BALL STATE UNIVERSITY

ACADEMIC POSTING

2013-2014

VOLUME XLV – 7 February 14, 2014

This posting may contain all or part of the following: new, revised, and dropped programs, courses and prefixes. The posting period begins February 17, 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.*

INTERDEPARTMENTAL PROGRAMS

INTERDEPARTMENTAL (ID)

New:

605 Academic Colloquium (1) Provides an opportunity to discuss research projects, scholarly advances in the discipline, and professional development. Offered credit/no credit only.

Prerequisite: permission of the program director or department chairperson.

A total of 10 hours of credit may be earned, but no more than 1 in any one semester or term.

WRITING PROFICIENCY PROGRAM (WPP)

Revised:

392 Writing Proficiency Examination (0) May be used to satisfy the Writing Proficiency requirement. Eligible students will have earned at least 60 but no more than 89 credit hours and completed ENG 104 or 114 (or their equivalent) with a grade of *C* or better. May be attempted twice only and is offered on a credit/no credit basis.

Prerequisite: ENG 104 or 114 (or equivalent); completed at least 60 but no more than 89 credit hours.

COLLEGE OF APPLIED SCIENCES AND TECHNOLOGY

Department of Family and Consumer Sciences

FAMILY AND CONSUMER SCIENCES: INTERIOR DESIGN (FCID)

Revised:

115 Interior Materials and Applications (3) Study of interior materials, finishes, furniture, and architectural components. Covers floor, wall, and ceiling finishes, furniture, cabinetry, and casegoods. Selection criteria, green design, cost, quality, application, sources, and specifications will be discussed and analyzed.

School of Physical Education, Sport, and Exercise Science

Revised:

CERTIFICATE IN GERONTOLOGY, 18 hours

PREFIX	*NO*	*SHORT TITLE*	*CR HRS*
9 hours from			
GERO	535	Aging in Communities (3)	
	605	Aging Well: A Systems Approach (3)	
	610	Public Policy and Aging (3)	
	630	Health Wellness and Aging (3)	
	635	Adaptations in Later Life (3)	9
Directive electives			
GERO	515	Technology in Aging (3)	
	540	Women and Aging (3)	
	620	Guided Life Review (3)	
	625	Changing Hlth Wlns Behaviors (3)	
EDAC	638	Prog Planning in Comm/Ad Ed (3)	
	648	The Community Educator (3)	
	681	Managing Community Education (3)	
EDST	697	The Grant Process and Research (3)	
HSC	571	Death and Dying (3)	
MGT	500	Managing Org Behavior (3)	
MKG	505	Survey of Marketing (3)	9
			18 hrs

AQUATICS (AQUA)

Revised:

458 Aquatic Leadership and Staff Development (3)
Provides information to become an effective leader. Aquatic facility financial management is discussed in depth, as accounting principles apply to aquatic facilities. Certification for aquatic leadership is available if the student meets the required qualifications. Optional certification fee.

ATHLETIC TRAINING (AT)

Revised:

372 Therapeutic Modalities in Athletic Training (3)
Examination of the treatment of musculoskeletal injuries and conditions through the use of cryotherapy, thermotherapy, electrotherapy, and other modalities found in the sports medicine setting. Laboratory experiences emphasize the clinical skills associated with the application of therapeutic modalities. Lab fee required.

Prerequisite: AT 370, 371.

Open only to athletic training majors admitted into the Athletic Training Program.

PHYSICAL EDUCATION: PROFESSIONAL (PEP)

Revised:

291 Motor Development and Learning Across the Lifespan (3) Introduction to motor development and motor learning across the lifespan emphasizing major theoretical viewpoints; factors affecting motor development including physiological change, perceptual change, cognitive change, sociocultural practices, and intervention; and instruction and assessment of fundamental motor patterns in a laboratory setting. Includes laboratory experience.

Prerequisite: PEP 161 and 209; permission of the coordinator.

Open only to health and physical education teacher education majors and coaching minors.

