

# BALL STATE UNIVERSITY

## ACADEMIC POSTING

2016-2017

VOLUME XLVIII – 5

February 27, 2017

This posting may contain all or part of the following: new, revised, and dropped programs, courses and prefixes. The posting period begins February 27, 2017. If no demurrer is received within ten school days, the changes will be certified for implementation. *The effective date for implementing the undergraduate and graduate materials posted after May 5, 2017 is Fall Semester 2018.*

### INTERDEPARTMENTAL PROGRAMS

#### INTERDEPARTMENTAL (ID)

##### Dropped:

151 Final Cut Pro, Level 1 Certification (1-3)

152 Sound Editing in Final Cut Studio, Level 1 Certification (1-3)

153 Color Correction in Final Cut Studio, Level 1 Certification (1-3)

154 Motion, Level 1 Certification (1-3)

155 DVD Studio Pro, Level 1 Certification (1-3)

160 Photoshop Certification (1-3)

161 Dreamweaver Certification (1-3)

162 Flash Certification (1-3)

163 After Effects Certification (1-3)

164 Illustrator Certification (1-3)

165 Premiere Pro (1)

166 InDesign (1)

167 Fireworks (1)

168 Lightroom (1)

169 Soundbooth (1)

170 Aperture (1)

171 Encore DVD (1)

172 Logic Pro (1)

173 Maya (1)

181 Pro Tools 101 (1)

182 Pro Tools 110 (1)

251 Final Cut Pro, Level 2 Certification (1-3)

282 Pro Tools 201 (1)

283 Pro Tools 210 Production (1)

284 Pro Tools 210 Music (1)

### Real Estate Development

#### Revised:

MINOR IN REAL ESTATE DEVELOPMENT,  
25 credits

PREFIX	NO	SHORT TITLE	CREDITS
PLAN	240	Plan and Priv Dev	3
	303	Economic Development Studio	4
RE	230	Real Estate Principles	3
Capstone: 3 credits from			
FCCPM	400	Housing and Society (3)	
PLAN	490	Ind Study in Plan (1-9)	
	498	Spec Proj in Urbn Plan and Dev (3-9)	
TEDU	490	Study in Technology (1-3)	
TCST	460	Capstone in Construction (3)	3

13

Electives

12 credits from any of the following areas

Business Administration and Real Estate Law		
ACC	201	Principles of Accounting 1 (3)
	202	Principles of Accounting 2 (3)
BL	260	Principles of Business Law (3)
ECON	221	Business Statistics (3)
MKG	300	Principles of Marketing (3)
PLAN	452	Urban Planning Law (3)
RE	331	RE Construction Law and Fin (3)

#### Community Development

PLAN	430	Housing and Comm Dev (3)
	453	Center City Revitalization (3)
	465	Comm Dev and Faith Based Init (3)
	485	Intro Comm Dev and Enter Plng (3)
	486	Methods of Public Interest Dev (3)
	498	Spec Proj in Urbn Plan and Dev (3-9)

#### Construction

TCST	180	Construction Documents (3)
	200	Site Preparation (3)
	320	Estimating (3)
	365	Construction Safety (3)
	400	Const Proj Mngmnt (3)
	420	Construction Finance and Law (3)

#### Housing and Property Management

FPCM	104	Housing Decisions (3)
	235	Intro to RPM (3)
	305	Maintenance for Prop Mgr (3)
	315	Sr Housing: Dsgn, Mkg, and Mgt (3)
	405	Mgt of Gov Assisted Housing (3)
PLAN	411	Property Law (1)
	430	Housing and Comm Dev (3)
	440	Building Performance (3)
	441	Sustainable Housing (3)
TCST	252	Building Diagnostics (3)

#### Public Policy and Facilities

PLAN	421	Urban Land-use Planning (3)
	439	Community Facilities Planning (3)
	452	Urban Planning Law (3)

#### Management

MGT	241	The Entrepreneurial Experience (3)
	300	Managing Behavior in Org (3)
	341	Opportunity Identification (3)
	346	Product and Service Design (3)

12

25 crs

The capstone requirement may be fulfilled through any independent study course with the approval of the Real Estate Development program's academic advisor and coordinator. All independent study courses and variable-title courses such as PLAN 498 must be cleared with RED program advisor to be certain they qualify toward the minor. Urban planning and development majors are strongly advised to take their electives outside of their major.

## COLLEGE OF ARCHITECTURE AND PLANNING

### Department of Architecture

#### ARCHITECTURE (ARCH)

##### New:

##### **340 Introduction to Historic Preservation for Architects**

**(3)** The introduction of historic preservation in the context of architectural practice. Students will become familiar with the significant public and private Preservation agencies and organizations, along with the roles they play in the Preservation movement. The legal basis of preservation will be surveyed, as well as the process for documenting, designating, and protecting historic properties. Preservation treatment and re-use options will be discussed in light of conversation, sustainability and cultural continuity.

*Not open to students who have credit in ARCH 440.*

*Open only to B.ARCH; BS/BA in architecture and environmental design majors.*

**400 Comprehensive Architecture Studio (6)** Architecture studio involves architectural design explorations requiring integrated evaluations and decision-making in the design process. Projects will demonstrate consideration and integration of environmental and structural systems, environmental stewardship, technical documentation, accessibility, site conditions, life safety, and building envelope systems and assemblies.

