
	431	Retail Strategy (3)	
	432	Sales Strategy (3)	
	450	Advanced Mkg Res & Analytics (3)	
	460	Strategic Supply Chain Mgt (3)	
	470	International Marketing (3)	
	475	Marketing Simulation (3)	
	476	Mkg of Emerging Technology (3)	
	495	Seminar in Marketing (3)	
	497	Independent Study in Marketing (1-6)	
	498	Advanced Immersive Project Mkg (3)	15
			<hr/>
			69 hrs

To assist students in choosing electives from above that are most closely related to a particular career interest, please see the marketing major advisor.

A total of 6 credit hours may be earned for marketing majors and a total of 3 credit hours may be earned for marketing minors across a combination of MKG 369, 495, 497, and 498.

To pursue this program, students must have sufficient mathematical preparation to meet the prerequisite for ECON 221. The prerequisite for ECON 221 is a C or better grade in MATH 111 or a passing grade in MATH 132, 161, 162, 165, or 166. MATH 132 simultaneously substitutes for the University Core Curriculum math requirement. The prerequisite for ISOM 135 is ISOM 125 or equivalent.

## MAJOR IN PROFESSIONAL SELLING, 69 hours

*Not open to marketing majors.*

PREFIX	NO	SHORT TITLE	CR HRS
Miller College of Business core, 42 hours			
ACC	201	Principles of Accounting 1	3
	202	Principles of Accounting 2	3
BL	260	Principles of Business Law	3
ECON	201	Elementary Microeconomics	3
	202	Elementary Macroeconomics	3
	221	Business Statistics	3
FIN	300	Principles of Finance	3
ISOM	135	Business Information Systems	3
	249	Foundations of Business Comm	3
	351	Operations Management	3
MATH	132	Brief Calculus	3
MGT	300	Managing Behavior in Org	3
	491	Bus Policy and Strategy Mgt	3
MKG	300	Principles of Marketing	3
			<hr/>
			42 hrs

Core requirements, 27 hours

MKG	325	Professional Selling	3
	350	Marketing Research & Analytics	3
	425	Seminar in Adv Prof Selling	3
	427	Sales Management	3
	429	Sales Technology Application	3
			<hr/>
			15 hrs

3 hours from

MKG	369	Professional Practice in Mkg (1-3)	
	432	Sales Strategy (3)	3

3 hours from

MKG	345	Procurement and Supply Mgt (3)	
	460	Strategic Supply Chain Mgt (3)	3

6 hours from

MKG	310	Consumer Behavior (3)	
	375	Social Media Marketing (3)	
	470	International Marketing (3)	6
			<hr/>
			27 hrs

69 hrs

To pursue this program, students must have sufficient mathematical preparation to meet the prerequisite for ECON 221. The prerequisite for ECON 221 is a C or better grade in MATH 111 or a passing grade in MATH 132, 161, 162, 165, or 166. MATH 132 simultaneously substitutes for the University Core Curriculum math requirement. The prerequisite for ISOM 135 is ISOM 125 or equivalent.

## COLLEGE OF COMMUNICATION, INFORMATION, AND MEDIA

## Interdepartmental

### ICOMMUNICATION (ICOM)

#### Revised:

**499 Colloquium (1 or 2)** Attendance at colloquia, workshops, and Center for Media Design events as specified in the digital media student handbook is the basis for earning colloquium credit. Offered credit/no credit only.

A total of 2 hours of credit may be earned.

*Open only to digital media minor and emerging media certificate students.*

### Department of Journalism

#### Revised:

#### CERTIFICATE IN EMERGING MEDIA JOURNALISM, 18 hours

PREFIX	NO	SHORT TITLE	CR HRS
CCIM	280	Social Media	3
NEWS	105	Journ Storytelling: Intro	2
	130	Multimedia: Design	1
	131	Multimedia: Stills	1
	132	Multimedia: Audio	1
	133	Multimedia: Video	1
	233	Multimedia: Reporting	3
	449	Legal and Ethical Issues	3

3 hours from

NEWS	221	Storytelling: Covering Issues (3)	
	229	Multimedia: Production (3)	3
			<hr/>
			18 hrs

### Department of Telecommunications

#### Revised:

#### CERTIFICATE IN EMERGING MEDIA JOURNALISM, 18 hours

PREFIX	NO	SHORT TITLE	CR HRS
CCIM	280	Social Media	3
NEWS	105	Journ Storytelling: Intro	2
	130	Multimedia: Design	1
	131	Multimedia: Stills	1
	132	Multimedia: Audio	1
	133	Multimedia: Video	1
	233	Multimedia: Reporting	3
	449	Legal and Ethical Issues	3

3 hours from

NEWS	221	Storytelling: Covering Issues (3)	
	229	Multimedia: Production (3)	3

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18 hrs

## COLLEGE OF FINE ARTS

### Department of Art

#### ART (ART)

#### Revised:

**511 Advanced Animation (3-6)** Advanced animation may include narrative and/or non-narrative approaches and focus on the principles of animation, story development, and pre-visualization through animatics. Students will use a wide variety of mediums.

A total of 12 hours of credit may be earned, but no more than 6 in any one semester or term.

**611 Animation Studio (3-6)** Graduate supervised, time intensive graduate-level problems in animation defining aesthetic and technical directions for the professional artist. Bi-weekly meetings and exhibition of artwork required for final assessment.

*Prerequisite:* ART 511 (6 total hours).

A total of 12 hours of credit may be earned, but no more than 6 in any one semester or term.

### School of Music

#### MUSIC HISTORY AND MUSICOLOGY (MUHI)

#### Revised:

**390 Honors Colloquium in Music (2 or 3)** Readings, reports, and discussions of various aspects of music.

A total of 3 hours of credit may be earned.

*Open only to students in the Honors Program.*

#### SCHOOL OF MUSIC (MUSC)

#### Revised:

**340 Large Instrumental Ensemble (1-3)** A major performing ensemble, rehearsing normally five hours a week. Included in this category are the Wind Ensemble, Symphony Band, Marching Show Band, Basketball Pep Band, Symphony Orchestra, and Jazz Ensemble I.

A total of 99 hours of credit may be earned, but no more than 3 in any one semester or term.



**341 Large Instrumental Ensemble (.5-3)** Organizations normally rehearsing two hours a week. Included in this category are the Concert Band and Jazz Ensembles II and III.

A total of 99 hours of credit may be earned, but no more than 3 in any one semester or term.

**350 Large Vocal Ensemble (1-3)** Major performing ensembles normally rehearsing five hours a week. Included in this category are the Concert Choir, Opera/Musical Theatre, and the University Singers.

A total of 99 hours of credit may be earned, but no more than 3 in any one semester or term.

**351 Large Vocal Ensemble (.5-3)** Organizations normally rehearsing two hours a week. Included in this category are the Women's Chorus, the Statesmen, the University Chorus, and the Lab Choir.

A total of 99 hours of credit may be earned, but no more than 3 in any one semester or term.

## MUSIC PERFORMANCE (MUSP)

### Revised:

**200 Major Study (1-4)** One primary instrument/voice lesson per week for students majoring in guitar, organ, piano, symphonic instruments, or voice.

*Prerequisite:* permission of the director of the school.

A total of 99 hours of credit may be earned, but no more than 4 in any one semester or term.

**201 Principal Study (1-4)** One primary instrument/voice lesson per week for students majoring in music composition, music education, or music technology.

*Prerequisite:* permission of the director of the school.

A total of 99 hours of credit may be earned, but no more than 4 in any one semester or term.

**202 Secondary Study (1-4)** One secondary instrument/voice lesson per week.

*Prerequisite:* permission of the director of the school.

A total of 99 hours of credit may be earned, but no more than 4 in any one semester or term.

**203 Minor Study (1-4)** One primary instrument/voice lesson per week for non-music majors.

*Prerequisite:* permission of the director of the school.

A total of 99 hours of credit may be earned, but no more than 4 in any one semester or term.

**206 Piano Accompanying (1-99)** One lesson each week is devoted to practice and coaching on the materials of accompaniment as performed during a specified three-hour period each week in the voice or instrumental studios.

A total of 99 hours of credit may be earned.

**231 Jazz Combo (1-4)** Players of appropriate instruments are organized into small groups according to proficiency for the study of commercial and jazz music. These groups may include trios, quartets, quintets, and sextets.

*Prerequisite:* permission of the director of jazz studies.