Department of Technology

Dropped:

MECHANICAL ENGINEERING TECHNOLOGY

Revised:

MAJOR IN GRAPHIC ARTS MANAGEMENT, 82 hours

Students preparing for management positions in the graphic arts industry will complete a departmental major in graphic arts management and a minor in business administration. A required internship gives students experience in the graphic arts industry. Plans for internship credit are arranged with assistance and approval of the program coordinator and internship coordinator, who also supervises the internships.

PREFIX	*NO*	*SHORT TITLE*	*CR HRS*
Required technical courses			
TGRA	180	Introduction to Graphic Comm	3
	181	Print Imaging Systems	3
	182	Digital Imaging 1	3
	183	Screen and Specialty Graphics	3
	281	Ink and Substrate	3
	282	Digital Imaging 2	3
	283	Packaging Technology	3
	286	Digital Photography 1	3
	381	Color Management	3
	385	Cross Media Communications	3
	386	Planning and Finishing	3
	387	Digital Photography 2	3
Required management courses			
TDPT	380	Internship in Technology	3
	390	Training and Devel in Industry	3
TGRA	480	Capstone in Graphic Comm	3
	484	Printing Management	3
	486	Advanced Management Systems	3
	488	Cost Analysis	3
	489	Quality control and Automation	3
Required Business Administration minor			18
CHEM	111	General Chemistry 1	4
ECON	201	Elementary Microeconomics	3
			82 hrs

MINOR IN DESIGN TECHNOLOGY, 18 hours

PREFIX	*NO*	*SHORT TITLE*	*CR HRS*
TCST	106	CAD for Construction Management	3
TDPT	280	3D Prototyping	3
TGRA	286	Digital Photography 1	3
	387	Digital Photography 2	3
TMFG	105	Technical Design Graphics	3
3 hours from			
Approved elective			3
			18 hrs

MINOR IN GRAPHIC ARTS TECHNOLOGY, 18 hours

PREFIX	*NO*	*SHORT TITLE*	*CR HRS*
TGRA	180	Introduction to Graphic Comm	3
	181	Print Imaging Systems	3
	182	Digital Imaging 1	3
	183	Screen and Specialty Graphics	3
	184	Comp Applications-Graphic Arts	3

381	Color Management (3)	
or		
386	Planning and Finishing (3)	3
		18 hrs

PURDUE UNIVERSITY—MECHANICAL ENGINEERING TECHNOLOGY (PUME)

Dropped:

104 Industrial Organization (3)

111 Applied Statics (3)

141 Materials and Processes 1 (3)

142 Materials and Processes 2 (3)

160 Applied Engineering Computational Analysis (2)

211 Applied Strength of Materials (4)

213 Dynamics (2)

214 Machine Elements (3)

220 Heat and Power 1 (3)

230 Fluid Power (3)

242 Manufacturing Processes (3)

TECHNOLOGY: GRAPHIC ARTS/PRINTING (TGRA)

Revised:

480 Capstone for Graphic Communications (3) A capstone course that focuses on the research of emerging trends, processes, and technologies in the contemporary graphic arts/printing industry. Students are required to complete a senior research project related to the graphic arts/printing industry.

Prerequisite: senior standing.

COLLEGE OF COMMUNICATION, INFORMATION, AND MEDIA

Department of Communication Studies

COMMUNICATION STUDIES (COMM)

Dropped:

420 Classical Rhetorical Theory (3)

New:

425 Speechwriting (3) Examines the process of effective speechwriting in a variety of contexts (i.e., corporate, political, nonprofit). Emphasizes key skills such as understanding audience and context, gathering information, and capturing the speaker's voice. Offers both a theoretical examination of the act of speechwriting and a pragmatic application of skills.

Prerequisite: COMM 210.

450 Rhetoric and Activism (3) Students will employ their knowledge of and skills in rhetoric to address a need in the community.

Prerequisite: COMM 385, 412, or permission of the department chairperson.

Revised:

310 Communication and Democracy (3) Emphasizes the vital role that communication plays in America's political history. Examines various genres of discourse (e.g., speeches, pamphlets and handbills, political advertising, film) used to address political, social, and economic issues.

Prerequisite: COMM 210 or permission of the department chairperson.

333 Topics and Contexts in Interpersonal Communication (3) Critical examination of relevant topics in the field of interpersonal communication. Designed to help students become familiar with the theoretical, methodological, and contextual issues related to interpersonal communication.