*Prerequisite:* ARCH 302.

*Parallel:* ARCH 420.

*Open only to B.ARCH majors.*

**403 Architecture Design Studio (6)** Architecture design studio investigating topical architectural problems that may have an interdisciplinary and/or applied aspect. Within this, students are expected to increasingly define their design values and effective methods for engaging and representing them.

*Prerequisite:* ARCH 400.

*Parallel:* ARCH 424.

*Open only to B.ARCH majors or by permission of the department chairperson.*

**404 Architecture Final Project Studio (6)** Conceptual and design development processes applied to a student initiated and defined architecture design final studio project.

*Prerequisite:* ARCH 403.

*Open only to B.ARCH majors.*

**420 Professional Practice (3)** Overview of the essential aspects of the architectural profession. Subjects include: stakeholder roles in architecture; project management; business practices; financial considerations; legal responsibility; ethics and professional conduct.

*Parallel:* ARCH 400.

*Open only to B.ARCH majors.*

**424 Research and Programming Methods in Architecture**

(3) Exposure to methods and procedures of architectural research and programming, including case studies.

Application of these methods to research and programming for development of individual final project proposals for the architecture final project studio.

*Parallel:* ARCH 403.

*Open only to B.ARCH majors.*

**Revised:**

**301 Architectural Design (5)** Integration of all facets of design including design, research, programming, technology, function, human behavior, scheduling, time management, communication, use of materials, and systems. Workshops in the further exploration and development of visualization and communication skills at all stages of the design process.

*Prerequisite:* ARCH 202.

*Parallel:* ARCH 410.

*Open only to B.ARCH; BS/BA in architecture and environmental design majors.*

**MILLER COLLEGE OF BUSINESS****Department of Accounting****Revised:****MASTER OF SCIENCE IN ACCOUNTING – Professional Accounting Concentration, 30 credits**

<i>PREFIX</i>	<i>NO</i>	<i>SHORT TITLE</i>	<i>CREDITS</i>
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## Required courses

ACC	625	Tax Planning and Research	3
	640	Intro Accounting Research	3
	650	Attestation Principles Prac	3
	665	Seminar in Management Acctg	3
	675	Seminar in Financial Acctg	3
	690	Seminar in Professional Issues	3
	695	Accounting Capstone	3
MBA	611	Stats and Quantitative Methods	3

## Accounting electives

ACC	630	Accounting Info Systems (3)	
	655	Selected Topics in Accounting (3)	
	660	International Acctg Issues (3)	
	670	Ped and Prac Research in Acctg (2)	
	671	Advanced Accounting Research I (2)	
	672	Advanced Accounting Research II (2)	0-6

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 24-30 crs

0-6 credits of graduate business courses outside the Department of Accounting approved by the department chairperson or program advisor

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 0-6

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 30 crs
**MASTER OF SCIENCE IN ACCOUNTING – Research and Analytics Concentration, 30 credits**

<i>PREFIX</i>	<i>NO</i>	<i>SHORT TITLE</i>	<i>CREDITS</i>
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## Required courses

ACC	640	Intro Accounting Research	3
	670	Ped and Prac Research in Acctg	2
	671	Advanced Accounting Research I	2
	672	Advanced Accounting Research II	2
	680	Accounting Research Methods	3
	699	Research in Accounting	3
FIN	645	Bus Analy Vae Creation	3
MBA	611	Stats and Quantitative Methods	3

## Accounting electives

ACC	625	Tax Planning and Research (3)	
	630	Accounting Info Systems (3)	
	650	Attestation Principles Prac (3)	
	655	Selected Topics in Accounting (3)	
	660	International Acctg Issues (3)	
	665	Seminar in Management Acctg (3)	
	675	Seminar in Financial Acctg (3)	
	690	Seminar in Professional Issues (3)	
	695	Accounting Capstone (3)	3-9

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 24-30 crs

0-6 credits of graduate business courses outside the Department of Accounting approved by the department chairperson or program advisor

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 0-6

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 30 crs
**Department of Economics****ECONOMICS (ECON)****Revised:**

**330 Sports Economics (3)** Economics affects sports players, teams, leagues and institutions. The course applies economic principles to sports and covers topics such as the organization of sports, the market for franchises, financing sports venues, ticket prices, labor relations, player drafts, athlete compensation, betting markets, cooperative, collusive and competitive strategic behaviors in sports, and anti-trust issues. Students successfully completing this course will be able to understand and apply economic principles to sports and in their own lives.

*Prerequisite:* ECON 201 and ECON 221.

**COLLEGE OF FINE ARTS****Department of Art****ART (ART)**

**New:**

**508 Graduate Experimental Animation (3)** This class is designed to utilize multiple media and forms of animation to allow the student to explore, integrate, and develop new and interesting ways to create stories and ideas.

**509 Graduate Visual Storytelling (3)** This course provides an in-depth look into cinematic storytelling by investigating the effective visual communication of concepts and ideas. Readings, discussions, critiques, writings and practical application will help to explore these ideas and execute them.

**510 Graduate Animation Methods (3)** This class emphasizes visual storytelling through the development of writing, storyboards, and animatics. Additionally the course covers history, style, and personalities throughout animation history.  
*Open only to graduate students.*

**610 Graduate Production 1 (3)** This class focuses on the designing and production of collaborative animations projects. Projects will be produced in collaboration with an interdisciplinary group of artists, animators, or composers.

