

BALL STATE UNIVERSITY

ACADEMIC POSTING

2016-2017

VOLUME XLVIII – 2

December 2, 2016

This posting may contain all or part of the following: new, revised, and dropped programs, courses and prefixes. The posting period begins December 5, 2016. 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 9, 2016 is Fall Semester 2016.*

COLLEGE OF APPLIED SCIENCES AND TECHNOLOGY

Department of Technology

Revised:

DIRECTOR OF CAREER AND TECHNICAL EDUCATION, 30 credits

Initial Practitioner License Requirements

Designed for students who seek a Director of Career and Technical Education license required for administering career programs and facilities. This addresses Indiana REPA license requirements.

Admission requirements

Applicants must meet the admission requirements of the Graduate School.

Who can qualify?

Candidates must meet the following:

1. Hold one (1) of the following licenses:
 - (A) A Proficient Practitioner license or Accomplished Practitioner license with at least one (1) of the content areas in career and technical education according to the Indiana Standard License Assignment Code.
 - (B) A Workplace Specialist II license with two (2) years of full-time teaching experience in an accredited vocational school in the grade level and vocational content area listed on the license.
 - (C) A Proficient or Accomplished Practitioner License in Building Level Administrator, Superintendent, Director of Curriculum and Instruction, or Director of Exceptional Needs.

(D) A Proficient or Accomplished Practitioner license that includes the content area of Business or Technology education.

2. Successfully complete the content for director of career and technical education.
3. Successfully complete a master's degree.

Also required:

Verified valid CPR/Heimlich Maneuver certification and Suicide Prevention training through a state approved training program. Also complete a required state criminal background check.

PREFIX	NO	SHORT TITLE	CREDITS
EDAC	631	Adult and Community Education (3)	
		or	
	632	Org Ad and Comm Ed Progs (3)	3
EDAD	600	Intro to Ed Leadership	3
	684	Educational Finance and Ethics	3
	695	Career Tech Director Intern	6
SPCE	637	Org and Admin of Spec Ed	3
6 credits in EDAD 695 are required unless the student previously took an internship for another administrative license, in which case 3 credits may be required pending review.			
3 credits from			
BED	582	Imp Instr in Mkg Subs (3)	
	625	Problems and Issues (3)	
FCED	692	FCS Educ Prog Implementation (3)	
TEDU	568	Principles and Philosophy CTE (3)	3
3 credits from			
BED	593	Phil Org Adm CTE (3)	
TEDU	569	Organization Coordination CTE (3)	3
3 credits from			
BED	592	Work-Based Learning (3)	
	594	Surv Car Tech Ed Prgrm Areas (3)	
TEDU	552	Strategies and Materials CTE (3)	
	696	Coordinating Coop Programs (3)	3

3 credits from			
EDPS	640	Research Methods (3)	
FCS	697	Research Methods in FCS (3)	
TEDU	699	Research in Technical Educ (3)	3
			<hr/>
			30 crs

TECHNOLOGY: CONSTRUCTION TECHNOLOGY (TCST)

Revised:

460 Capstone in Construction (3) A construction product, process, or system is studied. Conduct in-depth research on an approved topic related to construction. Results of the research are formally presented to peers and faculty.

Prerequisite: TCST 222, 320, and 355.

Prerequisite or parallel: TCST 400 and 420.

Open only to majors in construction management with senior status.

MILLER COLLEGE OF BUSINESS

Department of Finance and Insurance

BUSINESS LAW (BL)

Dropped:

160 Law of Personal Finance (3)

362 The Law of Business Associations (3)

597 Independent Study in Business Law (1-6)

663 Commercial and Business Organization Law (3)

REAL ESTATE (RE)

Dropped:

332 Legal Aspects of Real Estate (3)

369 Internship in Real Estate (1-6)

497 Independent Study in Real Estate (3)

Department of Information Systems and Operations Management

INFORMATION SYSTEMS AND OPERATIONS MANAGEMENT (ISOM)

Correction (per Department of Information Systems and Operations Management):

313 Databases and Information Resource Management (3)
Revise prerequisite: ISOM 125 with a minimum grade of C; or permission of the department chairperson.

