BALL STATE UNIVERSITY

ACADEMIC POSTING

2012-2013

VOLUME XLIV – 8

April 19, 2013

This posting may contain all or part of the following: new, revised, and dropped programs, courses and prefixes. The posting period begins April 22, 2013. 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 April 16, 2012 is Fall Semester 2013. Graduate materials posted after April 16, 2012 have an implementation date of Fall Semester 2014.*

ACADEMIC PROGRAMS

DEGREES

Revised:

Associate Degrees

General Arts

Electives

29 hrs

60 hrs

INTERDEPARTMENTAL PROGRAMS

ENGLISH AS A FOREIGN LANGUAGE (ENEF)

Correction:

146 Vocabulary and Literacy 4 (1.5-99)

Remove: "the" before "critical thinking skills"

165 Listening Level 6 (1.5-99)

Remove: "254" between "course" and "outcome"

New:

116 Vocabulary and Literacy Level 1 (1.5-99) The focus is on vocabulary acquisition, including the pronunciation and spelling of the words on the Level 1 word list. Students continue to learn the IPA, increasing their knowledge of simple vowels and adding diphthongs and consonants.

126 Vocabulary and Literacy Level 2 (1.5-99) Using a graded reader, students will identify the main idea in a reading, use context to identify unknown vocabulary, and identify specific figures of speech, such as metaphors, similes, and personification. They should also be able to generate and answer questions about a text and summarize accurately.

136 Vocabulary and Literacy Level 3 (1.5-99) The key goals of this course are to broaden and deepen learners' working vocabulary (Level 3 word list) and develop reading fluency.

156 Vocabulary and Literacy Level 5 (1.5-99) Focuses on improving reading fluency and comprehension through reading a popular novel and mastering the Level 5 word list (part of the AWL)

166 Vocabulary and Literacy Level 6 (1.5-99) Focuses on improving reading fluency and comprehension through reading a BSU selected freshman reader and mastering the Level 6 word list (part of the AWL).

172 Repeating Grammar (1.5-99) Designated as a grammar course for part-time IEI students repeating a class in the same semester.

Revised:

174 Repeating Speaking (1.5-99) Designated as a speaking course for part-time IEI students repeating a class in the same semester.

176 Repeating Vocabulary and Literacy (1.5-99)

Designated as a vocabulary and literacy course for part-time IEI students repeating a class in the same semester.

ENGLISH: INTENSIVE ENGLISH INSTITUTE (ENIE)

Correction:

146 Vocabulary and Literacy 4 (1.5-99)

Remove: "the" before "critical thinking skills"

165 Listening Level 6 (1.5-99)

Remove: "254" between "course" and "outcome"

Dropped:

176 International Teaching Assistant Preparation (1.5-99)

INTENSIVE ENGLISH INSTITUTE (IEI)

Correction:

146 Vocabulary and Literacy 4 (1.5-99)

Remove: "the" before "critical thinking skills"

165 Listening Level 6 (1.5-99)

Remove: "254" between "course" and "outcome"

INTERNATIONAL STUDY ABROAD (INSA)

New:

400 International Study Abroad (0-50) Courses with the prefix INSA are reserved for participants in study abroad programs managed by affiliate providers. This placeholder course remains on the student's academic record until the record is updated by Study Abroad following the completion of the student's study abroad program. It will be dropped and replaced with Ball State University courses, credits, and grades equivalent to the coursework completed abroad.

Prerequisite: permission of the Rinker Center. A total of 50 hours of credit may be earned.

COLLEGE OF APPLIED SCIENCES AND TECHNOLOGY

Department of Family and Consumer Sciences

Correction:

MAJOR IN PRE-DIETETICS/DIETETICS, 95 hours

Under "Minimum requirements for admission include" **Change:** CHEM 260 **to:** 360

TEACHING MAJOR IN FAMILY AND CONSUMER SCIENCES, 54 hours

CHEM 100 as a prerequisite for FCFA 230 and FCFN 340 is waived.

School of Nursing

NURSING (NUR)

Revised:

603 Nursing Theory (3) Exploration and analysis of theory development in the field of nursing, emphasizing current research, conceptual models, and theory development in nursing.

Prerequisite or parallel: NUR 605. Open only to graduate nursing students.

604 Research (3) Research methodology in nursing emphasizing the critical evaluation of research and its applicability to practice.

Prerequisite or parallel: NUR 607. Open only to graduate nursing students.

607 Data Analysis in Nursing Research (3) Emphasizes the interpretation and application of descriptive, inferential, and advanced statistical analyses of data. Critical examination of data collection, data analyses, and interpretation of quantitative and qualitative nursing studies will be the focus.

Prerequisite or parallel: NUR 605. Open only to graduate nursing students.

across the lifespan.

608 Pathophysiology and Pharmacology for Clinical Practice (3) Focuses on advanced knowledge of pathophysiology and pharmacology for application in clinical practice, and on teaching pathophysiology and pharmacology related to the nursing care of patients with health alterations

Prerequisite: NUR 603 and 604 and 605 and 607. Open only to graduate nursing students.

610 Concepts Analysis 1 (3) Analyzes selected nursing concepts and related research with a focus on health promotion. Relationship of concepts to advanced practice models is explored. Clinical experience focuses on application of research findings to clinical populations in various stages of the life cycle.