A total of 99 hours of credit may be earned, but no more than 4 in any one semester or term.

**400 Major Study (1-4)** One primary instrument/voice lesson per week for students majoring in guitar, organ, piano, symphonic instruments, or voice.

*Prerequisite:* junior standing; permission of the director of the school.

A total of 99 hours of credit may be earned, but no more than 4 in any one semester or term.

**401 Principal Study (1-4)** One primary instrument/voice lesson per week for students majoring in music composition, music education, or music technology.

*Prerequisite:* junior standing; permission of the director of the school.

A total of 99 hours of credit may be earned, but no more than 4 in any one semester or term.

**430 Small Ensemble (Woodwinds) (1-4)** Players of woodwind instruments are organized into small groups according to proficiency for the study of music of all periods with emphasis on chamber music style of playing.

A total of 99 hours of credit may be earned, but no more than 4 in any one semester or term.

**431 Small Ensemble (Brass) (1-4)** Players of brass instruments are organized into small groups for the study and performance of brass ensemble literature. These groups may include trios and quartets of like instruments, or quintets, sextets, and octets of mixed brasses.

A total of 99 hours of credit may be earned, but no more than 4 in any one semester or term.

**432 Small Ensemble (Percussion) (1-4)** Players of percussion instruments are organized into small groups for the study and performance of the literature designed for their public performance. These groups may range in size from trios and quintets to larger ensembles.

A total of 99 hours of credit may be earned, but no more than 4 in any one semester or term.

**433 Small Ensemble (Strings) (1-4)** Players of string instruments are organized into small groups according to proficiency for the study of music of all periods with emphasis on chamber music style of playing.

A total of 99 hours of credit may be earned, but no more than 4 in any one semester or term.

**434 Small Ensemble (Harp) (1-4)** Groups of harpists are organized to perform the specialized literature for this unusual ensemble. Original compositions and transcriptions are presented in public performances.

A total of 99 hours of credit may be earned, but no more than 4 in any one semester or term.

**435 Small Ensemble (Piano) (1-2)** Study of sonata literature in conjunction with another instrument or literature for multiple pianos. Students will be organized into small groups according to proficiency and demands of the literature.

*Prerequisite:* permission of the director of the school.

A total of 99 hours of credit may be earned, but no more

than 2 in any one semester or term.

**436 Ensemble for New Music (1-2)** Players of all instruments are organized into small groups for the study of contemporary chamber music.

A total of 99 hours of credit may be earned, but no more than 2 in any one semester or term.

*Open to all students with sufficient proficiency.*

**437 Small Ensemble (Organ and Church Music) (1-2)**

Performance projects of interest to the organist and church musician. Reading of anthems, motets, oratorio movements; music for organ and instruments; music for graded church choirs; conducting from the keyboard.

A total of 99 hours of credit may be earned, but no more than 2 in any one semester or term.

**438 Small Ensemble (Vocal) (1-2)** Quartets, sextets, octets, and multiples of these units are arranged as student enrollment indicates. Music studied and performed ranges from the traditional quartet literature to material appropriate for glee clubs.

A total of 99 hours of credit may be earned, but no more than 2 in any one semester or term.

**439 Small Ensemble (Guitar) (1-2)** Guitar players are organized into small groups to study and perform the duet, trio, and quartet repertoire for classical guitar. Upperclass students generally study ensemble works involving other instrumentation such as guitar and flute; guitar and strings; and guitar and voice.

*Prerequisite:* permission of the director of the school.

A total of 99 hours of credit may be earned, but no more than 2 in any one semester or term.

## Department of Theatre and Dance

### Revised:

#### MAJOR IN THEATRE, BA/BS, 58-64 hours

PREFIX	NO	SHORT TITLE	CR HRS
<i>Theatrical studies concentration, 26 hours</i>			
DANC	130	Intro to Jazz 1 (1-3)	1
THEA	233	Acting 2	3
	318	Advanced Topics	3
	320	Design Skills	2
	322	Theatre of the 21 <sup>st</sup> Century	3

#### Electives, 14 hours

ENG	410	Adv Screenwriting (3)
	464	Shakespeare (3)
TCOM	434	Video Production Workshop (3)
THEA	150	Introduction to Theatre Education (3)
	223	Costume Technology (3)
	229	Stage Makeup (2)
	291	Stage Management (3)
	318	Advanced Topics (3)
	326	Stage Lighting (3)
	340	Playwriting 1 (3)

350	Directing 2 (3)
380	Advanced Practicum (1-9)
420	Scene Design (3)
423	Costume Design (3)
426	Lighting Design (3)
434	Immersion Experience (1-12)
450	Directing 3 (3)
491	Theatre Management (3)
496	Directed Study (1-9)

Up to three other THEA or DANC courses not listed above as approved by PDA or chairperson. Exception: THEA 318 may be taken up to four times total, but each must be on a different topic. Students are expected to take THEA 220 to meet the prerequisite for THEA 320.

14

58 hrs

The theatrical studies option is recommended for students wanting a broad-based, liberal-arts education in theatre. Some students may also pursue graduate study at the MA and PhD level. Students must earn and keep a 3.0 or better grade-point average for all courses required on the major after earning 36 credit hours or they will be placed on academic probation for one semester. If a student has two consecutive semesters on academic probation, they will be dismissed from the theatrical studies option. Students must also submit a Theatrical Studies Writing Portfolio in the fall of their sophomore, junior, and senior years. Failure to submit a portfolio will result in the student being placed on option probation. Failure to submit two portfolios in a row will result in removal from the option. Students may audition or submit portfolio reviews for other options within the department.

## THEATRE (THEA)

### New:

**322 Theatre of the 21st Century (3)** Study of the major works of theatre from 2000 to present, with emphasis on dramatic analysis, production conceits, major practitioners and companies, theory, and journalistic criticism. Preferable for students with junior or senior standing who have completed THEA 317 and 319.

*Prerequisite:* THEA 103 and 104, permission of the instructor.

### Revised:

**318 Advanced Topics in Theatre and Dance (3-6)** In-depth study of special topics in theatre depending upon expertise of instructor. Topics may include dance, acting, musical theatre, directing, design, dramaturgy, Feminist theatre, etc.

*Prerequisite:* permission of the instructor.

A total of 12 hours of credit may be earned, but topics may not be repeated, and a student may not earn more than 6 in any one semester or term.

## Honors College

### HONORS (HONR)

#### Revised:

**299X Inquiries in Special Topics (1-6)** Exploration of special topics relevant to Honors learning. Titles will be announced before each semester. May be repeated for different topics.

*Prerequisite:* permission of the dean of the Honors College.

A total of 99 hours of credit may be earned, but no more than 6 in any one semester or term.

*Open only to* Honors College students.

**310 Honors Foreign Study (1-18)** Study in a foreign country appropriate to Honors learning. Course work undertaken at institutions of higher learning in other countries is granted Ball State University Honors College credit.

*Prerequisite:* permission of the dean of the Honors College.

A total of 99 hours of credit may be earned, but no more than 18 in any one semester or term.

*Open only to* Honors College students accepted in a Ball State exchange or study abroad program.

**390 Honors Colloquium (1-6)** Exploration of selected issues that explore a single topic in depth or connect subjects or disciplines. Emphasis is on discussion, individual projects, and ways of combining information from several sources. May be repeated for different topics.

*Prerequisite:* permission of the dean of the Honors College.

A total of 99 hours of credit may be earned, but no more than 6 in any one semester or term.

*Open only to* Honors College students who have completed at least two of HONR 189, 199, 201, 202, 203, 296, 297, 298.

**450 Medallion Scholar Advanced Study (1-9)** Supervised advanced independent or interdisciplinary study designed to meet the goals of an approved Medallion Scholar program of study.

*Prerequisite:* permission of the dean of the Honors College.

A total of 9 hours of credit may be earned.

*Open only to* approved Medallion Scholars.

## COLLEGE OF SCIENCES AND HUMANITIES

### Department of Anthropology

#### ANTHROPOLOGY (ANTH)

#### Revised:

**341 Anthropology of Gender (3)** Considers many different ways in which gender intersects with race, ethnicity, class, religion, and sexuality. Class topics will include cross-cultural ideas and practices regarding femininity and masculinity, the politics of production and reproduction, globalization and migration, and violence and militarism as well as the ways that people subscribe to and/or resist gender norms.