**612 Graduate Production 2 (3)** Production 2 is a continuation of creating collaborative animation projects. Projects will be produced in collaboration with an interdisciplinary group of artists, animators, or composers.

**School of Music****Revised:****MINOR IN MUSIC: JAZZ/COMMERCIAL, 25 credits**

PREFIX	NO	SHORT TITLE	CREDITS
MUHI	200	Survey of Music Literature	2
MUSP	204	Jazz Study (1-2)	2
	231	Jazz Combo (1-4)	1
	456	Jazz Improv 1	2
	457	Jazz Improv 2	2
	462	Jazz Piano Lab	1
MUST	101	Sight Singing and Ear Training	1
	102	Sight Singing and Ear Training	1
	111	Music Theory	2
	112	Music Theory	2
	250	Jazz Theory	2
MUSC	499	Recital	1
2 credits from			
MUSC	341	Large Instrumental Ensemble	2
4 credits from			
MUHI	441	Jazz History (2)	
MUSE	465	Jazz Pedagogy (2)	
MUST	223	Jazz Composition (2)	
	414	Jazz Arranging (2)	
	415	Jazz Arranging 2 (2)	

MUSP 204 Jazz Study (1-2)

4

25 crs

**MUSIC HISTORY AND MUSICOLOGY (MUHI)****Revised:**

**331 Music History 2 (3)** Traces the development of musical styles and compositional techniques from ca 1720 to the present, and examines the relationships between music, others arts, and broader socio-political contexts.

*Prerequisite:* MUHI 200 and 330 or departmental permission.

*Open only to music majors.*

**436 Music in the Classical Era (2)** A survey of vocal and instrumental music of the eighteenth century, including the various styles that marked the transition from the baroque to classical music, the rise of comic opera, and the development of the symphony, concerto, sonata, chamber music, and keyboard literature.

*Prerequisite:* MUHI 200 and 331.

*Open only to music majors.*

**MUSIC PERFORMANCE (MUSP)****New:****520 Instrumental Literature and Pedagogy (1-2)**

Introduction to and preparation of music and materials for instrumental music literature. May include audition preparation, solo and ensemble repertoire, practice techniques, and pedagogy techniques. This is an elective course.

A total of 4 credits may be earned.

*Open only to graduate-level students accepted into an instrumental performance degree program.*

**Department of Theatre and Dance****DANCE (DANC)****New:**

**200 The Dancer's Body (2)** An introduction to the basic knowledge of the human body in specific relation to dance, including studies of the musculoskeletal systems, nervous system, and kinesiology, as well as common dancer pathologies, injury prevention, and body maintenance. Additional topics may include the function of anatomical structures of the human body, the biomechanical principles of these structures and the integration of these systems.

*Prerequisite:* permission of the department chairperson.

**289 Student-Directed Dance Performance (1)** This course provides students with practical performance experience as part of the student directed production series.

*Prerequisite:* permission of the department chairperson.

A total of 8 credits may be earned, but no more than 1 in any one semester or term.

**389 Studio Dance Performance (1)** This course provides students with a practical performance experience as part of the faculty and/or guest artist directed studio production series.

*Prerequisite:* permission of the department chairperson.

A total of 8 credits may be earned, but no more than 1 in any one semester or term.

### Revised:

**300 Body Conditioning and Maintenance (2)** A specialize study of specific body therapies utilized to preserve, protect, and maintains a dancer's instrument. This course may include Pilates, yoga, proprioceptive neuromuscular facilitation techniques, relaxation techniques, somatic practices, massage techniques, diet and wellness.

*Prerequisite:* permission of the department chairperson.

A total of 6 credits may be earned, but no more than 2 in any one semester or term.

**489 Mainstage Dance Performance (1)** This course provides students with a practical dance performance experience as part of the faculty and/or guest artist directed mainstage production series.

*Prerequisite:* permission of the department chairperson.

A total of 7 credits may be earned, but no more than 1 in any one semester or term.

## THEATRE (THEA)

### New:

**373 Musical Theatre Scene Study (2)** This course will connect acting and singing studios through the use of libretto scenes and their accompanying duets from multiple periods in musical theatre. Students will understand heightened realism in musical theatre and specify the physical and emotional world of the piece, and will learn how to bridge the gap between the spoken text and songs particular to this genre of performance.

*Prerequisite:* permission of the department chairperson.

### Dropped:

**395 Introduction to Teaching Methods for Theatre (3)** Theory and practice of teaching theatre in middle and secondary schools. Includes curriculum development, instructional planning, classroom management techniques, methods and strategies of instruction, assessment, and use of instructional aids and activities for the classroom.

*Prerequisite:* THEA 220 and 232.

### Revised:

**280 Theatre and Dance Practicum (0-1)** Intensive experience in theatre performance, dance performance, stage management, scenery and costume preparation, running crews, theatre management, and other production areas. Students should complete practicum in six different areas.

*Prerequisite:* permission of the department chairperson.

A total of 15 credits may be earned, but no more than 3 in any one semester or term.

**295 (395) Introduction to Teaching Methods for Theatre (3)** Theory and practice of teaching theatre in middle and secondary schools. Includes curriculum development, instructional planning, classroom management techniques, methods and strategies of instruction, assessment, and use of instructional aids and activities for the classroom.