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

385 Rhetoric of Marginalized Voices (3) Examines the challenges faced by underrepresented groups as they attempt to make their voices heard in the public sphere. Considers concepts such as freedom of expression, social responsibility, culture, power, race, ethnicity, sexual orientation, class, religion, and gender.

440 Interpersonal Communication (3) Examines contemporary theories, concepts, models, and pertinent research related to the communication process in interpersonal relationships to understand message exchanges and how they affect the people involved. Introduces the approaches, variables, and topics that influence social interaction.

Prerequisite: COMM 360.

COLLEGE OF SCIENCES AND HUMANITIES

Department of Computer Science

COMPUTER SCIENCE (CS)

Dropped:

496 Software Engineering 2 (3)

Revised:

498 Software Engineering 2 (3) Continuation of CS 495. Must be taken in the semester following CS 495. Involves a senior capstone project with an external client partner.

Prerequisite: CS 495.

Open only to computer science majors.

Department of English

Revised:

MASTER OF ARTS IN TEACHING ENGLISH TO SPEAKERS OF OTHER LANGUAGES (TESOL), 36 hours

Admission requirements

Applicants must meet the admission requirements of the Graduate School, have an undergraduate grade-point average (GPA) of at least 3.0, and have the equivalent of at least two years of college-level study of foreign language (requirement can be met during MA program). To apply, submit a statement of purpose (750-1000 words), a sample of scholarly or critical writing (8-15 pp double-spaced), three letters of recommendation, and Graduate Record Examination (GRE) scores. Non-native speakers of English may submit Test of English as a Foreign Language (TOEFL) scores of at least 550 (or equivalent) in place of GRE scores.

Degree requirements

PREFIX	*NO*	*SHORT TITLE*	*CR HRS*

ENG 520 or the equivalent will be required but will not count towards required hours in the degree.

Major requirements

ENG	616	Intro to Theor of Lang Learn	3
	617	Methods for Teaching ELL	3
	618	Materials Dev for Teaching ELL	3
	624	Found of Sec Lang Acquisition	3

Directed electives

18 hours from

ENG	605	Teaching in English Studies (3)	
	619	Assessment in TESOL (3)	
	621	Meaning & Structure in Eng (3)	
	622	History of English Language (3)	
	623	Phonetics & Phonology (3)	
	625	Phonology (3)	
	626	Morphology and Syntax (3)	
	627	Sociolinguistics (3)	
	628	Language and Culture (3)	
	629	Topics in Applied Linguistics (3)	
	630	Contrastive Analysis (3)	
	631	Historical Linguistics (3)	
	632	Discourse Analysis (3)	
	682	Topics in Eng Linguistics (3)	
	684	Topics in Sec Lang Acquisition (3)	
	686	Topics in Linguistics (3)	
	693	Writing in the Profession (3)	18

Research requirements

ENG	601	Research in English Studies	3
	and		
RES	697	Research Paper (1-3)	
	or		
CRPR	698	Creative Project (3 or 6)	3
			36 hrs

Depending on the nature of the student's research, the student may also be advised to take one or more courses in Experimental Design and Statistics in addition to other course work.

MASTER OF ARTS IN TEACHING ENGLISH TO SPEAKERS OF OTHER LANGUAGES (TESOL) AND LINGUISTICS, 45 hours

Admission requirements

Applicants must meet the admission requirements of the Graduate School, have an undergraduate grade-point average (GPA) of at least 3.0, and have the equivalent of at least two years of college-level study of foreign language (requirement can be met during MA program). To apply, submit a statement of purpose (750-1000 words), a sample of scholarly or critical writing (8-15 pp double-spaced), three letters of recommendation, and Graduate Record Examination (GRE) scores. Non-native speakers of English may submit Test of English as a Foreign Language (TOEFL) scores of at least 550 (or equivalent) in place of GRE scores.

Degree requirements

PREFIX	*NO*	*SHORT TITLE*	*CR HRS*

ENG 520 or the equivalent will be required but will not count towards required hours in the degree.