Department of Marketing

MARKETING (MKG)

Correction (2016-2017 Undergraduate Catalog):

450 Advanced Marketing Research and Analytics (3) In-depth look into the details of conducting market research including marketing decision making, database marketing, marketing analytics and related issues.

Prerequisite: BA 350 or MKG 350.

COLLEGE OF COMMUNICATION, INFORMATION, AND MEDIA

Department of Journalism

JOURNALISM (JOUR)

Correction (2016-2017 Graduate Catalog):

681 Applied Research in Journalism (3)

Revise prerequisite: JOUR 601.

COLLEGE OF FINE ARTS

Department of Art

ART: CRAFTS (ACR)

New:

611 Ceramics Studio (3-6) Supervised, graduate-level problems in ceramics defining concepts and technical directions for the professional artist. Bi-weekly meetings and critical assessment of artwork required.

Prerequisite: ACR 511.

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

621 Metals Studio (3-6) Supervised, graduate-level problems in metal defining concepts and technical directions for the professional artist. Bi-weekly meetings and critical assessment

of artwork required.

Prerequisite: ACR 521.

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

ART: FINE ARTS (AFA)

New:

621 Sculpture/Intermedia Studio (3-6) Supervised, graduate-level problems in sculpture/intermedia defining concepts and technical directions for the professional artist. Bi-weekly meetings and critical assessment of artwork required.

Prerequisite: AFA 521.

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

Revised:

521 Advanced Sculpture/Intermedia (3-6) Advanced three-dimensional study, which may include a wide variety of media, time-based projects and/or social practice. Follows specific needs and encourages individual direction.

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

COLLEGE OF HEALTH

School of Kinesiology

Dropped:

MINOR IN GENERAL FOUNDATIONS OF BUSINESS, 15 credits

PHYSICAL EDUCATION: PROFESSIONAL (PEP)

Dropped:

395 Teaching Physical Education in the Middle School (3)

Department of Nutrition and Health Science

Revised:

ASSOCIATE IN SCIENCE—RADIOGRAPHY (AS), 64 credits

Admission requirements

In order to apply for admission to the professional concentration phase of the radiography program, students must:

- Meet with the Health Science Primary Departmental Advisor.
- Be a current Ball State student by December 1 of the year immediately prior to the professional concentration phase application deadline. All transfer hours must be evaluated and appear on the BSU Student DegreeWorks record and official BSU transcript.
- Successfully complete 14 of the 28 credits of radiography prerequisite courses.
- Earn a minimum of 2.5 overall GPA from the required radiography prerequisite courses.
- Meet the following requirements of the math/science courses ANAT 201, CHEM 100, MATH 125, PHYC 100, PHYS 205:
 - Complete 3 of the 5.
 - Complete within the past seven years or must be retaken.
 - Not repeat any math/science course more than one time.
 - Earn a grade of C or higher for all 5 math/science courses.

Retention Requirements

In order to maintain admission and participate in the professional concentration phase of the radiography program, students must:

- Successfully complete all 28 credits of the radiography prerequisite courses by the end of spring semester prior to beginning the professional concentration phase.
- Earn a grade of C or higher in all professional concentration courses.

<i>PREFIX</i>	<i>NO</i>	<i>SHORT TITLE</i>	<i>CREDITS</i>
General education courses, 28 credits			
ANAT	201	Fundamentals of Human Anatomy	3
CHEM	100	People and Chemistry	3
COMM	210	Fundamentals of Public Comm	3
CS	104	Introduction to Computers	3
ENG	103	Rhetoric and Writing	3
MATH	125	Mathematics Applications	3
PHYC	100	Conceptual Physics	3
PHYS	205	Fund of Hum Phys	3
PSYS	100	Intro to Psychological Science	3
PFW			1
			28 crs
Professional concentration courses, 36 credits			
AHSC	201	Introduction to Patient Care	2
	224	Radiographic Procedures 1	3
	225	Radiographic Procedures 2	4
	226	Radiographic Procedures 3	2
	227	Computed Tomography	1
	228	Radiographic Principles 1	2

229	Radiographic Principles 2	3
230	Radiographic Principles 3	3
231	Clinic 1 Radiography	2
232	Clinic 2 Radiography	5
233	Clinic 3 Radiography	5
234	Clinic 4 Radiography	4
		—————
		36 crs
		—————
		64 crs

Students qualifying for exemption from ENG 103 will receive credit for the course. ENG 101 and 102 may be substituted for ENG 103.