*Prerequisite:* THEA 220, 232.

## COLLEGE OF HEALTH

### School of Kinesiology

### Revised:

#### MAJOR IN SPORT ADMINISTRATION (BA/BS), 72-75 credits

##### Admission requirements

- Completion of ECON 201; and ENG 104 with a C or better.
- Completion of ACC 201; and SPTA 190 with C- or better.
- Completion of at least 8 hours of field experience in the sport industry.
- Completion of Ball State University Sport Administration Program application.
- Attain a minimum overall grade-point average of 2.5 at the time of application.

Once admitted into the sport administration major the following guidelines will be used to evaluate each student in order to remain in this program of study. Only students admitted into the program will have access to advanced course work (200-400 level) in the area of sport administration (SPTA prefix).

- Maintenance of an overall grade-point average of 2.5 or higher.
- No grade lower than a C- will be accepted in any course within the sport administration and business core courses.
- Maintenance of an overall grade-point average of 2.0 or higher within the business minor requirement.
- Internship (SPTA 479) enrollment requires senior standing and approval of the coordinator.

PREFIX NO SHORT TITLE

CREDITS

ACC	201	Principles of Accounting 1	3
BL	260	Principles of Business Law	3
ECON	201	Elementary Microeconomics	3
MGT	300	Managing Behavior in Org	3
MKG	300	Principles of Marketing	3
PEP	409	Psychological Social Issues	3
SPTA	190	Introduction to Sport Admin	3
	195	Comp Tech App for Sport Admin	3
	290	Revenue Generation in Sport	3
	300	Sport Law	3
	303	Sport Marketing	3
	305	Sport Finance	3
	345	Sport Communication	3
	402	Sport Event and Facility Mgt	3
	448	Sport Governance	3
	479	Sport Admin Internship	12
	485	Sport Management	3
			<hr/>
			60 crs

Students must also complete the additional credits from one of the following minors:

Foundations of Business (12 credits)	
Foundations of Management (12 credits)	
Marketing (15 credits)	
Professional Selling (15 credits)	12-15
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72-75 crs	

## Department of Nutrition and Health Science

### Revised:

#### Master of Arts in Nutrition and Dietetics, 36 credits

PREFIX	NO	SHORT TITLE	CREDITS
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36 credits from

Research component, 6 credits from

EDPS	641	Intro Statistical Methods (3)	
		or	
	642	Analysis of Variance (3)	
		or	
HSC	683	Principles of Epidemiology (3)	
		or	
	687	Stat Thry and Meth in Hlth Sci (3)	3
NUTR	697	Research Methods Nut Dietetics (3)	3
			<hr/>
			6 crs

Nutrition core, 15 credits from

NUTR	642	Nutrition Assessment	3
	647	Carbs, Proteins, and Lipids	3
	648	Vitamins and Minerals	3
6 credits from 600-level NUTR courses			6
			<hr/>
			15 crs

15 credits from

Electives inside or outside the Department of Nutrition and Health Science (may include dietetic internship NUTR 680, 681, 682)	15
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36 crs	

## COLLEGE OF SCIENCES AND HUMANITIES

### Department of Biology

#### Revised:

#### MAJOR IN BIOLOGY (BA/BS), 65-74 credits

##### *Concentration 1: General, 18-24 credits*

Six elective courses at the 300-level or above in ANAT, BIO, BIOT, BOT, PHYS, or ZOOL. Courses taken to fulfill University Core Curriculum requirements and biology major requirements may not be used as electives in this category. 18-24 crs

### Department of Criminal Justice and Criminology

#### CRIMINAL JUSTICE AND CRIMINOLOGY (CJC)

#### New:

**397 Constitutional Issues in Criminal Justice (3)** This class explores legal precedents in the criminal justice system. Analyses of appellate court decision are limited to those that are related to the 1<sup>st</sup>, 2<sup>nd</sup>, 4<sup>th</sup>, 5<sup>th</sup>, 6<sup>th</sup>, 8<sup>th</sup>, and 14<sup>th</sup> amendments. Topics include criminal investigations, custody, interrogations, searches and seizures, trial components, and sentencing.

*Prerequisite:* CJC 101 and 102 and 250.

*Open only to CJC majors and minors.*

**398 Human Services in Criminal Justice (3)** This course examines offender characteristics and needs, and explores how human services can meet those needs. Special attention is paid to human service policies and practices in prevention efforts, criminal justice interventions, and reentry.

*Prerequisite:* CJC 101 and 102.

*Open only to CJC majors and minors.*

**399 Special Populations in Criminal Justice (3)** This course examines special populations within the US criminal justice system, including (but not limited to) offenders with mental illness, elderly offenders, and offenders with HIV/AIDS. This course addresses the specific needs of each special population, as well as legal and ethical issues arising from their treatment in criminal justice contexts.

*Prerequisite:* CJC 101 and 102.

*Open only to CJC majors and minors.*

## Revised:

**309 Juvenile Justice and Delinquency (3)** This course examines theoretical explanations of delinquency and the juvenile justice system. Delinquency is examined from numerous perspectives, including the role of families, communities, schools, and genetics. The examination of responses to delinquency include those by the police, courts and correctional institutions.

*Prerequisite:* CJC 101 and 102.

*Open only to CJC majors and minors.*

**332 Victimology (3)** The purpose of this course is to examine the correlation of victimization theories. It also examines victims' reactions and various responses made to victims by the criminal justice system and other societal agencies.