Prerequisite: NUR 603 and 604 and 605 and 607. *Open only to* graduate nursing students.

611 Concepts Analysis 2: Decision Making (3) Analyzes selected nursing concepts and related research with emphasis on ethics and decision making.

Prerequisite: NUR 603 and 604 and 605 and 607. *Open only to* graduate nursing students.

614 Concepts Analysis 3: Concepts Issues in Chronic Illness and Aging (3) Builds on NUR 610 concepts and issues of chronic illness and aging are applied. Research findings are analyzed related to quality care. Impact of fiscal management health care policies and technology are explored.

Prerequisite: NUR 610.

Open only to graduate nursing students.

620 Curricular Designs in Nursing (3) Opportunity to develop, implement, and/or evaluate student-selected aspects of existing nursing curricula. Emphasizes a group experience in assessing a curricular problem and applying current theory of practice in seeking solutions to a practical curriculum issue.

Prerequisite: NUR 603 and 604 and 605 and 607.

Open only to graduate nursing students.

622 Teaching in Nursing (3) Focuses on teacher behaviors that promote student learning, including course development and use of technology in a variety of post-secondary nursing environments. Includes faculty roles and responsibilities in nursing education.

Prerequisite: NUR 603 and 604 and 605 and 607. *Open only to* graduate nursing students.

626 Program Evaluation (3) Focuses on program evaluation of a nursing unit by exploring the components of a systematic evaluation plan and identifying evaluational tools for educational assessment using collaborative strategies.

Prerequisite: NUR 620 and 622. Open only to graduate nursing students.

630 Advanced Practice Nursing and Role Theory (3)

Nursing and related theories analyzed as the roles of advanced practice nurses are explored. Professional practice issues are examined through the synthesis of professional and research literature. A conceptual model to guide practice is developed.

Prerequisite or parallel: NUR 610 and 611. Open only to graduate nursing students.

632 Pathophysiology and Nursing Practice (3) Provides a comprehensive scientific background and understanding of pathophysiology as it relates to client assessment across the lifespan in a variety of health care settings. Forms the basis for advanced nursing practice.

Prerequisite: NUR 603 and 604 and 605. *Open only to* graduate nursing students.

634 Advanced Health Assessment (3) Practice of advanced health assessment techniques across the lifespan. Emphasizes the use of critical thinking and decision-making abilities to formulate differential diagnosis and a plan of care based on assessment data.

Prerequisite: NUR 632.

Open only to graduate nursing students.

638 Advanced Clinical Pharmacology (3) Provides

principles of advanced pharmacology based on pharmacotherapeutics, pharmacokinetics, and pharmacodynamics of broad categories of drugs. Emphasizes pharmacological management of clients across the lifespan in diverse settings.

Prerequisite: NUR 632.

Open only to graduate nursing students.

640 Nursing Administration in Complex Organizations (3)

Introduction to administration of nursing. Relates

organizational and administrative theories to the delivery of nursing care with emphasis on the health care environment.

Prerequisite: NUR 603 and 604 and 605 and 607. *Open only to* graduate nursing students.

642 Administrative Management for Nurses (3)

Introduction to organizational planning, budgeting, human resources management, conflict management issues, quality management, and ethics.

Prerequisite: NUR 603 and 604 and 605 and 607. *Open only to* graduate nursing students.

643 Financial Management for Nurses (3) Introduction to organizational planning, budgeting, human resources management, conflict management issues, quality management, and ethics.

Prerequisite: NUR 640 and 642. Open only to graduate nursing students.

672 Practicum of Role Expectations (4) Practicum in (clinical/educational/administrative/nurse practitioner) setting of student's selected functional role. Seminars for guidance and analysis of role relationships. Topics include teacher in nursing; administrator in nursing; role of clinical nurse in advanced practice; nurse practitioner.

Prerequisite: all other courses required for program track. *Open only to* graduate nursing students.

680 Primary Care of Adult/Geriatric Clients (7) Focuses on the application and evaluation of advanced practice knowledge and skills required for the care of adult/geriatric clients.

Prerequisite: NUR 630 and 632 and 634 and 638. *Open only to* graduate nursing students.

682 Primary Care of Children (4) Focuses on the application and evaluation of advanced nursing practice knowledge and skills required for the care of children and their families.

Prerequisite: NUR 630 and 632 and 634 and 638. *Open only to* graduate nursing students.

684 Primary Care of Women (3) Focuses on the application and evaluation of advanced nursing practice knowledge and skills required for the care of women and their families.

Prerequisite: NUR 630 and 632 and 634 and 638. Open only to graduate nursing students.

School of Physical Education, Sport, and Exercise Science

Correction:

BACHELOR OF ATHLETIC TRAINING, 75-77 hours

Remove: EXSC 147 from recommended electives

Department of Technology

Correction:

MAJOR IN CONSTRUCTION MANAGEMENT, 96 hours

Replace the following course in the Minor in Business Administration for Construction Management, 15 hours

Replace: MGT 200 with: MGT 300

COLLEGE OF ARCHITECTURE AND PLANNING

Department of Landscape Architecture

LANDSCAPE ARCHITECTURE (LA)

New:

414 Landscape Architectural Engineering 4 (3) Advanced methods of landscape architecture engineering and construction/implementation practices. Subjects include advanced applications for construction documentation, Building/Site/Land Information modeling (e.g., BIM); documented sustainable design criteria/guidelines/techniques (e.g., SITES); landscape construction management; and post construction evaluation. Course topics may include advanced sustainable site construction and landscape engineering applications for lighting, water, material selection, and landscape management.

