

BALL STATE UNIVERSITY

ACADEMIC POSTING

2012-2013

VOLUME XLIV – 1

August 17, 2012

This posting may contain all or part of the following: new, revised, and dropped programs, courses and prefixes. The posting period begins August 20, 2012. 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.*

COLLEGE OF APPLIED SCIENCES AND TECHNOLOGY

Electives	3
	<hr/>
	12 hrs
	<hr/>
	33 hrs

School of Physical Education, Sport, and Exercise Science

Correction:

MASTER OF ARTS OR MASTER OF SCIENCE IN EXERCISE SCIENCE, 33-38 hours

Sports Performance, 33 hours

EXSC	600	Internship in Exercise Science (1-6)	3
	603	Exercise Physiology 1	3
	604	Resistance Training and Cond	3
	634	Mechan Analysis of Movement	3
FCFN	644	Nutrition for Exer and Sport	3
PEP	609	Sport Psychology	3
	696	Advanced Techniques in AT	3

Research requirements
12 hours from one area

Master of Arts, non-thesis option

EDPS	641	Statistical Methods	3
PEP	601	Research App Non-Thesis	3
Electives			6

Master of Arts, research paper/creative project

PEP	601	Research App Non-Thesis	3
CRPR	698	Creative Project (3 or 6)	
		or	
RES	697	Research Paper (1-3)	3-6
Electives			3-6

Master of Science, thesis

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

MILLER COLLEGE OF BUSINESS

Department of Information Systems and Operations Management

Correction:

MASTER OF ARTS IN BUSINESS EDUCATION, 30-36 hours

PREFIX	NO	SHORT TITLE	CR HRS
Course requirements			
BED	592	Mngng In-Schl Lab/Coop	3
	593	Phil, Org, and Admin of CTE	3
	620	Improve Instruct Tech	3
	622	Improve Instruct Basc	3
	625	Probs/Issues Bus/Mkg Ed	3

Research requirements

BED	616	Res Meth Bus & Mkg Ed	3
		and/or	
THES	698	Thesis	1-6
			<hr/>
			3-9 hrs

BED and other directed electives with program
advisor approval

6-18

30-36 hrs

Suspended:

**ASSOCIATE IN SCIENCE—BUSINESS
INFORMATION TECHNOLOGY, 60 hours**

Department of Marketing and Management

Suspended:

**ASSOCIATE IN SCIENCE—BUSINESS
ADMINISTRATION—MANAGEMENT, 60 hours**

MANAGEMENT (MGT)

Revised:

241 The Entrepreneurial Experience (3) An introductory course focusing on the generation of innovative business ideas, the creation of business ventures, and the role of entrepreneurship within society. Presents the skills and process knowledge needed to create an innovative solution to a real-world market opportunity.

341 Opportunity Identification (3) Creatively identifying and developing an entrepreneurial opportunity through market feedback. Exploring an opportunity through interaction with potential customers and industry experts.

Prerequisite: MGT 241.

Open only to Miller College of Business majors.

346 Product and Service Design (3) The product design aspect focuses on establishing product functionality, developing blueprints, listing parts and materials, and identifying specific manufacturing processes at the parts level. Service design aspect, where applicable, focuses on detailed service process design ranging from bundling of services with products to micro-level service process flows.

Prerequisite: MGT 341.

Open only to entrepreneurial management majors.

347 Business Model Generation (3) An interactive environment where students work with stakeholders on strategic perspectives and the development of an economically feasible business model towards the capstone project.

Prerequisite: MGT 346.

Open only to entrepreneurial management majors.

441 Entrepreneurial Decision Making (3) Teams of students consult with organizations on specific problems or opportunities in such areas as production, marketing, financial analysis, and other related entrepreneurial or managerial issues. Students will be exposed to contemporary challenges in entrepreneurial management and asked to solve problems from real-world scenarios.

Prerequisite: MGT 347 and 443.

Open only to entrepreneurial management majors.

449 New Venture Creation (3) Requires the development of

a thorough business plan that must be approved by an external panel of executives and entrepreneurs.

Prerequisite: MGT 347.

Open only to entrepreneurial management majors.

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 300 and 361.

MARKETING (MKG)

Revised:

325 Professional Selling (3) Detailed introduction to and application of the principles of personal selling as applied to persons pursuing any vocation, as well as those aspiring to careers in marketing.

Prerequisite: any ECON course.

Prerequisite or parallel: MKG 300.

COLLEGE OF FINE ARTS

School of Music

MUSIC THEORY AND COMPOSITION (MUST)

New:

592 Special Topics in Music Theory and Composition (1-3) 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 3 in any one semester or term.

Revised:

101 Sight Singing and Ear Training (1) In-depth study and application of sight singing techniques, dictation, chord recognition, error detection, and related activities. Placement by level of experience.