*Prerequisite:* ANTH 101, 111, a WGS course, or permission of the instructor.

**377 Topics in Museum Operations (3-6)** Introduces various aspects of museum operations, such as organization, financing, curation, exhibits, public interpretation, and conservation of collections. Emphasizes ethnographic and archaeological collections. May be repeated for different topics.

A total of 6 hours of credit may be earned.

### Department of Chemistry

#### CHEMISTRY (CHEM)

#### Revised:

**299X Experimental/Developmental Topics (1-6)** Topics relevant to the discipline. Course titles will be announced before each semester.

A total of 6 hours of credit may be earned.

**369 Professional Experience (1-3)** Paid work and learning experience as a practicing chemist. Practical problem-solving experience will be gained through such programs as internships, practicums, cooperative education programs, and the Department of Chemistry summer research program.

*Prerequisite:* application, recommendation of the program selection committee, and permission of the department chairperson.

A total of 5 hours of credit may be earned (3 towards major), but no more than 3 in any one semester or term. One hour may be counted toward the Associate in Science in Chemical Technology degree.

No more than 3 hours may be counted as electives toward the departmental major.

**470 Independent Study and Research (1-3)** Scientific investigation on an individual basis under the supervision of a faculty member. Extensive reading, experimental work, and development of research techniques and skills.

*Prerequisite:* permission of the department chairperson.

A total of 5 hours of credit may be earned (3 towards major), but no more than 3 in any one semester or term.

No more than 3 hours may be counted as electives toward any departmental major.

**475 Exploration of Selected Topics in Chemistry (1-4)**

Discussion or written reports or both in advanced special topics in or related to chemistry. Examples are topics in neurochemistry, physical organic, chemical synthesis, kinetics, spectroscopy, etc.

*Prerequisite:* permission of the department chairperson.

A total of 6 hours of credit may be earned (3 towards major), but no more than 4 in any one semester or term.

## Department of Criminal Justice and Criminology

### CRIMINAL JUSTICE AND CRIMINOLOGY (CJC)

#### Revised:

**410 Current Topics in Criminology (3-6)** Exploration of selected, contemporary issues and topics in criminology emphasizing individualized study, reporting, and group discussion.

*Prerequisite:* successful completion of CJC 101, 102, 220, 221, 230, 240, 250, and junior or senior standing.

A total of 9 hours of credit may be earned, but no more than 6 in any one semester or term.

*Open only to* criminal justice majors and minors.

**430 Current Topics in Policing (3-6)** Exploration of selected issues and topics in policing and law enforcement emphasizing individualized study, reporting, and group discussion.

*Prerequisite:* successful completion of CJC 101, 102, 220, 221, 230, 240, 250, and junior or senior standing.

A total of 9 hours of credit may be earned, but no more than 6 in any one semester or term.

*Open only to* criminal justice majors and minors.

**440 Current Topics in Corrections (3-6)** Exploration of selected issues and topics in penology emphasizing individualized study, reporting, and group discussion.

*Prerequisite:* CJC 101, 102, 220, 221, 230, 240, 250, and junior or senior standing.

A total of 9 hours of credit may be earned, but no more than 6 in any one semester or term.

*Open only to* criminal justice majors and minors.

**450 Current Topics in Legal Aspects of Criminal Justice (3-6)** Exploration of selected issues and topics in legal aspects of criminal justice emphasizing individualized study, reporting, and group discussion.

*Prerequisite:* successful completion of CJC 101, 102, 220, 221, 230, 240, 250, and junior or senior standing.

A total of 9 hours of credit may be earned, but no more than 6 in any one semester or term.

*Open only to* criminal justice majors and minors.

**471 Practicum in Criminal Justice and Criminology (3-6)** Part-time individual assignment under field supervision in one of a variety of criminal justice settings.

*Prerequisite:* successful completion of CJC 101, 102, 220, 221, 230, 240, 250; 2.5 grade-point average; permission of the instructor, and senior standing.

A total of 6 hours of credit may be earned.

*Open only to* criminal justice majors.

## Department of English

### ENGLISH (ENG)

#### Revised:

**436 Theory and Research in Teaching English to Speakers of Other Languages (3)** Psychological and linguistic bases of language learning and recent theories concerning the application of linguistic science to methodology and materials in second-language teaching.

*Prerequisite:* ENG 320; or permission of the department chairperson.

**437 Methods and Materials in Teaching English to Speakers of Other Languages (3)** Study and practice of a variety of methods in teaching English as a second or foreign language. Discussion of pedagogical issues in language teaching.

*Prerequisite:* ENG 320; or permission of the department chairperson.

## Department of Geography

### GEOGRAPHY (GEOG)

#### Revised:

**334 Atmospheric Hazards (3)** Examination of the causes, consequences, and spatial distribution of hazards deriving from or impacting the atmosphere. Both the physical properties and processes of natural hazards (e.g. hurricanes, tornadoes, biochemical) and the human actions and reactions to these hazards will be emphasized at the local, regional, and global scales.

*Prerequisite:* GEOG 230.

**534 Atmospheric Hazards (3)** Examination of the causes, consequences, and spatial distribution of hazards deriving from or impacting the atmosphere. Both the physical properties and processes of natural hazards (e.g. hurricanes, tornadoes, biochemical) and the human actions and reactions to these hazards will be emphasized at the local, regional, and global scales.

*Prerequisite:* GEOG 230.

*Not open to* students who have credit in GEOG 334.

## Department of Geological Sciences

### GEOLOGY (GEOL)

#### Revised:

**299X Experimental/Developmental Topics (1-6)** Immersion or experiential topics relevant to the discipline. Section titles will be announced before each semester.

A total of 9 hours of credit may be earned, but no more than 6 in any one semester or term.

## Department of History

## HISTORY (HIST)

### Revised:

**299X Experimental/Developmental Topics (3)** Topics relevant to the discipline. Course titles will be announced before each semester.

A total of 6 hours of credit may be earned, but no more than 3 in any one semester or term.

**360 Selected Topics in Military History (3)** Survey and investigation of a particular period, topic, or issue in military history with emphasis on materials not covered in established courses. Exact content will be announced in advance of each offering.

A total of 6 hours of credit may be earned, but no more than 3 in any one semester or term.

**449 American Culture Field Studies (3 or 6)** American culture, its art, economic life, educational systems, geography, history, industry, languages, music, and society. Students travel through designated areas in North America. Requires considerable reading before the trip and papers at the conclusion. With departmental approval, secondary social studies teacher-education students with a concentration in United States history may apply 3 hours of credit to category 1, 2, or 3.

A total of 6 hours of credit may be earned.

**469 World Civilizations--Field Studies (3 or 6)** Studies in world civilizations--their history, art, economic life, educational systems, geography, industry, languages, music, and society—through varied travel programs. Advance reading and a summary paper complement each year's travel program and are required. With departmental approval, secondary social studies teacher-education students with a concentration in world civilization may apply 3 hours of credit to category 1, 2, or 4.

A total of 6 hours of credit may be earned.

**494 Selected Topics in Non-Western History (3)** Survey and investigation of a particular topic, problem, or issue in non-Western history with emphasis on topics, specialties, and materials not covered in other courses. Topics will be announced before each semester.

A total of 6 hours of credit may be earned, but no more than 3 in any one semester or term.

**497 Selected Topics in European History (3)** Survey and investigation of a particular topic, problem, or issue in European history with emphasis on topics, specialties, and materials not covered in other courses. Topics will be announced before each semester.

A total of 6 hours of credit may be earned, but no more than 3 in any one semester or term.

**499 Selected Topics in American History (3)** Survey and investigation of a particular topic, problem, or issue in American history with emphasis on topics, specialties, and materials not covered in other courses. Topics will be announced before each semester.

A total of 6 hours of credit may be earned, but no more than 3 in any one semester or term.

## Department of Mathematical Sciences

### MATHEMATICAL SCIENCES (MATH)

#### Revised:

**320 Probability (4)** Probability theory for discrete and continuous sample spaces, random variables, density functions, distribution functions, marginal and conditional distributions, mathematical expectation, moment-generating functions, common distributions, sampling distribution theory, central limit theorem, t, chi-square, and F distributions.

*Prerequisite:* C- or better in MATH 166 or permission of the department chairperson.

*Prerequisite or parallel:* MATH 215.