Prerequisite: LA 413 or permission of the instructor. *Open only to* LA majors.

Revised:

221 Landscape Architecture History 2 (3) The history of landscape architecture from 1800 to the present. Emphasizes the North American human-environment relationship, its relationship to European antecedents, and other cultural parallels in landscape design.

404 Landscape Architecture Comprehensive Project (5)

Analytical, conceptual, and design development processes applied to a comprehensive project in landscape architecture. Emphasizes guided independent design work based on individual initiative.

Prerequisite: LA 451. Open only to LA majors.

MILLER COLLEGE OF BUSINESS

Revised:

Miller (College	of Business core, 42 hours	
ACC	201	Principles of Accounting 1	3
	202	Principles of Accounting 2	3

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

42 hrs

BUSINESS ADMINISTRATION (BUSA)

Revised:

300 Introduction to Sustainability in Business (3) Offers interdisciplinary perspectives on issues forming the environmental context for business. The life-cycle concept frames the discussion of environmental management systems and standards, pollution prevention, and product and market issues. Includes lectures, readings, case studies, and student projects.

Prerequisite: sophomore standing.

Department of Finance and Insurance

Revised:

MAJOR IN FINANCE, 69 hours

PREFIX	NO	SHORT TITLE	CR HRS		
Miller Co	ollege	of Business core, 42 hours			
ACC	201	Principles of Accounting 1	3		
	202	Principles of Accounting 2	3		
BL	260	Principles of Business Law	3		
ECON	201	Elementary Microeconomics	3		
	202	Elementary Macroeconomics	3		
	221	Business Statistics	3		
FIN	300	Principles of Finance	3		
ISOM	135	Business Information Systems	3		
	249	Foundations of Business Comm	3		
	351	Operations Management	3		
MATH	132	Brief Calculus	3		
MGT	300	Managing Behavior in Org	3		
	491	Bus Policy and Strategy Mgt	3		
MKG	300	Principles of Marketing	3		
			42 hrs		
Finance core (required of all finance majors), 18 hours					

Finance	e core (re	equired of all finance majors), 18 nours	
FIN	301	Intermediate Finance	3
	310	Investments 1	3
	320	Financial Markets 1	3
	410	Investments 2	3

	420	Financial Markets 2	3
	490	Decision Making in Finance	3
			18 hrs
Electives	, 9 hou	irs from	
ACC	301	Intermediate Accounting 1 (3)	
	302		
	305	Accounting Info Systems (3)	
	306	Intermediate Mgmt Accounting (3)	
	401	Introduction to Taxation (3)	
BL	367	Principles of Estate Planning (3)	
ECON	301	Intermediate Microeconomics (3)	
	302	Intermediate Macroeconomics (3)	
	421	Mathematical Economics (3)	
	424	Introduction to Econometrics (3)	
	441	The Theory of Monetary Policy (3)	
FIN	352	Global Finance (3)	
	353	Short Term Finance (3)	
	367	Practicum in Finance (3)	
	369	Finance Internship (3 or 6)	
	445	Financial Statement Analysis (3)	
	497	Independent Study - Finance (3)	
RMI	270	Principles of Risk Mgt & Ins (3)	
	330	Employee Benefits & Ret Plan (3)	9
			69 hrs

To pursue this program, students must have sufficient mathematical preparation to meet the prerequisite for ECON 221. The prerequisite for ECON 221 is a *C* or better grade in MATH 111 or a passing grade in MATH 132, 161, 162, 165, or 166. MATH 132 simultaneously substitutes for the University Core Curriculum math requirement. Proficiency in computer skills may be demonstrated by examination, or credit in ISOM 125 or CS 104 or its equivalent. The prerequisite for ISOM 135 is proficiency test required or ISOM 125 or CS 104.

MAJOR IN RISK MANAGEMENT AND INSURANCE, 66 hours

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

Principles of Risk Mgt & Ins 270 3 330 Employee Benefits & Ret Plan (3) or 377 Operations of Ins Enterprises (3) 3 371 3 Life & Health Insurance 3 378 Commercial Risk Mgt & Ins 474 Seminar in Risk Mgt & Ins 3 15 hrs

RMI core (required of all RMI majors), 15 hours

			10 111
Electives	s. 9 hoi	urs from	
ACC	301	Intermediate Accounting 1 (3)	
1100	302	2 ,	
	401	9 , ,	
BL	367	(-)	
FIN	301	Intermediate Finance (3)	
	310	` /	
	320	(-)	
	410	Investments 2 (3)	
	420	* *	
	445	* *	
MATH	259	•	
	457		
	458	Actuarial Models 2 (3)	
MGT	341	Opportunity Identification (3)	
	361	Managing Human Resources (3)	
MKG	325		
	425	— — — — — — — — — — — — — — — — — — —	
	427	<u> </u>	
	429	Sales Technology Application (3)	
RMI	330	Employee Benefits & Ret Plan (3)	
	369	Risk Mgt & Ins Internship (3-6)	
	377	Operations of Ins Enterprises (3)	
	401	Health Care Risk Management (3)	
	473	Insurance Law (3)	
	497	Independent Study in RMI (1-6)	9

66 hrs

To pursue this program, students must have sufficient mathematical preparation to meet the prerequisite for ECON 221. The prerequisite for ECON 221 is a *C* or better grade in MATH 111 or a passing grade in MATH 132, 161, 162, 165, or 166. MATH 132 simultaneously substitutes for the University Core Curriculum math requirement. Proficiency in computer skills may be demonstrated by examination, or credit in ISOM 125 or CS 104 or its equivalent. The prerequisite for ISOM 135 is proficiency test required or ISOM 125 or CS 104.