*Prerequisite:* CJC 101 and 102.

*Open only to CJC majors and minors.*

**333 Policing in Free and Diverse Society (3)** This course is an examination of issues and developing trends confronting police in the United States. It examines issues of police and policing including organizations and management, minorities in policing, police deviance, use of force, and community policing. It emphasizes developments in the provision of law enforcement and social services by the police at the local, state, and federal levels.

*Prerequisite:* CJC 101 and 102 and 230.

*Open only to CJC majors and minors.*

**341 Community Corrections (3)** This course examines the organization and operation of community-based correctional programs throughout the United States. Topics include probation, parole, halfway houses, group homes, diversion, restitution, and community service programs, with an emphasis on best practice.

*Prerequisite:* CJC 101 and 102 and 240.

*Open only to CJC majors and minors.*

**350 Criminal Evidence and Procedure (3)** This course intends to enhance student's understanding of the rules of evidence in criminal proceedings. In criminal trials, the primary goal of the rules of evidence is intended to secure a defendant's constitutional right to a fair trial. Rules of evidence are not only important for the protection of the fundamental rights of the accused, but also are necessary in maintaining the integrity of the criminal justice system.

*Prerequisite:* CJC 101 and 102 and 250.

*Open only to CJC majors and minors.*

## Department of English

### ENGLISH (ENG)

#### Revised:

**220 Language and Society (3)** Addresses major social issues related to language use in the United States. Students learn through case studies and other projects to identify hidden assumptions, frame questions requiring research and do the research necessary to make informed decisions about linguistic issues in our society.

## Department of History

#### Revised:

### MASTER OF ARTS IN HISTORY, 33 credits

#### Admission requirements

Students must apply to and meet the admission requirements of the Graduate School. Students also must apply separately to the Department of History. All applicants must submit to the director a resume or curriculum vitae, original copies of all official undergraduate transcripts, a writing sample (typically their best undergraduate history paper), and a 300-500 word statement concerning goals and interests. Applicants normally should have earned at least a 3.0 grade-point average (GPA) on a scale of 4.0 in a minimum of 18 credits in undergraduate history courses. To qualify for a graduate assistantship in the department, applicants must take the Graduate Record Examination (GRE) general test and ordinarily have an undergraduate GPA of at least 3.0 on a scale of 4.0.

#### Degree requirements

PREFIX	NO	SHORT TITLE	CREDITS
Required Core			
HIST	612	Seminar Modern Historiography	3
	613	Seminar in Historical Research	3

#### Directed electives

A minimum of five courses in American, European, and/or World History distributed over a minimum of two areas. Students must select from the following courses:

##### American History

HIST	621	Studies in US History to 1877 (3)
	622	Studies in US History 1877- (3)

##### European History

HIST	631	Studies Early European History (3)
	632	Studies Modern Europe History (3)

##### World History

HIST	641	Studies in World History (3)
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American, European, and/or World History (depending upon course topic and/or student project)

HIST	623	Special Topics US Europe Hist (3-6)
	633	Special Tpcs Comparative Hist (3-6)
	661	Seminar in Digital History (3)

670	Intro to Teaching History (3)	
671	Seminar in History Education (3)	15

Two 500- or 600-level courses in history or with approval in related fields	6	
	<hr/>	27 crs

*Thesis concentration, 6 credits*

Any student may choose to write a thesis. The history department strongly recommends that students who intend to continue their graduate education at the doctoral level write a thesis.

THES	698	Thesis (1-6)	6
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or

*General concentration, 6 credits*

Students who choose not to write a thesis must complete 6 additional credits of 600-level course work in lieu of a thesis.

600-level course work	6
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or

*Digital concentration, 6 credits*

Students who choose the Digital History concentration must take HIST 546 (or a suitable alternative digital methods course if they took HIST 446 as undergraduates, as arranged through consultation with the Director of the MA program) and HIST 661 as a directed elective. They must also take CRPR 698 for 6 credits, or CRPR 698 for 3 credits plus 3 additional credits of 600-level work.

CRPR	698	Creative Project (6)	
		or	
	698	Creative Project (3)	
and 3 additional credits of 600-level work (3)			6

or

*History Teaching concentration, 6 credits*

Students who choose the History Teaching concentration must take HIST 670 and HIST 671 as directed electives. They must also take THES 698 or CRPR 698 for 6 credits, or CRPR 698 for 3 credits plus 3 additional credits of 600-level work.

THES	698	Thesis (6)	
		or	
CRPR	698	Creative Project (6)	
		or	
	698	Creative Project (3)	
And 3 additional credits of 600-level work (3)			6

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33 crs

**MA Examination**

All students must take a three-hour MA examination, consisting of two 90-minute written examinations in two of three geographic fields. The first examination is in the student's primary field of study. The second examination is comparative in

nature and will require the student to make connections between his or her primary and complementary fields. The written exam is followed by a one-hour oral examination. Students must take at least three courses (9 credits) in the primary field of study, at least two of which (6 credits) must be at the 600 level. Students will complete at least two courses (6 credits) in the complementary field of study from a different geographic area. At least one of those courses (3 credits) must be at the 600 level.