**351 Mathematics of Finance (4)** Mathematical theory of compound interest, force of interest, annuities, equations of value, yield rates, amortization, sinking funds, bonds, market derivatives, depreciation, and current topics in finance.

*Prerequisite:* C- or better in MATH 165 and 251 or permission of the department chairperson.

*Prerequisite or parallel:* MATH 166.

**411 Abstract Algebra 1 (3)** The theory of groups, including subgroups, cyclic groups, normal subgroups, cosets, Lagrange's Theorem, quotient structures, homomorphisms, automorphisms, group actions, Sylow's Theorems, structure of finite abelian groups, generators, and relations.

*Prerequisite:* C- or better in MATH 215 and 217; or permission of the department chairperson.

**412 Abstract Algebra 2 (3)** An introduction to the theory of rings, including integral domains, division rings, and fields. Quotient fields of integral domains. Homomorphisms, ideals, and quotient structures. Factorization in commutative rings. Polynomial rings and field extensions. Aspects of Galois theory.

*Prerequisite:* C- or better in MATH 411; or permission of the department chairperson.

**415 Mathematics of Coding and Communication (3)** Exploration of applications of number theory, group theory, and linear algebra to areas such as cryptography and error-correcting codes; applications of graph theory to resource allocation and route planning; other possible topics selected by the instructor.

*Prerequisite:* C- or better in MATH 215 and 217; or permission of the department chairperson.

**416 Theory of Numbers (3)** Topics include the division algorithm; positional notation; divisibility; primes; congruences; divisibility criteria; the sigma, divisor, and phi functions; diophantine equations; linear, polynomial, and simultaneous congruences; theorems of Fermat, Euler, Lagrange, and Wilson; quadratic reciprocity.

*Prerequisite:* C- or better in MATH 215; or permission of the department chairperson.

**422 Theory of Sampling and Surveys (3)** Survey designs; simple random, stratified, cluster, and systematic sampling; ratio estimates; regression estimates; cost and variance functions.

*Prerequisite:* C- or better in MATH 321 or its equivalent; or permission of the department chairperson.

**428 Regression and Time Series Models (3)** Addresses regression topics that include simple and multiple linear regression, polynomial regression, regression diagnostics, and forecasting. Introduces time series topics that include exponential smoothing, auto-regressive, integrated, moving average (ARIMA) models, and forecasting.

*Prerequisite:* C- or better in MATH 321 or its equivalent; or permission of the department chairperson.

**429 Analysis of Variance in Experimental Design Models**

**(3)** Multivariate normal distribution; quadratic forms; linear models; simple random, randomized block, Latin squares, factorial, split-plot, balanced incomplete block design; analysis of covariance; confounding; multiple comparison tests.

*Prerequisite:* C- or better in MATH 321 or its equivalent, or permission of the department chairperson.

**441 Geometry and Topology (3)** Introduction to geometric topology, including piecewise linear structures, Euler's formula, surfaces and solids, knots, graphs, and other topics.

*Prerequisite:* C- or better in MATH 217 and 267; or permission of the department chairperson.

**445 Differential Geometry (3)** Fundamentals of differential geometry, as an extensive study of curves and surfaces in 3-space. Includes the use of computer visualization and emphasizes the importance of differential geometry in areas like relativity theory and modern physics.

*Prerequisite:* C- or better in MATH 217 and 267; or permission of the department chairperson.

**452 Mathematics of Life Contingencies 1 (4)** Survival distributions, life tables; the mathematics of life insurance, life annuities, net premiums, and net premium reserves.

*Prerequisite:* C- or better in MATH 321 and 351; or permission of the department chairperson.

**453 Mathematics of Life Contingencies 2 (4)** Mathematics of multiple life functions, multiple decrement models, valuation theory for pension plans, insurance models including expenses, nonforfeiture benefits, and dividends.

*Prerequisite:* C- or better in MATH 452; or permission of the department chairperson.

**454 Mathematics of Investments (3)** Mathematical analysis and actuarial principles of investments and asset management.

*Prerequisite:* C- or better in MATH 320 and 351; or permission of the department chairperson.

**456 Introduction to Operations Research (3)** Topics include linear programming models, the simplex method, duality theory, transportation and assignment problems, network optimization models.

*Prerequisite:* C- or better in MATH 162 or 166, and in 217; or permission of the department chairperson.

**457 Actuarial Models 1 (4)** Loss and frequency distributions, limited expected value, effects of inflation, parametric and non-parametric models, identification procedures for insurance company data, bootstrapping, Bayesian analysis, compound frequency, methods for censored and truncated data, classical and Bayesian credibility models, experience rating.

*Prerequisite:* C- or better in MATH 321; or permission of the department chairperson.

**458 Actuarial Models 2 (3)** Basic functions related to actuarial models, common parametric models, maximum likelihood estimation for censored or truncated data, nonparametric estimation, hypothesis testing, models with co-variables, simulation, and other topics as time permits.

*Prerequisite:* C- or better in MATH 321; or permission of the department chairperson.

**459 Models in Financial Economics (3)** Mathematical and economic analysis of financial instruments and the management of financial and investment risk.

*Prerequisite:* C- or better in MATH 320 and 351; or permission of the department chairperson.

**460 History of Mathematics (3)** The development of mathematics from prehistoric times to the seventeenth century. Topics may include number concepts and numeration, algebra, geometry, trigonometry, analytic geometry, and calculus.

*Prerequisite:* C- or better in MATH 161 or 165; or permission of the department chairperson.

**464 Numerical Methods for Differential Equations (3)** Numerical methods for solving differential equations: finite difference and finite element discretization techniques; direct and iterative methods; analysis of convergence and stability; and computer implementation of numerical algorithms.

*Prerequisite:* C- or better in MATH 374; C- or better in MATH 259 or CS 120; or permission of the department chairperson.

**471 Real Analysis 1 (4)** Real and complex number systems: ordered sets, least upper bound property, fields, Archimedean property; Basic topology: cardinality, metric spaces, completeness, compactness, connectedness; Numerical sequences and series: convergence tests, upper-lower limits; Continuity: continuous functions, uniform continuity, Intermediate and Extreme Value Theorems, l'Hospital's Rule, Taylor's Theorem.

*Prerequisite:* C- or better in MATH 215 and 267; or permission of the department chairperson.

**472 Real Analysis 2 (3)** The Riemann-Stieltjes integral and Fundamental Theorem of Calculus. Sequences and series of functions. Differential calculus of functions of several variables. Inverse and implicit function theorems. Extremum problems. Lebesgue integration and comparison with the Riemann integral.

*Prerequisite:* C- or better in MATH 471; or permission of the department chairperson.

**473 Boundary Value Problems (3)** Fourier Series and integrals, heat and wave equations in one dimension, Laplace's equation in two dimensions, problems in higher dimensions,

numerical methods of solving boundary value problems.

*Prerequisite:* C- or better in MATH 374; or permission of the department chairperson.

**475 Topics in Partial Differential Equations (3)** Classical solution techniques for linear PDEs. Topics include first- and second-order equations, method of characteristics, special functions, orthogonal polynomials, transforms, Green's functions, and fundamental solutions. A computer algebra system is utilized.

*Prerequisite:* C- or better in MATH 267 and 374; or permission of the department chairperson.

**497 Student-Faculty Colloquium (1-6)** Participatory colloquium experience for motivated students. A contemporary topic of broad mathematical interest is chosen each semester. Each student is paired with a faculty member. These pairs work together to develop and present components of the semester-long course.

*Prerequisite:* C- or better in MATH 267; or permission of the department chairperson.

A total of 6 hours of credit may be earned.

## Department of Modern Languages and Classics

**New:**

**Pending ICHE approval**

**MAJOR IN CHINESE, 37 hours**

PREFIX	NO	SHORT TITLE	CR HRS
CH	201	Intermediate Chinese 1	4
	202	Intermediate Chinese 2	4
	301	Advanced Chinese 1	4
	302	Advanced Chinese 2	4
	303	Readings in Chinese	3
	304	Composition	3
	334	Chinese Culture/Civil (3)	
	or		
	335	Contemporary Chinese Culture (3)	3
	401	Contemporary Masterpieces (3)	
or			
402	Classical Masterpieces (3)	3	
9 hours from 300- and 400-level CH courses			9
			<hr/>
			37 hrs

## CHINESE (CH)

**New:**

**303 Readings in Chinese (3)** Designed to build vocabulary, reading skills, and recognition of Chinese characters using progressively more difficult authentic materials: signs, schedules, menus, bulletins, information sheets, and selections

from newspapers, journals, and contemporary literature.