FAMILY AND CONSUMER SCIENCES: FOODS AND NUTRITION (FCFN)

Dropped:

- 101 Introduction to Dietetics (1)**
- 240 Nutrition for Educators (3)**
- 275 Personal Nutrition (3)**
- 340 Principles of Human Nutrition (3)**
- 345 Macronutrients (3)**
- 346 Micronutrients and Phytochemicals (3)**
- 350 Technology of Food Science (3)**
- 363 Administration of Food and Nutrition Systems (3)**
- 375 Nutrition Assessment, Counseling, and Education (3)**
- 396 Nutrition Counseling Practicum (3)**
- 444 Sports Nutrition and Weight Control (3)**
- 445 Advanced Nutrition (3)**
- 446 Medical Nutrition Therapy 1 (3)**
- 447 Medical Nutrition Therapy 2 (3)**
- 448 Nutrition and Weight Management (3)**
- 455 Lifecycle Nutrition (3)**
- 456 Community Nutrition (3)**
- 540 Human Nutrition (3)**
- 642 Nutrition Assessment (3)**
- 643 Energy Balance, Obesity, and Weight Control (3)**

- 644 Nutrition for Exercise and Sport (3)**
- 645 Nutrition and Food Policy (3)**
- 647 Carbohydrates, Proteins, and Lipids (3)**
- 648 Vitamins and Minerals (3)**
- 650 Maternal and Infant Nutrition (3)**
- 651 Pediatric Nutrition (3)**
- 652 Geriatric Nutrition (3)**
- 660 Advanced Food Service Administration (3)**
- 680 Supervised Practices in Food Systems Management (3)**
- 681 Supervised Practice in Nutrition Therapy (3)**
- 682 Supervised Practice in Community Nutrition/Business/Entrepreneur (3)**
- 683 Advanced Practice in Dietetics (3)**
- 696 Seminar in Foods and Nutrition (3-6)**

NUTRITION (NUTR)

Revised:

101 (FCFN 101) Introduction to Dietetics (1) Topics dealing with the profession of dietetics; roles and responsibilities of dietetic practitioners; professional standards and code of ethics; legislative issues related to health care; career and continuing education opportunities; marketing of dietetic services; and current trends and issues.

Open only to pre-dietetics and dietetics majors.

240 (FCFN 240) Nutrition for Educators (3) General principles of nutrition as related to growth, development, and health of the infant, child, adolescent, and adult. Classroom application and integration of strategies.

Not open to students who have credit in NUTR 275 or 340.

275 (FCFN 275) Personal Nutrition (3) Emphasizes the principles of nutrition and their application to daily living. The relationship between diet and health, the role of nutrition in reducing individual health risk, and contemporary issues in nutrition will be discussed. Core Transfer Library: Health and Physical Education (IHP 1402)

Not open to students who have credit in NUTR 240 or 340.

340 (FCFN 340) Principles of Human Nutrition (3) Addresses the principles of nutrition, life cycle nutrition, and the relationship of diet to health and disease.

Prerequisite or parallel: CHEM 100 or 101 or 111 or

permission of the department chairperson.

Not open to students who have credit in NUTR 240 or 275 or by permission of the department chairperson.

345 (FCFN 345) Macronutrients (3) Introduces metabolic pathways, cellular metabolism, and various energy systems of the human body. Emphasizes the digestion, metabolism, transport, and excretion of macronutrients.

Prerequisite: CHEM 360 and NUTR 340 and PHYS 215.

Open only to those admitted to the dietetics major.

346 (FCFN 346) Micronutrients and Phytochemicals (3) Emphasizes the roles of micronutrients in the human body, introduces micronutrient functions in a healthy population and response in times of deficiency. Discusses the role of micronutrients and other food constituents in the prevention of chronic illness.