**Department of Mathematical Sciences**

**Revised:**

**MASTER OF ARTS IN MATHEMATICS EDUCATION, 30-36 credits**

The master of arts in mathematics education provides opportunities for elementary, middle school, and high school teachers to examine various issues related to the teaching and learning of mathematics while continuing to develop their own mathematical content knowledge.

*Concentration 1: Elementary and middle school mathematics, 30 credits*

**Admission requirements**

Applicants must meet the regular admission requirements of the Graduate School; hold a current elementary, middle special education teaching license; and have at least one year of elementary or middle school teaching experience.

**Degree requirements**

<i>PREFIX</i>	<i>NO</i>	<i>SHORT TITLE</i>	<i>CREDITS</i>
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Content knowledge for teaching mathematics, 12 credits from  
Choose four courses from

MATH	514	Alg Res Elm Mid Fnd Math Teach (3)	
	517	Num Concpnts and Num Thry Teach (3)	
	518	Rat Num Prop El Mid Fnd Tch (3)	
	542	Geo Meas Ele Mid Fnd Math Tch (3)	
	623	Prob Data Anal Stat Reasoning (3)	12

Research and pedagogical knowledge for teaching mathematics, 12 credits

MATH	690	Curriculum Instruct Math Ed	3
	693	Teaching Math Prob Solving	3
	694	Research Methods Math Educat	3
	696	Action Research Math Education	3

Electives in content or pedagogical knowledge for teaching mathematics, 6 credits (as approved by advisor) from

MATH	514	Alg Res Elm Mid Fnd Math Teach (3)	
	517	Num Concpnts and Num Thry Teach (3)	
	518	Rat Num Prop El Mid Fnd Tch (3)	
	542	Geo Meas Ele Mid Fnd Math Tch (3)	
	623	Prob Data anal Stat Reasoning (3)	

631	Technology Mathematics Teach (3)	
632	Assessment Math Education (3)	
641	Topics in Geometry (3)	
680	Special Studies Teaching Math (3)	
695	Math Learners and Learning (3)	
697	Math Teacher Leadership 1 (3)	6
		<hr/>
		30 crs

*Concentration 2: Secondary mathematics, 30-32 credits*

### Admission requirements

Applicants must meet the regular admission requirements of the Graduate School; have an undergraduate major in mathematics or an equivalent background as determined by the Department of Mathematical Sciences; hold a current secondary mathematics teaching license; and have at least one year of secondary mathematics teaching experience.

### Degree requirements

Content knowledge for teaching mathematics, 12 credits

MATH	511	Abstract Algebra 1	3
	570	Intermediate Analysis	3
	623	Prob Data Anal Stat Reasoning	3
	641	Topics in Geometry	3

Electives in content knowledge for teaching mathematics, 3-8 credits (as approved by advisor) from the following

MATH	512	Abstract Algebra 2 (3)	
	516	Theory of Numbers (3)	
	517	Num Concepts and Num Thry Teach (3)	
	560	History of Mathematics (3)	
	620	Probability and Random Vars (4)	
	621	Theory of Statistics (4)	
	645	Topology 1 (3)	
	677	Complex Variables 1 (3)	3-8

Research and pedagogical knowledge for teaching mathematics, 12 credits

MATH	690	Curriculum Instruct Math Ed	3
	693	Teaching Math Prob Solving	3
	694	Research Methods Math Educat	3
	696	Action Research Math Education	3

Electives in pedagogical knowledge for teaching mathematics, 0-3 credits (as approved by advisor) from

MATH	631	Technology Mathematics Teach (3)	
	632	Assessment Math Education (3)	
	695	Math Learners and Learning (3)	
	697	Math Teacher Leadership 1 (3)	0-3
		<hr/>	
		30-32 crs	

*Concentration 3: Elementary/middle school mathematics specialist, 36 credits*

### Admission requirements

Applicants must meet the regular admission requirements of the Graduate School; hold a current middle school mathematics or elementary teaching license; and have at least three years of middle school mathematics or elementary teaching experience.

Content knowledge for teaching mathematics, 15 credits

MATH	514	Alg Res Elm Mid Fnd Math Teach	3
	517	Num Concepts and Num Thry Teach	3
	518	Rat Num Prop El Mid Fnd Tch	3
	542	Geo Meas Ele Mid Fnd Math Tch	3
	623	Prob Data Anal Stat Reasoning	3

Pedagogical knowledge for teaching mathematics, 12 credits

MATH	632	Assessment Math Education	3
	690	Curriculum Instruct Math Ed	3
	693	Teaching Math Prob Solving	3
	695	Math Learners and Learning	3

Research, 3 credits

MATH	694	Research Methods Math Educat	3
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Leadership knowledge and skills, 6 credits

MATH	697	Math Teacher Leadership 1	3
	698	Math Teacher Leadership 2	3

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36 crs

## Department of Physics and Astronomy

### Revised:

### MAJOR IN PHYSICS (BA/BS), 65-67 credits

<i>PREFIX</i>	<i>NO</i>	<i>SHORT TITLE</i>	<i>CREDITS</i>
Common core, 53 credits			
CS	120	Computer Science 1	4
MATH	165	Calculus 1	4
	166	Calculus 2	4
	267	Calculus 3	4
PHYC	115	Career Issues	1
	120	General Physics 1	5
	122	General Physics 2	5
	260	Introduction to Modern Physics	4
	262	Modern Physics Laboratory	1
	330	Mechanics	3
	434	Thermal Physics	3
	450	Electricity and Magnetism 1	3
	452	Electricity and Magnetism 2	3
	464	Intro to Quant Mech	3
	482	Independent Studies in Physics (1-3)	
or			
	369	Professional Experience (1-3)	
or			
	479	Practical Experience (1-3)	
or			