*Prerequisite:* CH 202 or its equivalent or permission of the instructor.

**304 Composition (3)** Designed to develop practice in writing simple everyday communications such as correspondence, forms, reports, and short compositions. Stress on developing grammar skills, use of Chinese characters, and use of set conventional forms.

*Prerequisite:* CH 202 or its equivalent or permission of the instructor.

**335 Contemporary Chinese Culture (3)** An advanced course in Chinese culture and civilization intended for students who are interested in learning about contemporary Chinese culture(s) and civilization.

*Prerequisite:* CH 202 or its equivalent or permission of the instructor.

**337 Chinese Linguistics (3)** Introduction to Chinese linguistics, particularly phonological and syntactical structures and communication patterns. Readings and discussions include an examination of the similarities and differences between Chinese and English.

*Prerequisite:* CH 202 or its equivalent or permission of the instructor.

**401 Contemporary Masterpieces (3)** Reading and discussion of selected modern Chinese literary texts concentrating on selections from poetry, short stories, essays, and novels. Readings in English translation and Chinese.

*Prerequisite:* CH 302 and 303 and 304.

**402 Classical Masterpieces (3)** Introduction to classical Chinese texts of literary and historical significance. Includes selections from major works of fiction, poetry, essay, and drama. Readings in English translation and Chinese.

*Prerequisite:* CH 302 and 303 and 304.

**403 Advanced Reading and Writing (3)** Designed to develop practice in reading and writing at a level high enough to function in business and industry. Stress on developing vocabulary, Chinese characters, and conventional forms.

*Prerequisite:* CH 302 and 303 and 304.

**404 Seminar in Language (3)** Designed to develop communication skills at a level high enough to function in academic, business, and industry. Stress on developing advanced grammar, speaking and listening skills, and communication strategies in various contexts.

*Prerequisite:* CH 302 and 303 and 304.

**405 Seminar in Translation (3)** Training students in skills in translating Chinese into English, and vice versa, to prepare them for a career in which such skills are required, such as the business world or foreign relations.

*Prerequisite:* CH 302 and 303 and 304.

## FOREIGN LANGUAGES (FL)

**Revised:**

**299X Experimental/Developmental Topics (3-12)** Topics relevant to the discipline. Course titles will be announced before each semester.

A total of 12 hours of credit may be earned.

**369 Professional Experience (3-12)** Paid, supervised work experience integrating foreign and classical language skills with career-related positions in international firms, the travel industry, and local, state, and federal agencies. Work assignments may be part- or full-time for one or more semesters in approved cooperative education (co-op) or internship programs.

*Prerequisite:* a minimum of two years of university-level foreign language study and permission of the department chairperson.

A total of 12 hours of credit may be earned.

**390 Honors Colloquium in Foreign Literature (3-6)**

Selected readings and in-depth exploration and discussion of literary currents, movements, authors, and themes found in foreign literature.

*Prerequisite:* junior standing in the Honors College or permission of the department chairperson.

A total of 6 hours of credit may be earned.

**479 Practical Experience (3-12)** Non-paid, supervised work experience integrating foreign and classical language skills with career-related positions in international firms, the travel industry, and local, state, and federal agencies. Work assignments may be part- or full-time for one or more semesters in approved cooperative education (co-op) or internship programs.

*Prerequisite:* a minimum of two years of university-level foreign language study; permission of the department chairperson.

A total of 12 hours of credit may be earned.

## JAPANESE (JAPA)

### Revised:

**498 Readings (1-9)** Individualized readings in English or Japanese on a Japanese topic selected with the advice and direction of the instructor.

*Prerequisite:* permission of the instructor.

A total of 9 hours of credit may be earned.

## Department of Philosophy and Religious Studies

### PHILOSOPHY (PHIL)

#### Revised:

**299X Experimental/Developmental Topics (3-6)** Topics relevant to the discipline. Course titles will be announced before each semester.

A total of 12 hours of credit may be earned, but no more than 6 in any one semester or term.

**312 Current Issues in Philosophy (3)** Selected current and important issues in philosophy. Topics may include social and ethical problems, recent work on traditional philosophical problems, and other issues of concern.

A total of 9 hours of credit may be earned, but no more than 3 in any one semester or term.

**403 Reading and Special Study (1-6)** Allows superior students opportunities for guided reading and investigation in areas of philosophy not covered intensively in available courses.

*Prerequisite:* permission of the department chairperson.

A total of 12 hours of credit may be earned, but no more than 6 in any one semester or term.

**415 Professional and Practical Ethics (3)** A variable content course. Involves a critical examination of a broad topic in applied ethics—e.g. business ethics, bioethics, or feminist ethics—or a more specific theme, such as the ethical treatment of nonhuman animals or just war theory and pacifism.

*Prerequisite:* junior or senior standing or permission of the instructor.

A total of 9 hours of credit may be earned, but no more than 3 in any one semester or term.

## RELIGIOUS STUDIES (RELS)

### Revised:

**250 Introduction to Biblical Interpretation (3)** Academic study of biblical literature and of the wide variety of processes for interpreting and understanding this literature given a range of historical, literary, political, and cultural contexts and effects, in their ancient settings and in their historical and continuing interpretations.

A total of 6 hours of credit may be earned, but no more than 3 in any one semester or term.

**299X Experimental/Developmental Topics (3-6)** Topics relevant to the discipline. Course titles will be announced before each semester.

A total of 12 hours of credit may be earned, but no more than 6 in any one semester or term.

**403 Reading and Special Study (1-6)** An opportunity for guided investigation of aspects of religion not covered intensively in available courses.

*Prerequisite:* permission of the department chairperson.

A total of 12 hours of credit may be earned, but no more than 6 in any one semester or term.

## Department of Physics and Astronomy

### APPLIED PHYSICS (APHY)

#### Revised:

**315 Medical Physics 1 (3)** Biomechanics, statistical physics, bioelectric fields, biomagnetic fields, electricity and magnetism at the cellular level.



*Prerequisite:* PHYC 112 or 122.

*Prerequisite recommended:* BIO 111, 215; MATH 165, and 166.

**420 Solar Thermal Systems (3)** Physics of the solar energy resource, solar collection, concentration, thermal conversion, energy storage, and the design and performance of solar thermal energy systems.

*Prerequisite:* MATH 166 and PHYC 122.

## PHYSICS (PHYC)

### New:

**336 Computational Physics (3)** Introduction to computational methods in physics, with an emphasis on application and on developing tools for implementing realistic computer simulations and interpretation of the data. These topics will include numerical integration, function fitting and minimization, realistic simulation of projectile motion and many-body systems, stochastic mechanics, wave motion, and molecular dynamics.

*Prerequisite:* PHYC 122 and MATH 166, some prior programming experience at level of CS 120 is preferred.

**536 Computational Physics (3)** Introduction to computational methods in physics, with an emphasis on application and on developing tools for implementing realistic computer simulations and interpretation of the data. These topics will include numerical integration, function fitting and minimization, realistic simulation of projectile motion and many-body systems, stochastic mechanics, wave motion, and molecular dynamics.

*Prerequisite:* permission of the department chairperson or the instructor; some prior programming experience at level of CS 120 is preferred.

### Revised:

**122 General Physics 2 (5)** Continuation of PHYC 120. Topics include heat and laws of thermodynamics, Coulomb's law and the electric field, Ampere's law and the magnetic field, introduction to Maxwell's equation, DC and AC circuits; the nature, propagation, and properties of light; and lens systems. An optional introduction to selected topics in modern physics may be included. Core Transfer Library: Physical Sciences (IPS 1754)

*Prerequisite:* PHYC 120.

*Parallel:* MATH 166.

**140 General Physics 1 (Calculus-based) (4)** First course in calculus-based physics. Topics include Newtonian mechanics, work and energy concepts, impulse and momentum, elasticity, wave motion and sound, hydrostatics and hydrodynamics. Course content is the same as the lecture portion of PHYC 120. Uses a computer-based content delivery system (internet, CD ROM, etc.) and is designed for students who prefer a self-paced individualized learning environment.

*Prerequisite or parallel:* MATH 165.

Students cannot get credit for both PHYC 120 and PHYC

140.