Major requirements

ENG	616	Intro to Theor of Lang Learn	3
	617	Methods for Teaching ELL	3
	618	Materials Dev for Teaching ELL	3
	621	Meaning & Structure in Eng	3
	623	Phonetics & Phonology	3
	624	Found of Sec Lang Acquisition	3
	625	Phonology	3
	626	Morphology and Syntax	3
	627	Sociolinguistics	3

Directed electives (at least 12 hours from the following courses):

ENG	605	Teaching in English Studies (3)
	619	Assessment in TESOL (3)
	622	History of English Language (3)
	628	Language and Culture (3)
	629	Topics in Applied Linguistics (3)
	630	Contrastive Analysis (3)

	631	Historical Linguistics (3)	
	632	Discourse Analysis (3)	
	682	Topics in Eng Linguistics (3)	
	684	Topics in Sec Lang Acquisition (3)	
	686	Topics in Linguistics (3)	
	693	Writing in the Profession (3)	12

Research requirements

ENG	601	Research in English Studies	3
	and		
RES	697	Research Paper (1-3)	
	or		
CRPR	698	Creative Project (3 or 6)	3
			45 hrs

Depending on the nature of the student's research, the student may also be advised to take one or more courses in Experimental Design and Statistics in addition to other course work.

Department of Geography

Revised:

MAJOR IN GEOGRAPHY, 51-89 hours

Concentration 4: Meteorology and climatology – professional, 69-74 hours

GEOG	230	Elementary Meteorology	3
	330	Weather Analysis	3
	331	Global Climatology	3
	332	Climate Change & Modification	3
	334	Atmospheric Hazards	3
	344	Adv Geog Info Systems Analysis	3
	350	Geog United States & Canada (3)	
	or		
	490	Field Obs Severe Local Storms (6)	3-6
	425	Physical Meteorology	3
	435	Satellite & Radar Meteorology	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

Select two courses 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)	
	410	Broadcast Meteorology (3)	
	443	Sem Adv Techniq Remote Sensing (3)	
	445	GIS Apps Design & Development (3)	
	448	Geog Information System Design (3)	
MATH	267	Calculus 3 (4)	6-7

Select one course from

CHEM	111	General Chemistry 1 (4)	
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 hrs

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

TEACHING MAJOR IN SOCIAL STUDIES, 54 hours

(See Teaching Major in Social Studies, College of Sciences and Humanities, p. 239, for total requirements for this area.)

PREFIX	*NO*	*SHORT TITLE*	*CR HRS*

Geography area, 15 hours

GEOG	120	Economic Geog of Globalization	3
	121	Geog of Cultural Environment	3
	150	Global Geography	3
	265	Intro Geographic Info Systems	3

3 hours from

GEOG	321	Urban Geography (3)	
	340	Cartograp Visual Spatial Data (3)	
	342	Introduction to Remote Sensing (3)	
	344	Adv Geog Info Systems Analysis (3)	
	350	Geog United States & Canada (3)	
	351	Latin American and Caribbean (3)	
	353	Geography of Indiana (3)	
	354	Geography of Asia (3)	
	356	Geog Russia and Its Neighbors (3)	
	357	Geography of Europe (3)	
	423	Population Geography (3)	
	470	Political Geography (3)	3
			15 hrs

GEOGRAPHY (GEOG)

Revised:

101 Earth, Sea, and Sky: A Geographic View (3) Selected aspects of the physical environment and their relationship to human occupancy of the earth.

Department of Mathematical Sciences

MATHEMATICAL SCIENCES (MATH)

Dropped:

371 Intermediate Analysis (3)

399 Theory and Practice in Middle School Mathematics (3)

New:

519 Quantitative Reasoning for Teachers (3) Interpreting and using quantitative information in authentic contexts involving number, algebra, measurement, data analysis, and chance; representing quantitative information with mathematical models, and using quantitative information to analyze and construct written arguments. Includes explorations of pedagogical issues and design of teaching materials for the development of quantitative literacy.

Prerequisite: MATH 514 or 517 or permission of the department chairperson.

570 Intermediate Analysis for Teachers (3) Introduction to basic concepts of analysis: the real numbers, sequences, continuous functions, the derivative, and the Riemann integral.

Prerequisite recommended: MATH 166 and 215.

Not open to students who have credit in MATH 470.