Prerequisite: CHEM 360 and NUTR 340 and PHYS 215.

Open only to those admitted into the dietetics major.

350 (FCFN 350) Technology of Food Science (3) Scientific evaluation of the behavior of food and its qualitative and quantitative properties. Overview of the food industry, food technology, biotechnology, and federal regulation related to food supply. Review of research and marketing practices of bioengineered food and dietary supplements.

Prerequisite: FCFN 220 and PSYS 241.

Open only to those admitted into the dietetics major.

363 (FCFN 363) Administration of Food and Nutrition Systems (3) A systems approach to foodservice management theories, concepts, and functions for integrated health care, public institutions, and nutrition care operations. Emphasizes the operational functions of purchasing, production, and administration of food and nutrition services.

375 (FCFN 375) Nutrition Assessment, Counseling, and Education (3) Assessment methods, techniques of nutrition counseling, education principles and implementation, and development of counseling materials. Includes assessment of various populations and counseling experiences.

Prerequisite: NUTR 340.

396 (FCFN 396) Nutrition Counseling Practicum (3) Individual counseling methods; behavior change theories; basic dietary, biochemical, and anthropometric assessment; and multi-culture customs and food practices. Application of theory and counseling skills in various community settings focusing on student's areas of interest. Thirty hours in-class; thirty hours supervised practicum. On-site experiences supervised and evaluated by a registered dietitian.

Prerequisite: NUTR 345 or permission of the department chairperson.

444 (FCFN 444) Sports Nutrition and Weight Control (3) A study of the unique nutrition needs of athletes' physically active populations. Presents the scientific basis for sports nutrition emphasizing concepts such as energy intake and timing, calorie expenditure and balance, and nutrition strategies to improve athletic performance and body

composition.

Prerequisite: NUTR 340.

445 (FCFN 445) Advanced Nutrition (3) Emphasizes the use and metabolism of nutrients at the cellular level in the human body. Significance and interpretation of current research in the field of nutrition is discussed.

Prerequisite: CHEM 360; NUTR 340; senior standing.

Prerequisite or parallel: ACC 201.

446 (FCFN 446) Medical Nutrition Therapy 1 (3) Medical nutritional therapy principles and intervention strategies for the routine management of chronic diseases in at-risk individuals or populations. Application of nutrition assessment principles to diagnose chronic diseases in clinical settings. Pathophysiology of chronic illness. Includes some clinical experiences.

Prerequisite or parallel: NUTR 346, 396.

447 (FCFN 447) Medical Nutrition Therapy 2 (3) Medical nutritional therapy principles and intervention strategies for management of critical and chronic illness and metabolic distress. Pathophysiology of disease progression and traumatic illness.

Prerequisite: NUTR 446.

448 (FCFN 448) Nutrition and Weight Management (3) A study of the etiology, pathophysiology, and interdisciplinary treatment of overweight and obesity. An emphasis will be placed on nutrition as a treatment modality, and the role of nutrition research in guiding public policy.

Prerequisite: NUTR 340.

455 (FCFN 455) Lifecycle Nutrition (3) Involves the study of special nutritional needs, physiology, and health concerns of pregnant and lactating women, infants, children, adolescents, women of child-bearing age, and older adults.

Prerequisite: NUTR 346 or permission of the department chairperson.

456 (FCFN 456) Community Nutrition (3) Overview of community nutrition and nutrition education. Analysis of biological, economic, social, cultural, and policy issue affecting a community's nutritional status. Emphasis on federal food and nutrition programs and policy implications at the state and local level. Observation and participation in local nutrition programs.

Prerequisite: NUTR 455.

540 (FCFN 540) Human Nutrition (3) Addresses the principles of nutrition, life-cycle nutrition, and the relationship of diet to health and disease.

Not open to students who have credit in NUTR 340, 445, or equivalent.

642 (FCFN 642) Nutrition Assessment (3) Techniques needed to evaluate nutritional status and plan appropriate nutrition intervention. Includes assessment of dietary intake, body composition, nutrient requirements, and laboratory indices of nutritional status. Development of appropriate

nutrition therapies will be addressed.