Department of Information Systems and Operations Management

Revised:

MAJOR IN LOGISTICS AND SUPPLY CHAIN MANAGEMENT, 60 hours

Page 5

42 hrs

PREFIX	NO	SHORT TITLE	CR HRS
Miller Co	ollege	of Business core, 42 hours	
ACC	201	Principles of Accounting 1	3
	202	Principles of Accounting 2	3
BL	260	Principles of Business Law	3
ECON	201	Elementary Microeconomics	3
	202	Elementary Macroeconomics	3 3 3 3 3 3 3 3 3 3 3
	221	Business Statistics	3
FIN	300	Principles of Finance	3
ISOM	135	Business Information Systems	3
	249	Foundations of Business Comm	3
	351	Operations Management	3
MATH	132	Brief Calculus	3
MGT	300	Managing Behavior in Org	3
	491	Bus Policy and Strategy Mgt	3
MKG	300	Principles of Marketing	3
			42 hrs
Logistics	and s	upply chain management core, 15 hour	·s
ISOM	361	Simulation, Modeling & Optimiz	3
	369	Industry Internship (3-6)	3
	453	Manufacturing Plan & Control	3
	460	Global Logistics & Transp Mgt	3
	480	Supply Chain Mgt Integ Project	3
			15 hrs
Electives	(choo	se any one from the list), 3 hours from	
ISOM	300	Project Management (3)	
	355	Quality Mgt & Lean Six Sigma (3)	
	452	Inventory, Warehouse & Negot (3)	
	456	Info Tech & Business Analytics (3)	3
			60 hrs

To meet the graduation requirement of 120 credit hours, students need to take additional 6 credit hours from the above electives, or more internship hours, or from other elective courses of the department.

To pursue this program, students must have sufficient mathematical preparation to meet the prerequisite for ECON 221. The prerequisite for ECON 221 is a *C* or better grade in MATH 111 or a passing grade in MATH 132, 161, 162, 165, or 166. MATH 132 simultaneously substitutes for the University Core Curriculum math requirement. Proficiency in computer skills may be demonstrated by examination, or credit in ISOM 125 or CS 104 or its equivalent. The prerequisite for ISOM 135 is proficiency test required, or ISOM 125 or CS 104.

INFORMATION SYSTEMS AND OPERATIONS MANAGEMENT (ISOM)

Revised:

300 Project Management (3) Prepares students to become productive project team members and develops an understanding of the activities and techniques necessary for a

successful project completion. Topics include: project leadership skills, project scheduling, project control, and project reporting.

Prerequisite: ISOM 135, junior standing or permission of the department chairperson.

Department of Marketing and Management

MANAGEMENT (MGT)

Dropped:

200 Management Principles (3)

Revised:

300 Managing Behavior in Organizations (3) Examines the challenges of managing human behavior in organizations. Reviews foundations of modern management thought. Discusses current and emerging management topics: emphasizes leadership, motivation, communication, human relations, group dynamics, job design, organizational development, and managing a diverse workforce.

Prerequisite: sophomore standing.

305 Job Search and Transition (1) Prepares students for moving from college to careers. Topics covered include defining career goals, writing resumes, job-search correspondence, interviewing, and initial adjustments in the first job position.

Prerequisite: sophomore standing.

443 Venture Financing (3) Examines the venture financing options available for new business startups. Emphasizes creating and analyzing financial documents, approaching financial sources, selling stock for growing companies, and managing the financial condition of a new venture.

Prerequisite: MGT 241; FIN 300.

Open only to students majoring or minoring in entrepreneurship.

461 Compensation Administration (3) Reviews basic compensation issues including internal, external, and individual equity, as well as benefits administration. Emphasizes design and implementation of compensation systems.

Prerequisite: MGT 361.

465 Human Resource Planning and Selection (3) Focuses on organization and human resource planning, including determination of organization and human resource needs, analysis and development of job requirements, and necessary qualifications for recruitment and selection procedures, placement and orientation, and evaluation of selection programs.

Prerequisite: MGT 361 and ECON 221.

469 Contemporary Issues in Human Resource

Management (3) Integration of various contemporary principles, theories, and techniques for solving realistic and complex human resource management problems in public and private organizations. Includes lectures, tours, readings, cases, and the completion of a major individual project.

Prerequisite: MGT 461 and 465; completion of all management core courses.

MARKETING (MKG)

Dropped:

200 Fundamentals of Marketing (3)

Revised:

300 Principles of Marketing (3) Introduces marketing principles, functions, and contemporary practices essential for attaining organizational objectives. Topics include the marketing environment and technology, marketing research, consumer behavior, market segmentation, product management, professional selling, advertising, pricing, distribution channels, strategy implementation, and the role of marketing in society.