Revised:

162 Applied Calculus 2 (3) Derivatives and integrals of transcendental functions with additional applications, techniques of integration, improper integrals, calculus in higher dimensions and series. Core Transfer Library: Mathematics (IMA 1605)

Prerequisite: C- or better in MATH 165, or *C*- or better in MATH 161 and either *C*- or better in MATH 112 or an appropriate score on the mathematics placement test, or permission of the department chairperson.

Not open to students who have credit in MATH 166.

470 (371) Intermediate Analysis (3) Introduction to basic concepts of analysis: the real numbers, sequences, continuous functions, the derivative, and the Riemann integral.

Prerequisite: C- or better in MATH 166 and 215, or permission of the department chairperson.

514 Algebraic Reasoning for Elementary, Middle School, and Foundational Mathematics Teachers (3) Algebra as the study of patterns, as a symbolic language, as a tool for problem solving, as the study of functions, as generalized arithmetic, and as a way of modeling physical situations.

Prerequisite: at least one year of teaching experience or permission of the department chairperson.

516 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 recommended: MATH 215.

Not open to students who have credit in MATH 416.

517 Number Concepts and Number Theory for Teachers (3) Number development, number systems, properties and characteristics of classes of numbers, number sense, number theory, operations and their relationships, and algorithms.

Prerequisite: at least one year of teaching experience or permission of the department chairperson.

518 Rational Numbers and Proportionality for Elementary, Middle School, and Foundational Teachers (3) An in-depth study of rational number concepts and operations and the development of proportional reasoning. Also, issues related to teaching.

Prerequisite: at least one year of teaching experience or permission of the department chairperson.

542 Geometry and Measurement for Elementary, Middle School, and Foundational Mathematics Teachers (3) Students will develop visualization skills; identify two- and three- dimensional shapes and know their properties; connect geometry to other mathematical topics; research historical topics relevant to elementary and middle school geometry.

Prerequisite: at least one year of teaching experience or permission of the department chairperson.

551 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 recommended: MATH 166.

Not open to students who have credit in MATH 351.

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

Prerequisite recommended: MATH 162 or 166; 217.

Not open to students who have credit in MATH 456.

560 History of Mathematics (3) The development of mathematics from pre-history to the seventeenth century. Topics may include number concepts and numeration, algebra, geometry, trigonometry, analytic geometry, and calculus.

Prerequisite recommended: MATH 161 or 165.

Not open to students who have credit in MATH 460.

562 Numerical Analysis 1 (3) Topics include error analysis, locating roots of equations, interpolation, numerical differentiation and integration, spline functions, smoothing of data. Includes programming of numerical algorithms.

Prerequisite recommended: MATH 162 or 166; MATH 259 or CS 120.

Not open to students who have credit in MATH 362.

563 Numerical Analysis 2 (3) Topics include direct and iterative methods for solving systems of linear equations, eigenvalue problems; minimization of functions and linear programming. Includes programming of numerical algorithms.

Prerequisite: MATH 362 or 562.

Prerequisite recommended: MATH 217.

Not open to students who have credit in MATH 363.

571 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; Differentiation: derivative, Mean Value Theorem, l'Hospital's Rule, Taylor's

Theorem.

Prerequisite recommended: MATH 215 and 267.

Not open to students who have credit in MATH 471.

575 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: MATH 374 or permission of the department chairperson.

Prerequisite recommended: MATH 267.

Not open to students who have credit in MATH 475.

620 Mathematical Theory of Statistics 1 (4) Probability set functions, random variables, density and distribution functions, mathematical expectations, marginal and conditional distributions, sampling distributions, and limiting distributions. The mathematical rigor requires a strong background in calculus.

Prerequisite recommended: MATH 166 and 215.

625 Probability Theory and Applications (3) Basic probability theory, random variables, conditional probability and conditional expectation, Poisson process, interarrival time, and waiting time distributions.

Prerequisite recommended: MATH 166.

645 Topology 1 (3) Introduction to point-set topology. Topics include set-theoretic preliminaries, topological spaces, continuous functions, metric spaces, product and quotient spaces, connectedness, compactness, countability and separation axioms, Urysohn's Metrization Theorem, Tietze's Extension Theorem, and Tychonoff's Theorem.