Prerequisite: NUTR 446, 447 or equivalent.

643 (FCFN 643) Energy Balance, Obesity, and Weight Control (3)

In-depth study of the components of energy balance, theories regarding the etiology of obesity, and the impact of obesity and dieting on health. Includes evaluation of current weight control techniques and identification of the best methods for maintaining optimal body weight.

Prerequisite: NUTR 340 or 345, 346 or equivalent.

644 (FCFN 644) Nutrition for Exercise and Sport (3)

Examination and integration of the principles of nutrition and energy metabolism as they apply to athletes and active individuals. Dietary recommendations for athletes participating in various sports will be reviewed. Current research in sports nutrition will be discussed.

Prerequisite: NUTR 340 or 345, 346 or equivalent.

Not open to students who have credit in NUTR 444.

645 (FCFN 645) Nutrition and Food Policy (3) Explores the relationships between agricultural practices, diet patterns, food procurement and distribution, nutrition policy formation and implications at the local, state, federal, and international levels with a focus on how food and nutrition policies effects health.

647 (FCFN 647) Carbohydrates, Proteins, and Lipids (3)

Advanced study of carbohydrates, proteins, and lipids in humans. Includes macronutrient metabolism and the relationship of these dietary components to health and disease.

Prerequisite: NUTR 345 or equivalent.

648 (FCFN 648) Vitamins and Minerals (3) Advanced study of vitamins and minerals in humans including micronutrient metabolism and the relationship of these dietary components to health and disease.

Prerequisite: NUTR 346 or equivalent.

650 (FCFN 650) Maternal and Infant Nutrition (3)

Nutrition during pregnancy, lactation, and infancy. Includes nutrient needs, growth and development, and common complications. Emphasizes reading in current professional publications.

Prerequisite: NUTR 345, 346 or equivalent.

651 (FCFN 651) Pediatric Nutrition (3)

Principles of pediatric nutrition (preschool through adolescence). Nutritional needs of children in normal and therapeutic nutrition will be investigated. Current research in pediatric nutrition will be discussed.

Prerequisite: NUTR 345, 346 or equivalent.

652 (FCFN 652) Geriatric Nutrition (3) Nutritional needs of older adults in consideration of physiological and social changes and research in the field. Review recent literature, evaluate nutrition status of elderly persons in selected situations, and study and evaluate nutrition programs designed for older adults.

Prerequisite: NUTR 340 or 540 or permission of the department chairperson.

660 (FCFN 660) Advanced Food Service Administration

(3) Identification and application of advanced foodservice management and marketing concepts; development of skills required of dietitians and other upper-level managers.

Prerequisite or parallel: NUTR 363 or permission of the department chairperson.

680 (FCFN 680) Supervised Practices in Food Systems

Management (3) Application of management principles involved in the acquisition, production, quality control, distribution, and service of quality food in an acute-care environment; development of a philosophy of excellence in administrative leadership through supervision of foodservice personnel (360 clock hours).

Prerequisite: permission of the department chairperson.

Open only to dietetic internship students.

681 (FCFN 681) Supervised Practice in Nutrition Therapy

(3) Application of the healthcare team approach of dietary management to human pathophysiologic status through assessing, planning, documenting, and counseling individuals and educating groups in an acute care environment (520 clock hours).

Prerequisite: permission of the department chairperson.

Open only to dietetic internship students.

682 (FCFN 682) Supervised Practice in Community

Nutrition/Business/Entrepreneur (3) Application of concepts and methodologies of nutrition and health practices as related to the family and people in the community; provision of education programs for specific populations and the public through community agencies and related business and private organizations (320 clock hours).

Prerequisite: permission of the department chairperson.

Open only to dietetic internship students.

683 (FCFN 683) Advanced Practice in Dietetics (3)

Advanced directed study in an approved area of board-certified or specialty certification as recognized by the American Dietetic Association. Areas of specialized practice could include sports nutrition, pediatrics, nutrition support, weight management, oncology, geriatrics, or diabetes.