Prerequisite: sophomore standing including ECON 116 or 201.

350 Marketing Research (3) Students are introduced to the role of empirical scientific research in marketing and the marketing research process. Emphasis is on the following three areas: marketing research designs; sources and means of data collection; the analysis and presentation of data.

Prerequisite: MKG 300 and ECON 221.

COLLEGE OF COMMUNICATION, INFORMATION, AND MEDIA

Department of Telecommunications

Correction:

MAJOR IN TELECOMMUNICATIONS, 45-59 hours

Digital audio, digital video, and emerging media tracks also are required to take 6 hours from both of the following two groupings

Under electives

Replace: MKG 200 with: MKG 300 **Replace:** MGT 200 with: MGT 300

School of Music

MUSIC HISTORY AND MUSICOLOGY (MUHI)

Dropped:

539 Jazz History 1 (2)

540 Jazz History 2 (2)

Revised:

599 Collegium Musicum (1-2) The study, realization, and performance of medieval, Renaissance, and baroque music.

A total of 4 hours of credit may be earned, but no more than 2 in any one semester or term.

SCHOOL OF MUSIC (MUSC)

Revised:

540 Large Instrumental Ensemble (1-3) A major performing ensemble, normally rehearsing five hours a week. Included in this category are the wind ensemble, the symphony band, the marching show band, the symphony orchestra, and jazz ensemble.

A total of 21 hours of credit may be earned, but no more than 3 in any one semester or term.

550 Large Vocal Ensemble (1-3) A major performing ensemble normally rehearsing five hours a week.

A total of 21 hours of credit may be earned, but no more than 3 in any one semester or term.

699X Experimental/Developmental Topics (1-3) Topics relevant to the discipline. Course titles will be announced before each semester.

Prerequisite: permission of the department chairperson. A total of 6 hours of credit may be earned, but no more than 3 in any one semester or term.

710 Internship in College Music Teaching (1-6) Guided teaching of Ball State undergraduate students. An analysis of objectives, teaching approaches, and evaluative techniques.

A total of 6 hours of credit may be earned. *Open only to* doctor of arts students with majors in music.

711 Externship in College Music Teaching (3-6) Guided teaching of undergraduates at a campus of a different size from Ball State. An analysis of objectives, teaching approaches, and evaluative techniques.

A total of 6 hours of credit may be earned. *Open only to* doctor of arts students with majors in music.

COLLEGE OF FINE ARTS

MUSIC PERFORMANCE (MUSP)

Revised:

577 Continuo Playing and Keyboard Improvisation (1-2)

Development of facility in reading from figured basses or improvisation in the church service, free harmonization of hymns.

A total of 4 hours of credit may be earned, but no more than 2 in any one semester or term.

592 Special Topics in Applied Music (0) Individual applied instruction (according to proficiency) for the study of music of any period or style.

600 Major Study (**1-4**) Thirty to 120 minutes of weekly private lesson(s) based on credit-hour enrollment. For master's and artist diploma students approved for major study (for elective study, see MUSP 620).

A total of 20 hours of credit may be earned, but no more than 4 in any one semester or term.

Not open to students enrolled in MUSP 610.

610 Applied Recital Study (4) Sixty-minute private lesson weekly with additional recital coaching sessions (to average an additional hour per week). Available one time for each full recital given. For master's and artist diploma students.

A total of 20 hours of credit may be earned, but no more than 4 in any one semester or term.

Not open to students enrolled in MUSP 600.

620 Elective Study (1-2) Thirty to sixty minutes of weekly private lessons based on credit-hour enrollment. Open to all graduate students; this usually functions as "elective" hours not on the student's major instrument.

A total of 20 hours of credit may be earned, but no more than 2 in any one semester or term.

626 Piano for the Conductor (1-2) Development of the facility to transpose and condense full score at the keyboard. Does not require advanced piano technique. To be used as a tool for better understanding the total musical and compositional process and acquiring an aural comprehension of the score.

A total of 10 hours of credit may be earned, but no more than 2 in any one semester or term.

637 Church Music Performance Practice (1-2) Performance projects of interest to organists and church musicians. Reading of anthems, motets, oratorio movements; music for organ and instruments; music for graded church choirs; conducting from the keyboard. Material varies each semester.

A total of 4 hours of credit may be earned, but no more than 2 in any one semester or term.

640 Independent Applied Study (1-2) Independent time for the master's or artist diploma student to work on repertoire that is being covered in concurrent enrollment in MUSP 600 for 2 credit hours. With permission of the graduate coordinator; may be repeated up to 2 times.

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

Open only to students registered in MUSP 600 for 2 credits.

643 Chamber Music (1-4) Advanced development in the art of chamber music performance. Emphasizes the study of a variety of types of literature of musical worth in program building. Refinement of ensemble skills and individual techniques.

A total of 12 hours of credit may be earned, but no more than 4 in any one semester or term.

690 Advanced Conducting (4) Baton technique, advanced study of vocal and instrumental scores, repertory development, and rehearsal techniques.

A total of 40 hours of credit may be earned, but no more than 4 in any one semester or term.

700 Primary Area Study (1-4) Thirty to 120 minutes of weekly private lesson(s) based on credit-hour enrollment. For doctoral primary area study only.