Prerequisite: MATH 470 or 471 or 570 or 571.

660 Topics in the History of Mathematics (3) In-depth study of selected topics in the history of mathematics.

Prerequisite: MATH 460 or 560.

Prerequisite recommended: MATH 162 or 165.

677 Complex Variables 1 (3) Complex number systems, differentiation and integration, functions (analytic, entire, meromorphic) of one complex variable, singularities, complex integration, Cauchy's theorem, Cauchy's integral formula, power series, Laurent series, calculus of residues.

Prerequisite: MATH 470 or 471 or 570 or 571.

692 Actuarial Science Exit Survey (0) This 0-credit course consists of an exit survey that should be completed by all students who attain an MA in Actuarial Science from Ball State University. The survey will ask students about professional actuarial exams completed prior to graduation, actuarial internships held during their time in the program, and their employment or education plans after graduation. Offered credit/no credit only.

Prerequisite: students will either have completed all course requirements for an MA in Actuarial Science or will complete all requirements by the end of the current semester.

Department of Natural Resources and Environmental Management

Revised:

MINOR IN EMERGENCY MANAGEMENT AND HOMELAND SECURITY, 24 hours

PREFIX	*NO*	*SHORT TITLE*	*CR HRS*
CS	110	Intro Comp Sci & Web Prog	3
	203	Intro to Computer Security	3
EMHS	351	Intro Emergency Management	3
	352	Science WMDs Technol Hazards	3

Electives, 12 hours from
At least 3 hours from each of the following groups:

Hazards

EMHS	350	Haz Mat Health and Safety (3)	
	355	International Domestic Terror (3)	
	493	Special Topics (1-6)	
GEOG	334	Atmospheric Hazards (3)	
GEOL	416	Geology Hazards Environment (3)	

Planning and policy

GEOG	265	Intro Geographic Info Systems (3)	
JOUR	261	Principles of Public Relations (3)	
PLAN	439	Community Facilities Planning (3)	
POLS	345	National Defense Policy (3)	
	494	Politics of Terrorism (3)	
RMI	270	Principles of Risk Mgt & Ins (3)	

Applied emergency-related courses

EMHS	389	Emergency Response WMDs (3)	
	469	Professional Practice (1-6)	
GEOG	450	Mesoscale Meteorology (3)	
HSC	250	Emergency Health Care (3)	12

Other relevant courses may substitute.
See program director regarding approval.

24 hrs

NATURAL RESOURCES AND ENVIRONMENTAL MANAGEMENT (NREM)

Dropped:

315 Water Quality Management (3)

322 Soil Quality (3)

327 Soil Conservation and Management (3)

348 Asbestos and Lead Assessment (3)

481 Site Remediation Technologies (3)

548 Asbestos and Lead Management (3)

581 Site Remediation Technologies (3)

586 Computer Applications in Environmental Management (3)

Revised:

415 (315) Water Quality Management (3) Effects, consequences of point and non-point sources of pollution on quality of surface and drinking water; occurrence, sources and effects of regulated and unregulated contaminants; role of regulations in water quality management in U.S., centralized drinking water and wastewater treatment. Laboratory analysis of water quality parameters; may include field work.

Prerequisite: NREM 211 or permission of the department chairperson.

422 (322) Soil Quality (3) Chemical, physical, and biological properties of soil that affect plant production and other land uses. Emphasizes nutrient cycles in natural and cropped systems. Use and fate of pesticides. Land application of agricultural and urban wastes.

Prerequisite: NREM 221 or its equivalent; CHEM 111 or its equivalent or permission of the department chairperson.

427 (327) Soil Conservation and Management (3) Stresses principles and methods of control of soil erosion using basic soil concepts. Studies management systems and individual practices with special emphasis on soil resource maintenance.

Prerequisite: NREM 221 or permission of the department chairperson.

502 Field Study (1-6) Off-campus field studies of a specific geographic area with emphasis on resource management. Details of arrangements (including group travel plans and housing) will be provided by the instructor.

Prerequisite: permission of the department chairperson.

A total of 6 hours of credit may be earned.

A maximum of 3 credit hours apply to NREM majors.