Prerequisite: current registered dietitian status.

696 (FCFN 696) Seminar in Foods and Nutrition (3-6)

Student presentations and discussions of trends and issues related to food and nutrition. Emphasizes in-depth knowledge of current research findings and policy issues. Basic knowledge of food and nutrition required.

Prerequisite: permission of the department chairperson.

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

COLLEGE OF SCIENCES AND HUMANITIES

Department of Anthropology

ANTHROPOLOGY (ANTH)

Correction (2016-2017 Undergraduate Catalog):

417 Forensic Anthropology (3)

Revise prerequisite: ANTH 105 or BIO 100 or CHEM 100 or permission of the instructor.

Dropped:

301 History of Method and Theory in Anthropology (3)

334 Midwestern Archaeology (3)

Revised:

401 (301) History of Method and Theory in Anthropology

(3) Surveys the major ideas and issues of anthropology over time. Includes methods and theories from archaeology, physical anthropology, linguistics, and cultural anthropology.

Prerequisite: ANTH 101 or permission of the instructor.

Open only to juniors and seniors.

434 (334) Midwestern Archaeology (3) Prehistoric cultural developments in the Midwest traced through the Paleoindian, Archaic, Woodland, and Mississippian periods and focused on the nature and questions of archaeological research in the region.

Prerequisite: ANTH 103 or 204 (or equivalent) or permission of the instructor.

534 Midwestern Archaeology (3) Prehistoric cultural developments in the Midwest traced through the Paleoindian, Archaic, Woodland, and Mississippian periods and focused on the nature and questions of archaeological research in the region.

Prerequisite: ANTH 103 (or equivalent), graduate standing, or permission of the instructor.

Not open to students who have credit in ANTH 434.

Department of Biology

BIOLOGY (BIO)

Dropped:

217 Methods in Ecology (2)

Revised:

315 Methods in Cell Biology (2) Introduction to scientific study design, experimental protocols, data analysis, and the scientific method as applied to cell biology research. Focuses on a laboratory research project that culminates in a written report and oral presentation.

Prerequisite or parallel: BIO 215.

316 (217) Methods in Ecology (2) Introduction to scientific study designs, measurements, data analysis, and the logic of inference as applied to ecological research. Focuses on a field research project that culminates in a written report and an oral presentation.

Prerequisite or parallel: BIO 216.

Department of Geography

New:

PENDING ICHE APPROVAL

MAJOR IN METEOROLOGY AND CLIMATOLOGY (BA/BS), 84-89 credits

PREFIX	NO	SHORT TITLE	CREDITS
GEOG	101	Earth Sea Sky: Geographic View	3
	150	Global Geography	3
	240	Map Reading and Graphics	3
	250	Spatial Analytical Methods	3
	265	Intro Geographic Info Systems	3
	344	Adv Geog Info Systems Analysis	3
	350	Geog United States and Canada (3)	3
		or	
METC	490	Field Obs Severe Local Storms (6)	3 or 6
	230	Elementary Meteorology	3
	330	Weather Analysis	3
	331	Global Climatology	3
	332	Climate Chng and Modification	3
	334	Atmospheric Hazards	3
	425	Physical Meteorology	3
	435	Satellite, Radar, & Forecastng	3
	447	Thermodynamic Meteorology	3
	449	Synoptic Meteorology	3
	450	Mesoscale Meteorology	3
451	Dynamic Meteorology	3	
MATH	165	Calculus 1	4
	166	Calculus 2	4
	374	Differential Equations	3
PHYC	120	General Physics 1	5
	122	General Physics 2	5

6-7 credits from

GEOG	340	Cartograp Visual Spatial Data (3)	
	341	Cartogra Visual Spatial Data 2 (3)	
	342	Introduction to Remote Sensing (3)	
	343	Advanced Remote Sensing (3)	
	443	Sem Adv Techniq Remote Sensing (3)	
	445	GIS Apps Design and Develop (3)	
	448	Geog Information System Design (3)	
MATH	267	Calculus 3 (4)	
METC	410	Broadcast Meteorology (3)	6-7

3-4 credits from

CHEM	111	General Chemistry 1 (4)	
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CS	120	Computer Science 1 (4)	
GEOL	206	Oceans and Nations (3)	
	420	Oceanography (3)	
PHYC	450	Electricity and Magnetism 1 (3)	3-4
			84-89 crs

Additional course work in the basic sciences such as mathematics, physics, and computer science is encouraged. Recommended minors include natural resources, environmental management, and telecommunications.