Recommended parallel: MUST 111.

111 Music Theory (2) In-depth study of music fundamentals including rhythm, melodic structure, four-part harmony, elementary harmonic and structural analysis accompanied by writing, listening, and score study. Placement by level of experience. Must be taken in sequence.

Recommended parallel: MUST 101.

Department of Theatre and Dance

THEATRE (THEA)

New:

207 Design Awareness for the Non-Major (3) THEA 207 will increase students' understanding of theatrical design technologies. Students will study design principles, demonstrate critical thinking, and creatively integrate their learning in the worlds of theatre and dance, gaining experience through "hands on" manipulation of design elements as well as application of principles in individual and group presentations.

Prerequisite: THEA 100 or DANC 100 or other THEA/DANC Tier 1 course.

Not open to students who have credit in THEA 107.

Open only to non-majors.

COLLEGE OF SCIENCES AND HUMANITIES

Department of Anthropology

ANTHROPOLOGY (ANTH)

Revised:

307 Applied Anthropology (3) Investigates the problems and work that engage the attention of anthropologists outside the university setting. Examination of new skills needed to supplement those traditionally taught in anthropology.

Prerequisite: ANTH 101 or permission of the instructor.

342 American Culture (3) Examines how the values, beliefs, and norms of American culture are integrated into and symbolized in various media. Explores how Americans experience and resolve cultural tensions between individualism and community, equality and hierarchy, competition and cooperation.

Prerequisite: ANTH 101 or permission of the instructor.

451 Witchcraft, Magic, and Religion (3) Anthropological study of humankind's age-old concern with life, death, sickness, and the unknown. Discusses human attempts to control life through supernatural beings, prayer, sacrifice, and techniques of magic and witchcraft.

Prerequisite: ANTH 101 or permission of the instructor.

Department of Computer Science

COMPUTER SCIENCE (CS)

Revised:

222 Advanced Programming (3) Project-intensive study of

advanced topics and best practices in software development, including advanced language features, modular decomposition, and development tools.

Prerequisite: CS 121 and either CS 124 or MATH 215, all with C- or better grades, and ENG 103 or equivalent.

230 Computer Organization and Architecture (3)

Performance measurement and benchmarking, assembly language, machine language, integer and floating-point arithmetic, processor architectures, register sets, and microprogramming.

Prerequisite: CS 121 and either CS 124 or MATH 215, all with C- or better grades.

310 Web Programming (3) Advanced HTML, including XHTML, Cascading Style Sheets, Java Script and Dynamic HTML. XML including DTDs and XSL. Server side programming, security issues, and encryption-based security mechanisms.

Prerequisite: CS 121 with a C- or better grade.

315 Game Programming (3) Serves as an introduction to game programming, and topics include active and passive rendering, sprite animation, collision detection, audio playback, input devices, deployment, and applications of artificial intelligence.

Prerequisite: CS 222 with a C- or better grade.

324 Design and Analysis of Algorithms (3) Topics include: analysis of algorithms; dynamic programming; probabilistic algorithms, examples of geometric, combinatorial, and graph algorithms, pattern matching; introduction to NP-completeness.

Prerequisite: CS 121 and either CS 124 or MATH 215 and either MATH 161 or 165, all with C- or better grades.

327 Distributed Processing and Networks (3) The hardware and software of computer networks and distributed processing. Develops the important design parameters and a general design methodology.

Prerequisite: CS 324 with a C- or better grade.

335 Programming Languages (3) Study of principles of programming languages. Emphasizes language paradigms and important features, structures, characteristics, and formal syntax of modern high-level programming languages. Examples of languages in each paradigm will be studied.

Prerequisite: CS 222 and 230, both with C- or better grades.

345 Human-Computer Interfaces (3) Investigation into the principles and practice of user interface design, evaluation, and implementation. Topics include user-centered design, graphical user interface programming, evaluation methods, and software architectures.

Prerequisite: CS 222 with a C- or better grade.

347 Network Security (3) Topics include encryption, decryption, protocols, viruses, network security, authentication, legal and ethical issues, and security in operating systems, databases, e-commerce, Internet, wireless. Algorithms, protocols and applications such as RSA, DES,

SSL, Firewalls, Digital Signatures, VPNs and emerging topics will be explored.

Prerequisite: CS 327 and 376, both with C- or better grades.

376 Operating Systems (3) Investigate the functions and structure of computer operating systems, processors, and memory. Topics include process control, concurrency, scheduling, security, and file systems. Introduces topics in systems programming, including I/O programming, signals, and IPC.

Prerequisite: CS 222 and 230, both with C- or better grades.