669 Advanced Professional Practice (1-3) Advanced supervised professional learning experiences in environmental/ natural resource management, studies, or education. Students complete an independent project and present it to a professional forum.

Prerequisite: permission of the department chairperson.

A total of 3 hours of credit may be earned.

Department of Psychological Science

Correction (per Psychological Science):

MAJOR IN PSYCHOLOGICAL SCIENCE, 39 hours

Remove: list of elective major courses

TEACHERS COLLEGE

Department of Elementary Education

EDUCATION: ELEMENTARY (EDEL)

Revised:

400 Student Teaching: Pre-Kindergarten (6) Capstone clinical experience in the practice and application of teaching skills with pre-kindergarten children. Students enroll in EDEL 400 (6) the same semester as EDEL 401 (6) or EDEL 402 (6). Offered credit/no credit only.

Prerequisite: completion of decision point 3: admission to student teaching; *C* or better grades in EDEL 301 and 351 and EDRD 400 and EDPS 393 and MATH 391 and SCI 398 and SS 398; 3.0 or better overall grade-point average; permission of the department chairperson.

Parallel: EDEL 401 or 402.

401 Student Teaching: Kindergarten (6) Capstone clinical experience in the practice and application of teaching skills with kindergarten children. Students enroll in EDEL 400 (6) the same semester as EDEL 401 (6) or EDEL 402 (6). Offered credit/no credit only.

Prerequisite: completion of decision point 3: admission to student teaching; *C* or better grades in EDEL 301 and 351 and EDRD 400 and EDPS 393 and MATH 391 and SCI 398 and SS 398; 3.0 or better overall grade-point average; permission of the department chairperson.

Parallel: EDEL 400.

402 Student Teaching: Primary Grades (6) Capstone clinical experience in the practice and application of teaching skills with primary grade (1-3) children. Students enroll in either EDEL 401 (6) or EDEL 402 (6) the same semester as EDEL 400 (6). Offered credit/no credit only.

Prerequisite: completion of decision point 3: admission to student teaching; *C* or better grades in EDEL 301 and 351 and EDRD 400 and EDPS 393 and MATH 391 and SCI 398 and SS 398; 3.0 or better overall grade-point average; permission of the department chairperson.

Parallel: EDEL 400.

463 Student Teaching: Elementary (6) Capstone clinical experience in the practice and application of teaching skills with elementary grade children. Students enroll simultaneously for EDEL 465 (6). Offered credit/no credit only.

Prerequisite: completion of decision point 3: admission to student teaching; *C* or better grades in EDEL 300 and 350 and EDRD 400 and EDPS 393 and MATH 391 and SCI 397 and SS 397; 3.0 or better overall grade-point average; permission of the department chairperson.

Parallel: EDEL 465.

Open only to elementary education majors.

464 Student Teaching: Elementary (6) Capstone clinical experience in the practice and application of teaching skills with elementary grade children. Students enroll simultaneously for SPCE 489 (6) (Dual Elementary Education/Special Education). Offered credit/no credit only.

Prerequisite: completion of decision point 3: admission to student teaching; *C* or better grades in EDEL 300 and 350 and EDRD 400 and EDPS 393 and MATH 391 and SCI 397 and SS 397; 3.0 or better overall grade-point average.

Parallel: SPCE 489.
Open only to dual elementary/special education majors.

465 Student Teaching: Elementary (6) Capstone clinical experience in the practice and application of teaching skills with elementary grade children. Students enroll simultaneously for EDEL 463 (6). Offered credit/no credit only.
Prerequisite: completion of decision point 3: admission to student teaching; *C* or better grades in EDEL 300 and 350 and EDRD 400 and EDPS 393 and MATH 391 and SCI 397 and SS 397; 3.0 or better overall grade-point average; permission of the department chairperson.
Parallel: EDEL 463.
Open only to elementary education majors.

Department of Special Education

SPECIAL EDUCATION (SPCE)

Revised:

454 Introduction to Language for Deaf Persons (3)
Philosophy underlying various methods of language will be reviewed. Participants will compare and contrast various aspects of communication strategies. Topics include interactive language, written language, and reading.
Prerequisite: SPCE 240.

Ron Murphy, Associate Director
Office of Academic Systems