A total of 20 hours of credit may be earned, but no more than 4 in any one semester or term.

Not open to students enrolled in MUSP 710.

710 Applied Recital Study (4) Sixty-minute private lesson weekly with additional recital coaching sessions (to average an additional hour per week). Available one time for each full recital given. For doctoral students only.

A total of 16 hours of credit may be earned, but no more than 4 in any one semester or term.

Not open to students enrolled in MUSP 700.

720 Secondary Study (1-2) Thirty to sixty minutes of weekly private lessons based on credit-hour enrollment. For approved doctor of arts secondary area study only (for elective study on an instrument, see MUSP 620).

A total of 16 hours of credit may be earned, but no more than 2 in any one semester or term.

743 Chamber Music (1-4) Advanced development in the art of chamber music performance. Study of a variety of types of literature with emphasis on mature works. Refinement of ensemble skills and individual techniques.

A total of 12 hours of credit may be earned, but no more than 4 in any one semester or term.

790 Advanced Conducting (4) Baton technique, advanced study of vocal and instrumental scores, repertory development, and rehearsal techniques.

A total of 20 hours of credit may be earned, but no more than 4 in any one semester or term.

791 Lessons in Advanced Conducting (1-2) One private half-hour lesson weekly for conducting students.

A total of 4 hours of credit may be earned, but no more than 2 in any one semester or term

MUSIC THEORY AND COMPOSITION (MUST)

Revised:

612 Compositional Practices of the Seventeenth and Eighteenth Centuries (3) General trends with focus (to be announced) on one or more composers, major works, or special developments of the period.

Prerequisite: MUST 621.

616 Theory of Nineteenth-Century Music (3) Stylistic devices of selected composers of the nineteenth century. *Prerequisite:* MUST 621.

617 Theory of Twentieth- and Twenty-First Century Music (3) Vocabulary, devices, tonal organization, notation, and other elements that characterize the compositional practices of twentieth- and twenty-first centuries.

Prerequisite: MUST 621.

621 Analytical Technique (3) Identification and analysis of significant compositional elements as determined by the musical context. Special attention given to musical practices before and after the period of tertian harmony.

625 Electronic Music Studio 1 (2) Fundamentals of the physical and perceptual dimensions of sound as a basis for the electronic synthesis and analysis of musical sounds. Studio laboratory time required.

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

626 Electronic Music Studio 2 (2-6) Individualized approach to the application of electronic sound synthesis compositionally or in educational research. Studio laboratory time required.

Prerequisite: MUST 625.

A total of 12 hours of credit may be earned.

628 Composition (1-4) Musical composition suited to the needs of graduate students whose major professional interests lie outside the field of composition; students are free to work in the shorter forms and in less-advanced idioms.

A total of 8 hours of credit may be earned, but no more than 4 in any one semester or term.

629 Composition (3-6) Experience in writing for any size instrumental or vocal ensemble with emphasis on the cultivation of a personal style within the framework of current practice. Encourages students to examine and cultivate facility in the use of serialism and electronic techniques.

A total of 24 hours of credit may be earned, but no more than 6 in any one semester or term.

635 Arranging Workshop (1-4) Individualized, project-oriented, advanced skill development in arranging. Scoring of commercials, show components, marching band shows, and background music for film, TV, radio, and media productions.

Prerequisite: permission of the instructor.

A total of 8 hours of credit may be earned, but no more than 4 in any one semester or term.

692 Special Topics in Music Theory and Composition (1-4) Explores problems of special interest to students and the instructor. Permits study of topics not formally treated in other courses.

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

722 Seminar in the Principles of Music Theory (3)

Discursive study of theoretical principles from a historical and pedagogical point of view. Includes readings, research, writing, contemporary materials and their applications in program organization, implementation, and administration.

729 Composition (3) Continuation of MUST 629 with emphasis on personal style development.

A total of 18 hours of credit may be earned.

COLLEGE OF SCIENCES AND HUMANITIES

Department of Biology

BIOLOGY (BIO)

Revised:

313 Microbiology (4) Microorganisms including representative archaea, bacteria, viruses, viroids, prions, protozoa, algae, lichens, and fungi. Emphasizes morphology, physiology, genetics, and control. Some consideration of applied microbiology and biotechnology. Lecture and laboratory.

Prerequisite: BIO 111.

341 Pathogenic Bacteriology (3) Study of pathogenic bacteria with emphasis on morphology and physiology. Laboratory techniques for culturing, isolating, and identifying bacteria.

Prerequisite: BIO 113 or 313.

344 Immunology-Virology (4) Examination of the basic principles of immunology and virology. Topics include the immune system, the variety of immune responses, immunoregulation, and characteristics of viruses. Emphasizes virushost interactions and serological diagnosis of viral infections.

Prerequisite: BIO 215 or 313.

440 Evolution (3) Principles, evidence, and the historical context of modern evolution theory. Some attention will be given to the origin of life and the evolution of plants and animals.

Prerequisite: BIO 111 or permission of the instructor.

456 Cancer Biology (3) Examination of the biological basis

of cancer, discussion of related contemporary issues, and overview of recent advances in cancer research. Emphasizes cancer progression, tumor production, etiology/epidemiology, prevention, modern therapies, and patient management.