**142 General Physics 1 Laboratory (4)** Continuation of PHYC 140. Topics include heat and laws of thermodynamics, Coulomb's Law and the electric field, Ampere's law and the magnetic field, introduction to Maxwell's equation. DC and AC circuits; the nature, propagation, and properties of light; and lens systems. An optional introduction to selected topics in modern physics may be included. Computer-based content delivery for self-paced learning.

*Prerequisite:* PHYC 140 and MATH 166.

**330 Mechanics (3)** Basic concepts of mechanics, general motion of particles in three dimensions. Simple and damped harmonic motion. Particle dynamics in noninertial frames of reference, central forces. Dynamics of systems of particles. Motion of rigid bodies in three dimensions. Dynamics of oscillation systems.

*Prerequisite:* PHYC 120 and MATH 166.

## Department of Physiology and Health Science

### Revised:

#### Health and Physical Education Teacher Education – Decision Point Requirements

##### Decision Point 1:

- PEP 161 – satisfactory dispositions; *C* or better.
- HSC 160 – *C* or better.
- Creation of on-line portfolio.
- Fitness Test – associated with Fitness/Activity (PEP 161).
- Demonstrate adequate swim skills or take AQUA 214/215.

##### Decision Point 2:

- CASA passed.
- Overall GPA of 3.0 in at least 45 hours.
- GPA of 2.75 in major.
- HSC 290 – satisfactory dispositions; *C* or better.
- PEP 209, 227, 291 satisfactory dispositions; *C* or better.
- Fitness Test – associated with Fitness/Activity (PEP 252).
- *C* or better in 100/200-level professional education courses (EDMU 205 and EDPS 250).
- *C* or better in COMM 210.
- Approval of application for admission in teaching curriculum.
- Declaration of teaching major via Degree Works.
- Satisfactorily complete second level of portfolio review.

##### Decision Point 3:

- Overall GPA of 3.0 in at least 93 hours.
- GPA of 3.0 in major.
- Completion of Writing Proficiency Program.
- Within 9 hours of completion of content courses.
- Satisfactorily complete third level of portfolio review.
- Meet fitness testing requirements (PEP 399).
- Portfolio – plan, delivery, reflection, and leadership

- potential.
- HSC 295, 363, 395 – satisfactory dispositions; C or better.
- HSC 261, 467, and FCFN 240 – C or better.
- PEP 310, 394, 399, 400 satisfactory dispositions; C or better.
- Lesson plan (HSC 295, PEP 294/399).
- Assessment (PEP 310).
- Evidence of CPR certification.

**Decision Point 4 (after student teaching):**

- Satisfactorily complete student teaching portfolio review.
- Overall GPA of 3.0.
- GPA of 3.0 in major.
- Complete all degree requirements.
- Current state licensure testing requirements (content and pedagogy).
- Exit interview/survey.

Approval from student teaching supervisor and University supervisor for graduation.

**TEACHING MAJOR IN HEALTH AND PHYSICAL EDUCATION (ALL-GRADE), 65 hours**

PREFIX	NO	SHORT TITLE	CR HRS
EXSC	292	Anatomy	3
	293	Found Physiology and Exercise	3
FCFN	240	Nutrition for Educators	3
HSC	160	Fundamentals of Human Health	3
	261	Health, Sex, & Family Life	3
	290	Eval & Assess in Hlth & PE	3
	295	Rdg/Tech/Instr Strat in Hlth	3
	363	Current Issue Admin/Coord H/PE	3
	395	Meths & Curr/Tchn Hlth Ed	3
	467	Drug Dependency and Abuse	3
PEP	158	Teaching Dance and Gymnastics	2
	161	Found/Prin of Health/Phys Ed	3
	209	Intro to Teaching Physical Ed	3
	222	Field and Court Invasion Games	2
	227	Intro Adapted Physical Ed/Act	3
	232	Net and Wall Games	2
	252	Teaching Fitness Activities	3
	291	Human Development/Learn	3
	310	Formal Assess Health/Phys Ed	3
	394	Teaching Phys Educ in Elem Sch	3
	399	Teaching Phys Ed High Sch	3
	400	Curr Design in Physical Educ	2
	444	Developing Health/PE Classroom	3

65 hrs

Demonstrates competent swimming skills or takes AQUA 214 or 215. Demonstrates CPR and first aid certification

**ALL-GRADE EDUCATION PROGRAM**

PREFIX	NO	SHORT TITLE	CR HRS
		Education core, 27 hours	
EDAL	470	Student Teaching: All-Grade (6-7)	7

EDFO	420	Soc, Hist, Phil Found of Ed	3
EDMU	205	Intro to Multicul Ed	3
EDPS	250	Human Growth Development	3
	390	Educational Psychology	3
EDJH	385	Prin of Tchn in Mid Schl	3
EDSE	465	Elective Student Teaching (3 or 5)	5

27 hrs

See Professional Education Assessment/Decision Points, P. 374, for additional information.

**Department of Political Science**

**POLITICAL SCIENCE (POLS)**

**Revised:**

**408 Topics in Legal Studies (3)** Topics in legal studies selected and investigated in consultation with departmental faculty and the department chairperson.

*Prerequisite:* permission of the department chairperson.

A total of 6 hours of credit may be earned, but no more than 3 in any one semester or term.

*Open only to legal studies majors.*

**Department of Social Work**

**SOCIAL WORK (SOCW)**

**Revised:**

**370 Selected Aspects of Social Work Practice (3-6)**

Explores social work practice with selected populations and within specific fields of practice.

*Prerequisite:* SOCW 100, 200, 220, 230; or permission of the department chairperson.

A total of 6 hours of credit may be earned.

*Open only to social work majors.*

**490 Independent Study in Social Work (1-3)** Topic to be chosen and investigated in consultation with an instructor with special competence in the subject involved.

*Prerequisite:* permission of the department chairperson.

A total of 3 hours of credit may be earned.

**Department of Sociology**

**SOCIOLOGY (SOC)**

**Revised:**

**490 Independent Study of Sociology (1-3)** Provides opportunities to conduct sociological investigations supervised by instructors who possess expertise in the subjects involved.

*Prerequisite:* SOC 100 plus 6 SOC hours; permission of the department chairperson.

A total of 6 hours of credit may be earned, but no more

than 3 in any one semester or term.

## TEACHERS COLLEGE

### Department of Counseling Psychology and Guidance Services

#### COUNSELING PSYCHOLOGY (CPSY)

##### Revised:

**490 Issues in Counseling (1-6)** Intensive study in selected areas of student need and interest in counseling. Opportunity for students to choose particular areas for in-depth study under faculty supervision.

A total of 9 hours of credit may be earned, but no more than 6 in any one semester or term.

### Department of Educational Psychology

##### Revised:

#### MINOR IN GIFTED AND TALENTED EDUCATION, 15 hours

PREFIX	NO	SHORT TITLE	CR HRS
EDPS	420	Education Gifted Student	3
	421	Identif/Evaluation Gifted	3
	425	Models/Strategies Gifted	3
	496	Practicum Gifted Education	3
	411	Creative Thinking (3)	
	or		
	423	Social/Emotional Needs Gifted (3)	3
			15 hrs

#### LICENSE IN GIFTED AND TALENTED EDUCATION, 12 hours

PREFIX	NO	SHORT TITLE	CR HRS
EDPS	420	Education Gifted Student	3
	421	Identif/Evaluation Gifted	3
	425	Models/Strategies Gifted	3
	411	Creative Thinking (3)	
	or		
	423	Social/Emotional Needs Gifted (3)	3
			12 hrs

#### EDUCATIONAL PSYCHOLOGY (EDPS)

##### Revised:

**498 Seminar in Educational Psychology (3-6)** Group or individual investigation and study of current issues, problems,

and developments in human development, classroom learning, and evaluation.

*Prerequisite:* permission of the department chairperson.

A total of 12 hours of credit may be earned, but no more than 6 in any one semester or term.

### Department of Educational Studies

#### EDUCATION: HIGHER (EDHI)

##### Revised:

**401 Special Topics in Leadership (1-3)** Critical examination of selected topics and issues in leadership. Designed to help students become familiar with current trends and issues associated with leadership, as well as practical application. May be repeated once by permission of the instructor.

A total of 3 hours of credit may be earned.

#### EDUCATION: TECHNOLOGY (EDTE)

##### Revised:

**480 Internship in Educational Technology (2-4)** Application of educational technology in classroom or schools under supervision by professors, classroom teachers, and administrators. Topics to be chosen in agreement with professor and field contact.