HONR	499	Senior Honors Project (3)	3
PHYC	483	Seminar in Physics (1-2)	2
	485	Meas of Lrng in Physics	1
			53 crs

Complete one concentration

*Concentration 1: Physics (general), 12 credits*

PHYC	465	Quantum Mechanics	3
Electives from departmental courses as approved by the student's departmental advisor and the department chairperson			9
			12 crs

*Concentration 2: Physics (applied), 14 credits*

PHYC	354	Electronics 1	4
	356	Electronics 2	4
Electives from departmental courses as approved by the student's departmental advisor and the department chairperson			6
			14 crs

*Concentration 3: Physics (medical), 12 credits*

APHY	315	Medical Physics 1	3
	316	Medical Physics 2	3
Electives from departmental courses as approved by the student's departmental advisor and the department chairperson			6
			12 crs

65-67 crs

Other APHY, ASTR, and PHYC courses at the 300-level and above, with the approval of the student's departmental advisor and the department chairperson, may be applied to all concentration areas.

## TEACHERS COLLEGE

### Interdepartmental

#### Revised:

#### DUAL MAJOR IN EARLY CHILDHOOD AND EARLY CHILDHOOD SPECIAL EDUCATION (BA/BS), 113 credits

PREFIX	NO	SHORT TITLE	CREDITS
AHS	100	Introduction to Art	3
BIO	102	Biol Concepts for Teachers	3
EDEL	200	Plan for Elem and EC Classroom	3
	231	Family and Community Relations	3
	244	Early and Elem Educ Soc Just	3
	252	Creative Exp for Yng Children	3
	301	Tchg in the Pre-K K Program	3

	351	Teaching in the K Primary Prog	3
	381	Early Childhood Language Arts	3
	400	Student Teaching: Pre-K	6
	401	Student Teaching: Kindergarten (6)	
			or
	402	Student Teaching: Primary (6)	6
	442	Administration of EC Programs	3
EDFO	420	Soc, Hist, Phil Found of Ed	3
EDPS	260	Development Elementary	3
	393	Educational Psych Elementary	3
EDRD	204	Literature for Children	3
	390	Early Emergent Literacy	3
	430	Corrective Reading	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 Pgrms	3
MATH	201	Num Oper Alg Reas 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	201	Intro Stdnts with Except Nds	3
	202	Legal and Proc Foundns Spec Ed	3
	210	Thry and Pract in EC Spec Ed	3
	215	Assess Yng Chldrn Exc Nds	3
	311	Dev Meth Infs and Todds Exc	3
	312	Dev Meth PS Chldrn with Exc	3
	331	Tech in Special Education (1-3)	1
	417	Pract: Inf Todds PS Spec Nds (1-6)	3
SS	398	Teaching SS EC Kind-Grade 3	3

113 crs

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

## Department of Educational Psychology

### EDUCATIONAL PSYCHOLOGY (EDPS)

#### Revised:

**601 Research in Educational Psychology (1-6)** Students in the first two years of their doctoral work will complete an independent research project. Students will learn about resources and opportunities for successful graduate research, including library resources, institutional review of university research, grant writing, submitting conference presentations and procedures for publishing research.

*Prerequisite:* permission of the program director.

A total of 12 credits may be earned, but no more than 6 in any on semester or term.

**744 Structural Equation Modeling (3)** Focuses on the application of covariance structure models to a variety of research problems. Students will learn about the major

structural equation model and how to apply them using multiple software packages.

*Prerequisite:* EDPS 641 or EDPS 642.

*Prerequisite recommended:* EDPS 741 or EDPS 743.

## Department of Elementary Education

### Revised:

#### TEACHING MAJOR IN EARLY CHILDHOOD EDUCATION (Birth-Grade 3) (BA/BS), 102 credits

PREFIX	NO	SHORT TITLE	CREDITS
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 and Elem Educ 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
	442	Administration of EC Programs	3
EDFO	420	Soc, Hist, Phil Found of Ed	3
EDPS	260	Development Elementary	3
	393	Educational Psych Elementary	3
EDRD	204	Literature for Children (3)	
	or		
	318	Lit for Young Children (3)	3
	390	Early Emergent Literacy	3
	430	Assess Interven Elem Schools	3
FCFC	265	Infant and Toddler Dvlp 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 Pgrms	3
MATH	201	Num Oper Alg Reas 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 and Dis in Gen Ed	3
SS	398	Teaching SS EC Kind-Grade 3	3
Elective			
			90 crs

#### 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	Early Childhood Language Arts	3
			12 crs
			102 crs

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) (BA/BS), 102 credits

PREFIX	NO	SHORT TITLE	CREDITS
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 and Elem Educ Soc Just	3
	300	Mgt, Org, and Instr Elem Clsrn	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	204	Literature for Children	3
	300	RDG and LA Instruction	3
	350	Adv RDG and LA	3
	430	Assess Interven Elem Schools	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 Pgrms	3
MATH	201	Num Oper Alg Reas 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 and Dis in Gen Ed	3
SS	397	Teaching SS in the Elemen Schl	3
Elective			2

90 crs  
 Concentration area 12 crs  
 102 crs

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 New Language, 12 credits

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	334	Eng Linguistics for Educators	3
	436	Theory and Research in TESOL	3
	437	Methods and Materials in TESOL	3
	457	Practicum in TESOL	3

The above requirements are for the English as a New

12 crs

Language concentration area available for Teaching Majors in Elementary Education (Grades K-6) only.