Revised:

MAJOR IN GEOGRAPHY (BA/BS), 51-57 credits

Recommended minors for all concentrations include anthropology, history, natural resources, and environmental management.

PREFIX	NO	SHORT TITLE	CREDITS
Core requirements, 15 credits			
GEOG	101	Earth Sea Sky: Geographic View	3
	150	Global Geography	3
	240	Map Reading and Graphics	3
	250	Spatial Analytical Methods	3
	265	Intro Geographic Info Systems	3
			15 crs

Concentration 4: Meteorological Studies, 36-39 credits

METC	230	Elementary Meteorology	3
	330	Weather Analysis	3
	331	Global Climatology	3
	332	Climate Chng and Modification	3
	334	Atmospheric Hazards	3
	344	Adv Geog Info Systems Analysis	3
	350	Geog United States and Canada	3
	450	Mesoscale Meteorology	3

6-9 credits from

GEOG	351	Latin American and Caribbean (3)	
	354	Geography of Asia (3)	
	356	Geog Russia and Its Neighbors (3)	
	357	Geography of Europe (3)	
METC	490	Field Obs Severe Local Storms (6)	6-9

6 credits from

GEOG	340	Cartograp Visual Spatial Data (3)	
	341	Cartogra Visual Spatial Data 2 (3)	
	342	Introduction to Remote Sensing (3)	
	343	Advanced Remote Sensing (3)	
	443	Sem Adv Techniq Remote Sensing (3)	
	445	GIS Apps Design and Develop (3)	
	448	Geog Information System Design (3)	
METC	410	Broadcast Meteorology (3)	
	435	Satellite, Radar, & Forecastng (3)	6

51-54 crs

Additional course work in the basic sciences such as mathematics, physics, and computer science is encouraged. Recommended minors for concentration 4 include natural resources, environmental management, and telecommunications.

Department of Modern Languages and Classics

SPANISH (SP)

Revised:

403 Seminar in Cultural and Literary Studies (3-9) Topics vary according to artist/author, genre, medium, or period and will be studied in depth. Intensive study of works of cultural production from a selected theme or period from Spain or Latin America. Typically involves advanced literary analysis and research.

Prerequisite: SP 361 or 362.

A total of 9 credits may be earned in courses with different topics.

404 Seminar in Language, Linguistics, and Culture (3-9)

Advanced seminar course in Spanish language, linguistics, and culture. Topics will vary and include among others, advanced grammar, linguistics, conversation, composition, and translation.

Prerequisite: SP 337 or 340.

A total of 9 credits may be earned in courses with different topics.

Department of Philosophy and Religious Studies

New:

MINOR IN ETHICS, 18 credits

PREFIX	NO	SHORT TITLE	CREDITS
PHIL	202	Ethics	3

Applied Ethics

PHIL	230	Environmental Ethics (3)	
	235	Bioethics (3)	
	304	Philosophy of Sport (3)	
	406	Feminist Ethics Epistemology (3)	
RELS	210	Religion, Morality, Pub Debate (3)	6-9

Ethical Theory

PHIL	203	Social Philosophy (3)	
	320	Emotion and Responsibility (3)	
	380	Justice (3)	

415	Topics in Neurophilosophy (3)	
420	Contemp Ethical Thry and Prob (3)	6-9
		18 crs

Students must take at least one 400-level course. Students must earn a minimum grade of C in all required courses.