Prerequisite: BIO 215 or permission of the instructor.

460 Introduction to Methods of Biological Imaging (4)

Biological imaging refers to any imaging technique used in biology. However, its use in microscopy to create images of objects or features too small to be detectable by the naked human eye is paramount. The theory, design, operation, and specimen preparation for the confocal light microscope and both the transmission and scanning electron microscopes. Basic digital image manipulation is also covered. To be successful in the course, you must demonstrate competency on all three microscopes, develop a portfolio with high quality images for each type of microscopy, and complete an individual research project. Primarily designed for students interested in doing research in biology, biochemistry, or neuroscience.

Prerequisite: permission of the instructor.

Recommended prerequisite: cell biology and introductory physics.

BOTANY (BOT)

Revised:

440 Taxonomy of Vascular Plants (4) Identification, use, and care of native and ornamental trees, shrubs, vines, and herbaceous plant material. The use of botanical keys, manuals, and texts in the identification of the plant taxa.

Prerequisite: BIO 210 or permission of the instructor.

451 Plant Physiology (4) An introductory treatment of the physiological activities of green plants with emphasis on plant growth substances, photosynthesis, and intermediate metabolism.

Prerequisite: BIO 111 or 210.

470 Dendrology (3) The identification and site characterization of woody plants with an emphasis on midwestern tree species. Use of botanical features and keys in field identification. Correlation of species with site conditions, plant diseases, climatic parameters, associate species, and geographical distribution.

481 Aquatic Botany (4) The collection and identification of nonvascular and vascular plants from freshwater ecosystems. Emphasizes the morphology, physiology, and ecology of these plants to explain their distribution in nature. Class project and field trips may be used to demonstrate ecological relationships. Two Saturday field trips required.

Prerequisite: BIO 210 or permission of the instructor.

ZOOLOGY (ZOOL)

Revised:

330 Structure and Development of Vertebrates (5)

Comparative study of the anatomy, development, and evolutionary relationships of vertebrates. Lecture and laboratory.

Prerequisite: BIO 112 and 214 or 215 or 216.

347 Animal Parasitology (3) Helminth, protozoan, and arthropod parasites of animals and humans. Emphasizes identification, life cycles, host-parasite relationships, and physiology of common species. Some emphasis on medical and clinical aspects of parasites in humans, and tropical forms.

Prerequisite: BIO 111 or 112.

432 Invertebrate Zoology (4) Comparative morphology, physiology, ecology, life histories, and phylogeny of invertebrate animal phyla.

Prerequisite: BIO 216.

441 Entomology (3) Anatomy, physiology, taxonomy, life histories, habits, and adaptations of insects.

Prerequisite: BIO 111 and 112 or permission of the instructor.

444 Ichthyology (3) The study of fish with emphasis on identification, classification, anatomy and physiology, and ecology. Emphasizes Indiana species, but other important species will be included.

Prerequisite: BIO 216.

484 Aquatic Entomology (3) Immature and adult stages of aquatic insects, including collecting techniques, identification, ecological requirements, morphology, and evolutionary adaptations to lentic and lotic conditions. Emphasizes aquatic insects as indicators of environmental quality and stress.

Prerequisite: BIO 216.

Department of Chemistry

Revised:

ASSOCIATE IN SCIENCE—CHEMICAL TECHNOLOGY, 60 hours

Electives (CS 116 strongly recommended)

4-8

23-27 hrs

Department of Criminal Justice and Criminology

Revised:

ASSOCIATE IN ARTS—CRIMINAL JUSTICE AND CRIMINOLOGY, 60 hours

Electives

23

39 hrs

Department of English

ENGLISH (ENG)

Revised:

345 Early American Literature (3) Special topics in a range of authors, genres, movements, and/or ideas in early American literature (pre-colonial through 1800).

Prerequisite: ENG 230 or 206 or permission of the department chairperson.

489 Practicum in Literary Editing and Publishing (3)

History, philosophy, and practice of literary editing and publishing. Students will work on projects including the production and publication of a literary magazine.

Prerequisite: ENG 306 or 307 or 308 or 310. A total of 6 hours of credit may be earned, but no more than 3 in any one semester or term.

Department of Geography

GEOGRAPHY (GEOG)

Revised:

250 Spatial Analytical Methods in Geography (3) Serves as a basic introduction to the quantitative methods employed by geographers to describe, analyze and interpret geospatial datasets. Lecture topics will include basic descriptive statistics, hypothesis formulation and testing, sampling strategies, geographical association and correlation analysis, regression, and a multivariate statistics overview.

Prerequisite: MATH 108 or 111 or 112 or 125 or 132 or 161 or 162 or 165 or 166.

Open only to geography majors and minors.

320 Immigration and Ethnic Geographies of the United

States (3) A systematic upper division course which introduces the geographical aspects of immigration and ethnicity in the United States, particularly with regard to the post-1965 ethnic groups from Latin America and Asia. Specific attention is given to concepts of immigration theory, identity, race, transnationality, and community formation within the larger context of human geography.