*Prerequisite:* EDTEC 470.

A total of 4 hours of credit may be earned.

### Department of Elementary Education

##### Revised:

#### TEACHING MAJOR IN EARLY CHILDHOOD EDUCATION (Birth-Grade 3), 103 hours

PREFIX	NO	SHORT TITLE	CR HRS
AHS	100	Introduction to Art	3
BIO	102	Biol Concepts for Teachers	3
EDEL	100	Educ in a Democratic Society	3
	200	Plan for Elem and EC Classroom	3
	244	Early & Elem Educ for Soc Just	3
	351	Teaching in the K/Primary Prog	3
	400	Student Teaching: Pre-K	6
	401	Student Teaching: Kindergarten (6)	
	or		
	402	Student Teaching: Primary (6)	6
EDFO	420	Soc, Hist, Phil Found of Ed	3
EDPS	260	Development Elementary	3
	393	Educational Psych Elementary	3
EDRD	390	Early Emergent Literacy	3
	400	Tchg of Rdg in Today's Schools	3
	430	Corrective Reading	3
EDTE	120	Intro Comp & Dig Media/Tchrs	1
ENG	204	Literature for Children (3)	

	or		
	318	Lit for Young Children (3)	3
FCFC	265	Infant/Toddler Develop Educ	3
GEOG	101	Earth Sea Sky: Geographic View (3)	
	or		
GEOL	101	Planet Earth Geol Environment (3)	3
HIST	201	American History, 1492-1876	3
HSC	350	Elem Schl Hlth Prgms	3
MATH	201	Num Alg Prob Elem Teach	4
	202	Data Geo Meas Elem Teach	3
	391	Teach Mathematics Elementary	3
MUSE	265	Music Basics for the Classroom	3
PHYC	101	Phys Sci Concepts for Teachers (1-3)	3
SCI	398	Teach Sci in Early/Pri Grds	3
SPCE	302	Tch Studs/Dis in Gen Ed	3
SS	398	Teaching SS EC/Kind-Grade 3	3
Elective			2
			<hr/>
			91 hrs

**Concentration**

EDEL	231	Family and Community Relations	3
	252	Creative Exp for Yng Children	3
	301	Tchg in the Pre-K/K Program	3
	381	Interaction Skills Young Child	3
			<hr/>
			12 hrs
			<hr/>
			103 hrs

These major courses, AHS 100, BIO 102, GEOG 101 or GEOL 101, HIST 201, MATH 201, MUSE 265, PHYC 101 also fill a University Core Curriculum requirement.

**TEACHING MAJOR IN ELEMENTARY EDUCATION (Grades K-6), 102 hours**

<i>PREFIX</i>	<i>NO</i>	<i>SHORT TITLE</i>	<i>CR HRS</i>
AHS	100	Introduction to Art	3
BIO	102	Biol Concepts for Teachers	3
EDEL	100	Educ in a Democratic Society	3
	200	Plan for Elem and EC Classroom	3
	244	Early & Elem Educ for Soc Just	3
	300	Mgt, Org, & Instr Elem Clasrm	3
	350	Tchg in the Elem Ed Classroom	3
	463	Student Teaching: Elementary	6
	465	Student Teaching: Elementary	6
EDFO	420	Soc, Hist, Phil Found of Ed	3
EDPS	260	Development Elementary	3
	393	Educational Psych Elementary	3
EDRD	400	Tchg of Rdg in Today's Schools	3
	430	Corrective Reading	3
ENG	204	Literature for Children	3
	311	Language Arts Methods	3
GEOG	101	Earth Sea Sky: Geographic View (3)	
	or		
GEOL	101	Planet Earth Geol Environment (3)	3
HIST	201	American History, 1492-1876	3
HSC	350	Elem Schl Hlth Prgms	3
MATH	201	Num Alg Prob Elem Teach	4
	202	Data Geo Meas Elem Teach	3
	391	Teach Mathematics Elementary	3

MUSE	265	Music Basics for the Classroom	3
PHYC	101	Phys Sci Concepts for Teachers (1-3)	3
SCI	397	Teach Sci in the Elem Schl	3
SPCE	302	Tch Studs/Dis in Gen Ed	3
SS	397	Teaching SS in the Elemen Schl	3
Elective			2
			<hr/>
			90 hrs

Concentration area			12 hrs
			<hr/>
			102 hrs

These major courses, AHS 100, BIO 102, GEOG 101 or GEOL 101, HIST 201, MATH 201, MUSE 265, PHYC 101, also fill a University Core Curriculum requirement.

**English as a Second Language, 12 hours**

Prepares teachers to work with non-native speakers of English in listening, writing, reading, and speaking skills. These courses can be applied toward licensure in Teaching English as a Second Language as well.

ENG	320	Intro to Linguistics Science	3
	436	Theory & Research in TESOL	3
	437	Methods & Materials in TESOL	3
	457	Practicum in TESOL	3
			<hr/>
			12 hrs

The above requirements are for the English as a Second Language concentration area available for Teaching Majors in Elementary Education (Grades K-6) only.

**Gifted and Talented, 12 hours**

EDPS	420	Education Gifted Students	3
	421	Identif/Evaluation Gifted	3
	425	Models/Strategies Gifted	3
	411	Creative Thinking (3)	
	or		
	423	Social/Emotional Needs Gifted	3
			<hr/>
			12 hrs

**Kindergarten/Primary Education, 12 hours**

EDEL	231	Family and Community Relations	3
	252	Creative Exp for Yng Children	3
	440	Kindergarten Education	3
EDRD	390	Early Emergent Literacy	3
			<hr/>
			12 hrs

**Language Arts, 12 hours**

Exploration in depth of the theory and content of the study of literature, writing, and language. Courses selected for this concentration are particularly related to content, issues, and concerns of the elementary classroom.

Required course			
ENG	302	Dev Elem Eng La Multicult Lit	3

Choose one of the following writing courses

ENG	213	Intro to Digital Literacies (3)	
	285	Intro to Creative Writing (3)	3

Choose one of the following literature courses				
ENG	205	World Literature (3)		12 hrs
	206	Reading Literature (3)		
	318	Lit for Young Children (3)		
	414	Young Adult Literature (3)	3	

<i>Spanish concentration</i>				
SP	202	Intermediate Spanish 2		3
	301	Conversation and Composition		3
	302	Composition and Grammar		3

Choose one of the following language courses				
ENG	220	Language and Society (3)		
	320	Intro to Linguistics Science (3)		
	321	English Linguistics (3)	3	
			3 hours from any other 300-400-level SP course	3
				12 hrs

3 hours from any other 300-400-level SP course 3

12 hrs

**Classical Languages, 12 hours**

<i>Latin concentration</i>				
LAT	202	Intermediate Latin 2		3
	301	Introduction to Prose 1		3
	302	Introduction to Poetry 1		3

3 hours from any other 300-400-level CC course 3

12 hrs

**Mathematics, 12 hours**

Designed to provide a mathematics background in the content standards characterizing the K-12 mathematics curriculum.

These courses can be applied toward requirements for licensure in middle school mathematics.

Required courses				
MATH	310	Algebra Elem Mid Scl Teach	3	
	316	Num Thy Elem Mid Scl Teach	3	
	360	Geometry Elem Mid Scl Teach	3	

Choose from one of the following courses				
MATH	181	Elementary Probability Stats (3)		
	330	Technology Ele Mid School Math (3)	3	
			12 hrs	

**Psychology and Counseling, 12 hours**

Elementary teachers must understand the psychology of children; their thinking, feelings, behavior, development, learning, the measurement of these characteristics, and the environments in which they occur. These psychological issues are essential for understanding, interacting with, and instructing children.