Revised:

MAJOR IN PHILOSOPHY (BA/BS), 33 credits

PREFIX	NO	SHORT TITLE	CREDITS
PHIL	200	Symbolic Logic	3

6 credits from

PHIL	203	Social Philosophy (3)	
	210	Philosophy of Religion (3)	
	230	Environmental Ethics (3)	
	235	Bioethics (3)	
	240	Society, Discipline, & Control (3)	
	304	Philosophy of Sport (3)	
	310	African Philosophy (3)	
	312	Current Issues in Philosophy (3)	6

6 credits from

PHIL	300	History of Ancient Philosophy (3)	
	302	History of Modern Philosophy (3)	
	306	Contemporary Philosophy (3)	6

9 credits from

PHIL	320	Emotion and Responsibility (3)	
	370	Existentialism (3)	
	380	Justice (3)	
	404	Metaphysics (3)	
	406	Feminist Ethics Epistemology (3)	
	410	Epistemology (3)	
	415	Topics in Neurophilosophy (3)	
	420	Contemp Ethical Thry and Prob (3)	9

9 credits from additional PHIL courses			9
			33 crs

Department of Physics and Astronomy

PHYSICS (PHYC)

Revised:

434 Thermal Physics (3) Classical and statistical thermodynamics. Basic concepts, principles, and theories of thermodynamics. Equations of state, laws of thermodynamics, introduction to the kinetic theory of gases, and classical and quantum statistics.

Prerequisite: PHYC 260; PHYC 330; MATH 267 or permission of the department chairperson.

566 Condensed Matter Physics (3) Structure and physical properties of matter in the solid state. Electrical and magnetic properties and band theory of solids, with special emphasis on semiconductors.

Prerequisite: PHYC 260.

TEACHERS COLLEGE

Department of Elementary Education

New:

PENDING ICHE APPROVAL

Certificate in Early Childhood Education, Master Teacher, 15 credits

PREFIX	NO	SHORT TITLE	CREDITS
EDEL	640	Intro to EC Education	3
	644	Education in a Diverse Society	3
	651	Educ Programs Young Children	3
	653	Obs and Assess in EC	3
	672	Mentoring EC Professionals	3
			15 crs

This program is offered on-line only.

EDUCATION: ELEMENTARY (EDEL)

Revised:

300 Management, Organization, and Instruction in the Elementary Education Classroom (3) Departmental themes concerning teaching and learning in elementary schools will be extended. This seminar focuses on instructional methods and classroom management.

Prerequisite: C or better in EDEL 200 and EDRD 204; completion of decision point 2: admission to the teacher education program.

Parallel: EDRD 300.

Open only to elementary education and dual elementary/special education majors.

May be repeated only once.

350 Teaching in the Elementary Education Classroom (3) Departmental themes concerning teaching and learning in elementary schools will be extended. Laboratory experience focuses on classroom instruction, organization, and management.

Prerequisite: C or better grade in EDEL 300 and EDRD 300; completion of decision point 2: admission to the teacher education program.

Parallel: EDRD 350.

Open only to elementary education and dual

elementary/special education majors.
May be repeated only once.

EDUCATION: READING (EDRD)

New:

300 Reading and Language Instruction in the Elementary Classroom (3) Designed to introduce an understanding of reading and language arts instruction in elementary classrooms. Develops practices that support students' literacy learning and in planning and implementing a meaningful literacy program in elementary classrooms. Offers an experience-based exploration of literacy education practices.

Prerequisite: C or better in EDRD 204 and EDEL 200.

Parallel: EDEL 300.

May be repeated only once.

350 Advanced Reading and Language Arts Instruction in the Elementary Classroom (3) Designed to expand an understanding of reading and language arts instruction in elementary classrooms. Develops practices that support students' literacy learning and in planning and implementing a meaningful literacy program in elementary classrooms. Continues an experience-based exploration of literacy education practices.

Prerequisite: C or better in EDEL 300 and EDRD 300.

Parallel: EDEL 350.

May be repeated only once.

Revised:

430 Assessment and Intervention in Elementary Schools

(3) Provides prospective teachers with understanding of difficulties in reading and practical experiences in assessing reading difficulties and in study of corrective treatments. Includes guided laboratory experience. Must earn a grade of C or better to pass the course.

Prerequisite: C or better grade in EDRD 350; completion of decision point 2: admission to the teacher education program.

May be repeated only once.

Laura Helms, Director
Office of Academic Systems