Department of Geological Sciences

GEOLOGY (GEOL)

Dropped:

101L Planet Earth's Geological Environment (0)

445 Fractals in the Natural Sciences (3)

New:

440 Karst Environments and Carbonate Geology (3) A study of a portion of the global carbon cycle that includes an intensive survey of karst aguifers and landscapes as well as the geology of the carbonate rocks in which the karst forms. Planned topics will include carbonate depositional environments, carbonate petrology and diagenesis, speleogenetic theories, karst hydrology and geochemistry, karst geomorphology, and environmental/engineering challenges in karst.

Prerequisite: GEOL 207, 240. Not open to students who have credit in GEOL 540.

Revised:

101 Planet Earth's Geological Environment (3)

Introductory study of the materials, structure, and surface features of the earth; the processes responsible for their development; geologic hazards; and the application of geologic knowledge to mankind's environmental and resource problems. Core Transfer Library: Physical Sciences (IPS

Department of Mathematical Sciences

MATHEMATICAL SCIENCES (MATH)

Revised:

335 Mathematical Models (3) Construction of mathematical models for use with problems in physics, chemistry, biology, and economics. Emphasizes the construction and interpretation of models. Existing computer software will be used.

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

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

Prerequisite: MATH 162 or 166, 217, or permission of the department chairperson.

Department of Modern Languages and Classics

Revised:

MAJOR IN SPANISH, 36 hours

PREF	X NO	SHORT TITLE	CR HRS
Langu	age, ling	uistics, and culture studies option	
SP	201	Intermediate Spanish 1	3
	202	Intermediate Spanish 2	3

	301	Conversation and Composition	3
	302	Composition and Grammar	3
	335	Topics in Hispanic Cultures	3
	337	SP Phonetics and SLA	3
	340	Survey in Spanish Linguistics	3
	404	Seminar in Language	3
12 hours	from 3	800- and 400-level SP courses	12
SP 305 r SP 302.	nay sut	ostitute for SP 301; SP 306 may subst	36 hrs titute for
Cultural	and lit	erary studies option	
SP	201	Intermediate Spanish 1	3
	202	Intermediate Spanish 2	3
	301	Conversation and Composition	3
	202	C	2

302 Composition and Grammar

Topics in Hispanic Cultures 3 335 Survey of Spanish Literature 3 361 362 Survey of Spanish-American Lit 3 Seminar in Culture/Lit Studies 3 403

12 hours from 300- and 400-level SP courses

36 hrs

12

SP 305 may substitute for SP 301; SP 306 may substitute for SP 302.

MINOR IN SPANISH, 15 hours

PREFIX	X NO	SHORT TITLE	CR HRS
SP	201	Intermediate Spanish 1	3
	202	Intermediate Spanish 2	3
	301	Conversation and Composition	3
	302	Composition and Grammar	3
3 hours	3		
			15 hrs

SP 305 may substitute for SP 301; SP 306 may substitute for SP 302.

TEACHING MAJOR IN FOREIGN LANGUAGE: SPANISH, 36 hours

PREFIX	NO	SHORT TITLE	CR HRS
SP	201	Intermediate Spanish 1	3
	202	Intermediate Spanish 2	3
	301	Conversation and Composition	3
	302	Composition and Grammar	3
	335	Topics in Hispanic Cultures	3
	337	SP Phonetics and SLA	3
	340	Survey in Spanish Linguistics	3
	361	Survey of Spanish Literature	3
	362	Survey of Spanish-American Lit	3
	403	Seminar in Culture/Lit Studies (3)	
	or		
	404	Seminar in Lang/Ling (3)	3

6 hours from 300- and 400-level SP courses

SP 305 may substitute for SP 301; SP 306 may substitute for SP 302.

6

36 hrs

JAPANESE (JAPA)

New:

250 Japanese Anime (3) In recent years, Japanese animation has become incredibly popular both in Japan and around the world. This online course is to accommodate the broad interest in Japanese animation and channel enthusiasm into systematic engagement with this unique and fascinating genre that connects and crosses Japanese culture, history, literature, society, popular culture, and technology. Taught in English.

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 and 362.

A total of 9 hours of credit 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 and 340.

A total of 9 hours of credit may be earned.

Department of Psychological Science

PSYCHOLOGICAL SCIENCE (PSYS)

Revised:

241 Statistics (3) Descriptive statistics and statistics of inference. The computation, application, and interpretation of various elementary statistics.

Prerequisite: PSYS 100; and MATH 125 or MATH 132 or MATH 161 or MATH 165.

385 Professional Ethics in Psychology (1) Introduces selected ethical issues in psychological research and practice. Offered only online through Online and Distance Education. Offered credit/no credit only.

Prerequisite: PSYS 241 and 295; a minimum of 6

additional hours in psychology.

Open only to juniors and seniors and only to psychological science majors.

475 Advanced Industrial Psychology (3) Introduction to principles of staffing organizations. Emphasizes job analytic methods, recruiting, interviewing, testing, test validation strategies, utility analysis, performance appraisal, and employment discrimination.

Prerequisite: PSYS 100 and 373.

476 Human Factors Psychology (3) Explores the relation between people and the physical things in their environments. Topics include design of objects based on psychological knowledge about information display, human control, and cognitive capacities.

Prerequisite: PSYS 100.

TEACHERS COLLEGE

Department of Elementary Education

EDUCATION: ELEMENTARY (EDEL)

Correction:

401 Student Teaching: Kindergarten (6)

Parallel: EDEL 400.

Ron Murphy, Associate Director Office of Academic Systems