12 hours from				
<i>Counseling psychology and guidance services</i>				
CPSY	400	Fundamentals of Counseling (3)		
	420	Psychological Interventions (3)		
	470	Cross-Cult Counseling (3)		

**Modern Languages, 12 hours**

<i>Classical culture concentration</i>				
CC	301	Classical Lit in English Trans (3-6)	3	
	305	Classical Myth and Theory	3	
6 hours from CC, GRK, and LAT courses			6	
			12 hrs	

<i>Educational psychology</i>				
EDPS	306	Behavior Analysis (3)		
	345	Tests and Measurement (3)		
	350	Child Psychology (3)		
	351	Adolescent Psychology (3)		

<i>French concentration</i>				
FR	202	Intermediate French 2	3	
	301	Conversation	3	
	302	Composition	3	
3 hours from any other 300-400-level FR course			3	
			12 hrs	

<i>Psychological science</i>				
PSYS	213	Psych of Human Adjustment (3)		
	316	Social Psychology (3)		
	317	Personality (3)		12

<i>German concentration</i>				
GER	202	Intermediate German 2	3	
	301	Conversation	3	
	302	Composition	3	
3 hours from any other 300-400-level GER course			3	
			12 hrs	

12 hrs

Students electing PSYS courses must take PSYS 100 for University Core Curriculum to satisfy prerequisites.

**Teacher of Reading for Elementary concentration/license, 12 hours**

<i>Japanese concentration</i>				
JAPA	202	Intermediate Japanese 2	4	
	301	Advanced Japanese 1	4	
	302	Advanced Japanese 2	4	

Required courses				
EDRD	427	Tchg Rdg to Diverse Learners		3
	450	Reading Strategies & Practicum		6

Choose 3 hours from the following courses				
EDRD	320	Disciplinary Literacy Elem Sch (3)		
	390	Early Emergent Literacy (3)		3

12 hrs

421 Racial & Cultural Minor US (3)  
424 Family (3)

9

12 hrs

**Science, 12 hours**

Includes a broad range of courses that cover life, earth, and physical sciences. Students seeking this option learn to use scientific knowledge, skills, and habits of mind to solve problems and think critically about the natural world. If GEOL 101 was selected for the University Core Curriculum requirement, then GEOL 202 must be selected for the concentration.

Choose a minimum of 12 hours from the following courses:

- ASTR 120 The Sun and Stars (3)
- or
- 101 Astro Mat for Teacher (3)
- BIO 112 Principles of Biology 2 (4)
- CHEM 100 People and Chemistry (3)
- or
- 101 Gen, Org, Biochem/Hlth Sci (5)
- GEOL 101 Planet Earth Geol Environment (3)
- or
- 201 Earth, Life, and Time (3)

12 hrs

**State/World Connections, 12 hours**

Includes a broad range of courses from the social sciences chosen to help prepare teachers for educating students in a world of ever-expanding worldwide connections. Students selecting this concentration will learn how to use this content in their own teaching of students in elementary grades.

Required course

- SS 392 Teaching State/World Conns 3

9 hours from *three* different subjects

- ANTH 101 Intro to Cultural Anthropology (3)
- 103 Archaeology and Culture (3)
- 105 Introduction to Biological Anth (3)
- 111 Anth, Culture, & Globalization (3)
- 342 American Culture (3)
- ECON 116 Survey of Economic Ideas (3)
- 279 Problems of Emerging Nations (3)
- 310 Amer Econ Hist 2: 1860-1990 (3)
- GEOG 150 Global Geography (3)
- 350 Geog United States & Canada (3)
- 351 Latin American and Caribbean (3)
- 353 Geography of Indiana (3)
- HIST 100 Introduction to US History (3)
- 198 Non-Western Civilizations (3)
- 201 American History, 1492-1876 (3)
- 202 US History, 1877 to Present (3)
- 415 History of Indiana (3)
- POLS 130 American National Government (3)
- 237 State and Local Politics (3)
- 280 Comparative Political Systems (3)
- 293 International Relations (3)
- 342 Problems in Public Policy (3)
- PSYS 100 Intro to Psychological Science (3)
- 316 Social Psychology (3)
- SOC 100 Principles of Sociology (3)

**Technology, 12 hours**

This concentration area provides the opportunity for students to acquire specialized professional knowledge beyond the minimum technological benchmarks expected of all future teachers.

“Technology is human innovation in action” (Technology for All. n.d., p.16). This action facilitates the generation of knowledge that leads to the development of solutions that assist and extend our capabilities as people.

Required courses

- EDTE 350 Curr Integration of Tech 3
- 470 Technology Policy and Ethics 3
- TDPT 100 Technology and Society 3

Choose 3 hours from the following courses

- CS 110 Intro Comp Sci & Web Prog (3)
- EDCU 331 Public School Curriculum (3)
- EDRD 445 Computers in Rdg Instruction (3)
- EDTE 352 Multi Web Design & Dev/Ed (3)
- 355 Lrn/Tchnng w/Emerging Tech (3)
- 360 Studies in Ed Tech (3)
- 365 Visual and Digital Literacies (3)
- 480 Internship in Educational Tech (2-4)
- TDPT 400 Capstone in Tech for Ele Grds (3) 3

12 hrs

**Wellness, 12 hours**

*Nutrition and family concentration*

Designed to provide an integrated approach to understanding relationships among wellness, nutrition, and the family environment. The teacher is prepared to identify children at risk and apply problem-solving skills using appropriate community health resources.

Required courses

- FCFC 250 Family Relations 3
- FCFN 240 Nutrition for Educators 3

Choose 6 hours from the following courses

- FCFC 202 Family Wellness (3)
- 380 Parenting (3)
- FCFN 110 Prin Food Prep and Food Serv (3)
- 395 Food and Culture (3) 6

12 hrs

FCFN 240 substitutes for FCFN 340 for prerequisite purposes.

*Physical education concentration*

Provides both content knowledge and practical experiences in designing and implementing a developmentally appropriate physical education program on the elementary school level.

- HSC 363 Coor Schl Hlth Pgams: Org/Iss 3
- PEP 227 Intro Adapted Physical Ed/Act 3

252	Teaching Fitness Activities	3
291	Motor Development/Learn	3
		12 hrs

**See Teachers College Interdepartmental for Dual Major in Elementary and Special Education.**

## Department of Special Education

### SPECIAL EDUCATION (SPCE)

#### Revised:

#### **331 Microcomputers in Special Education (1-4)**

Introduction to microcomputer applications in special education, from building personal computer skills and applying those skills in the classroom to adapting computers for learners with special needs.

*Prerequisite:* permission of the department chairperson.  
A total of 4 hours of credit may be earned.

**361 Advanced Practicum in Special Education (1-6)** An advanced practicum emphasizing the application of teaching methodologies. Projects associated with specialty methods courses (SPCE 376 or 454 or 476) will be completed. May be repeated only one time.

*Prerequisite:* SPCE 201 or 302 with grades of *C* or better; SPCE 202, 266, with grades of *C* or better (waived for secondary content area program and dual majors); admission to the teacher education program; passing scores on the CASA; 3.0 overall grade-point average; permission of the department chairperson.

*Parallel:* SPCE 366, 376, 378, 454, or 476.

A total of 9 hours of credit may be earned, but no more than 6 in any one semester or term.

**362 Advanced Practicum Severe Disabilities (3)** An advanced practicum emphasizing the application of assessment and teaching methodologies for students with moderate to severe disabilities in classroom and related settings. Projects associated with SPCE 378 will be completed.

*Prerequisite:* SPCE 201, 202, 266, 377 with grades of *C* or better; admission to the teacher education program; passing scores on the CASA; 3.0 overall GPA; permission of the department chairperson.

*Parallel:* SPCE 378.

A total of 9 hours of credit may be earned, but no more than 3 in any one semester or term.

*Open only to* students majoring in exceptional needs: intense interventions.

**363 Advanced Practicum Physical Impairments (3)** An advanced practicum emphasizing the application of assessment and teaching methodologies for students with physical, sensory, health impairments and multiple disabilities in classroom and related settings. Projects associated with SPCE 379 will be completed.

*Prerequisite:* SPCE 201, 202, 266, 366 with grades of *C*

or better; admission to the teacher education program; passing scores on the CASA; 3.0 overall GPA; permission of the department chairperson.

A total of 9 hours of credit may be earned, but no more than 3 in any one semester or term.

*Open only to* students majoring in exceptional needs: intense interventions.

**466 Student Teaching: Hearing Impaired (1-12)** Required pre-service teaching practica for students seeking licensure in special education hearing impaired. Offered credit/no credit only.

*Prerequisite:* admission to student teaching.  
A total of 12 hours of credit may be earned.

**488 Student Teaching: Mildly Mentally Disabled (1-12)** Required for licensure in special education: mildly mentally disabled. Offered credit/no credit only.

*Prerequisite:* admission to student teaching.  
A total of 12 hours of credit may be earned.

Ron Murphy, Associate Director  
Office of Academic Systems