397 Multitier Web Architectures (3) Topics include n-tier architectures, data access and application logic layers, Web services, scalability, advanced XML, service-oriented architectures, object access protocols, and Web site administration and security. Projects will be used to reinforce concepts.

Prerequisite: CS 222 and 310, both with C- or better grades.

436 Database Design (3) An introduction to database design, including physical representation, modeling, database systems, and implementation.

Prerequisite: CS 222 with a C- or better grade.

438 Computer Graphics (3) Methods of developing, modifying, and rendering graphics displays. Emphasizes the design and writing of graphics software for both two- and three-dimensional displays. Knowledge of a structured high-level language is required.

Prerequisite: CS 222 with a C- or better grade.

446 System Administration (3) Creating user accounts, local user authentication, network user authentication with encryption, filesystem and fileserver access control, configuration of Web servers, Web server authentication, and traffic encryption.

Prerequisite: CS 300 or 327 with C- or better grades.

455 Data Mining (3) Introduction to data mining algorithms, implementations, and applications. Topics include data preprocessing, clustering analysis, data classification, mining association rules, complex data mining, Web mining, and new applications in data mining.

Prerequisite: CS 222 with a C- or better grade.

456 Image Processing (3) Project based, dealing with the basic principles of digital image processing and computer vision. Topics: digital image formats, geometric operations on digital images, filtering, histogramming, binarization of grayscale images, labeling binary images, perimeter and area determination, thinning operations, object recognition using global features, edge detection processes, and other topics as time permits.

Prerequisite: CS 222 with a C- or better grade.

457 Applied Cryptography (3) Introduction of basic principles and application of cryptography. Topics include encryption, decryption, private and public key systems, and

their mathematical foundation: divisibility and Euclidean algorithm, arithmetic of congruences, and large prime numbers. Projects are implementations of related algorithms. LISP and JAVA are recommended languages.

Prerequisite: CS 222 with a C- or better grade.

470 Theory of Computation 1 (3) Mathematical logic; alphabets and languages; finite automata, regular and nonregular languages, Kleene's theorem; regular grammars; pushdown automata and context-free grammars; Turing and Post machines; recursive and recursively enumerable languages; the Chomski Hierarchy.

Prerequisite: CS 324 with a C- or better grade.

495 Software Engineering 1 (3) Introduction to software engineering: process, requirements, design, quality assurance, project management, and tools. Capstone project for the computer science major. Teams work on year-long immersive projects and perform all software development tasks in cooperation with a client partner. To be taken in the last full academic year before graduation.

Prerequisite: CS 222 with a C- or better grade; COMM 210; and permission of the department chairperson.

Department of History

HISTORY (HIST)

Revised:

613 Seminar in Historical Research (3) Designed to further investigative skills. Focuses on the knowledge of concepts and methodology used in historical research through the intensive study of a selected topic in American, European, or world history. A research paper is required.

Prerequisite: HIST 612.

Department of Natural Resources and Environmental Management

Correction (withdrawn by department):

MAJOR IN EMERGENCY MANAGEMENT AND HOMELAND SECURITY, 62-65 hours

EMERGENCY MANAGEMENT AND HOMELAND SECURITY (EMHS)

New:

555 International Domestic Terrorism (3) Examination of international and domestic terrorist organizations, including ideologies, tactics, training, and sources of funding. Students will gain a solid understanding of key concepts of doctrine, leaders, goals, history, ideology, and definitions of terms.

Not open to students who have credit in EMHS 355.

Department of Psychological Science

PSYCHOLOGICAL SCIENCE (PSYS)

Revised:

295 Career Planning in Psychology (1) Helps develop an awareness of psychology courses, minors, internships, research and teaching assistantships, and other opportunities; learn about career options and graduate school selection processes; and explore personal strengths and weaknesses with regard to long term goals.

Prerequisite: PSYS 100; permission of the department chairperson.

Open only to psychology majors.

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

Open only to students in the student-personnel program or by permission of the department chairperson.

Ron Murphy, Associate Director
Office of Academic Systems

Department of Sociology

SOCIOLOGY (SOC)

Dropped:

241 Deviance (3)

New:

355 Environmental Sociology (3) Addresses the role of social structures as cause, impediment, and solution to environmental and sustainability issues.

Revised:

221 Introduction to Race and Ethnic Relations (3) An exploration of social organization of racial and ethnic minority life in the United States. Particular emphasis placed on the theories and research related to patterns and outcomes of social interaction and diversity.

343 (241) Deviance (3) Overview of theory and research on deviance.

TEACHERS COLLEGE

Department of Educational Studies

EDUCATION: HIGHER (EDHI)

Revised:

699 Practicum in Student Affairs Administration (3)
Experience in one branch of student affairs (admissions, career services, dean of students, financial aid, student activities, recreation, minority related areas).