12 crs

*Gifted and Talented, 12 credits*

EDPS	420	Intro Gifted Talented	3
	421	Identif and Evaluation Gifted	3
	425	Models and Strategies Gifted	3
	411	Creative Thinking (3)	
	or		
	423	Social Emotional Needs Gifted (3)	3
			12 crs

*Kindergarten/Primary Education, 12 credits*

EDEL	231	Family and Community Relations	3
	252	Creative Exp for Yng Children	3
	440	Kindergarten Education	3
EDRD	390	Early Emergent Literacy	3
			12 crs

*Language Arts, 12 credits*

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

EDEL	302	Dev Elem Eng La Multicult Lit	3
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## 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

EDRD	318	Lit for Young Children (3)	
ENG	205	World Literature (3)	
	206	Reading Literature (3)	
	414	Young Adult Literature (3)	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
			12 crs

*Mathematics, 12 credits*

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)	
	331	Technology Teach Assess Math (3)	3

*Modern Languages, 12 credits*Modern Languages: Classical culture concentration

CC	301	Classical Lit in English Trans (3-6)	3
	305	Classical Myth and Theory	3
6 credits from CC, GRK, and LAT courses			6

12 crs

Modern Languages: French concentration

FR	202	Intermediate French 2	3
	301	Conversation	3
	302	Composition	3
3 credits from any other 300-400-level FR course			3

12 crs

Modern Languages: German concentration

GER	202	Intermediate German 2	3
	301	Conversation	3
	302	Composition	3

3 credits from any other 300-400-level GER course

12 crs

Modern Languages: Japanese concentration

JAPA	202	Intermediate Japanese 2	4
	301	Advanced Japanese 1	4
	302	Advanced Japanese 2	4

12 crs

Modern Languages: Spanish concentration

SP	202	Intermediate Spanish 2	3
	301	Conversation and Composition	3
	302	Composition and Grammar	3
3 credits from any other 300-400-level SP course			3

12 crs

*Classical Languages, 12 credits*Classical Languages: Latin concentration

LAT	202	Intermediate Latin 2	3
	301	Introduction to Prose 1	3
	302	Introduction to Poetry 1	3
3 credits from any other 300-400-level CC course			3

12 crs

*Psychology and Counseling, 12 credits*

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 credits from

Counseling psychology and guidance services		
CPSY	400	Fundamentals of Counseling (3)
	420	Psychological Interventions (3)
	470	Cross-Cult Counseling (3)

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

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

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12 crs

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

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

Required courses			
EDRD	427	Tchg Rdg to Diverse Learners	3
	450	Reading Strategies and Pract	6

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

*Science, 12 credits*

Includes a broad range of courses that cover life, earth, and physical sciences. Students seeking this concentration 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 201 must be selected for the concentration.

Choose a minimum of 12 credits from the following courses:

ASTR	101	Astro Mat for Teacher (3)	
		or	
	120	The Sun and Stars (3)	
BIO	112	Principles of Biology 2 (4)	
CHEM	100	People and Chemistry (3)	
		or	
	101	Gen, Org, Biochem and Hlth Sci (5)	
GEOL	101	Planet Earth Geol Environment (3)	
		or	
	201	Earth, Life, and Time (3)	12
			12 crs

*State/World Connections, 12 credits*

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 and World Conns	3
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9 credits from *three* different subjects

ANTH	101	Intro to Cultural Anthropology (3)	
	103	Archaeology and Culture (3)	
	105	Introduction Biological Anth (3)	
	111	Anth, Cult, and Globalization (3)	
	342	Anth of the United States (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 and 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)	
	421	Racial and Cultural Minor US (3)	
	424	Family (3)	9
			12 crs

*Technology, 12 credits*

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 credits from the following courses

CS	110	Intro Comp Sci and Web Prog (3)	
EDCU	331	Public School Curriculum (3)	
EDRD	445	Computers in Rdg Instruction (3)	
EDTE	352	Multi Web Design and Dev Ed (3)	
	355	Lrn and Tchg 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 Technology (3)	3
			12 crs

*Wellness, 12 credits*

Wellness: 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
NUTR	240	Nutrition for Educators	3

Choose 6 credits from the following courses

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

NUTR 240 substitutes for NUTR 340 for prerequisite purposes.

Wellness: 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	Current Issue Admin Coord H PE	3
PEP	227	Intro Adapted Physical Ed Act	3
	291	Motor Development and Learn	3
	394	Teaching Phys Educ in Elem Sch	3

12 crs

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

## **EDUCATION: ELEMENTARY (EDEL)**

### **Correction:**

#### **244 Early and Elementary Education for Social Justice (3)**

A broad understanding of social, economic, cultural, and linguistic diversity within the context of early and elementary Education in today's society.

*Prerequisite:* EDEL 100 with a minimum grade of C.

Laura Helms, Director  
Executive Director of Academic Services  
Associate Dean, University College