

BALL STATE UNIVERSITY

ACADEMIC POSTING

2013-2014

VOLUME XLV – 6

January 24, 2014

This posting may contain all or part of the following: new, revised, and dropped programs, courses and prefixes. The posting period begins January 27, 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

Peace Studies and Conflict Resolution

Revised:

MINOR IN PEACE STUDIES AND CONFLICT RESOLUTION, 18 hours

| PREFIX | NO | SHORT TITLE | CR HRS |
|--------|-----|---|--------|
| ID | 301 | Intro Peace Studies/Conf Res | 3 |
| COMM | 442 | Communication and Conflict (3) | |
| | | or | |
| POLS | 457 | Alternative Dispute Resolution (3) | |
| | | or | |
| GEOG | 270 | Geography of International Conflict (3) | 3 |

Group 1, Peace studies, 3 hours from

| | | | |
|------|-----|-------------------------------------|---|
| CJC | 312 | Victimology (3) | |
| GEOG | 470 | Political Geography (3) | |
| HIST | 215 | Women in American History (3) | |
| | 452 | Women Modern European History (3) | |
| RELS | 160 | Intro to Religion in Culture (3) | |
| | 280 | Topics in Religions in American (3) | |
| | 380 | Religion and Ethics (3) | |
| SOC | 242 | Social Problems (3) | 3 |

Group 2, Conflict management, 3 hours from

| | | | |
|------|-----|--------------------------------|---|
| JOUR | 101 | Media and American Society (3) | |
| NREM | 101 | Environment and Society (3) | |
| PHIL | 230 | Environmental Ethics (3) | |
| POLS | 293 | International Relations (3) | |
| | 392 | U N & International Org (3) | |
| SOCW | 400 | Social Work Practice 3 (3) | |
| | 410 | Social Work Practice 4 (3) | 3 |

Group 3, Multiculturalism, 3 hours from

| | | | |
|------|-----|---------------------------------|--|
| ANTH | 311 | Ethnicity and Race (3) | |
| COMM | 290 | Intercultural Communication (3) | |
| CPSY | 470 | Cross-Cult Counseling (3) | |

| | | | |
|------|-----|------------------------------------|---|
| EDMU | 205 | Intro to Multicul Ed (3) | |
| | 206 | Adv Ethnic/Multicul Grp Beh (3) | |
| ENG | 491 | Lit of African American Trad (3) | |
| HIST | 210 | Black History in the US (3) | |
| | 371 | Tradition & Change Modern Asia (3) | |
| | 373 | History of the Middle East (3) | |
| POLS | 281 | Econ/Pol Prob of Emerg Ntns (3) | |
| | 475 | Minority Group Politics (3) | 3 |

3 additional hours from groups 1, 2 or 3; or ID 399

Independent Study in Peace Studies and Conflict Resolution (3 hours), ID 401 Internship in Peace Studies and Conflict Resolution (3 hours), or a 3 credit course from outside the curriculum with approval from director of Center for Peace and Conflict Studies.

3

18 hrs

COLLEGE OF APPLIED SCIENCES AND TECHNOLOGY

School of Physical Education, Sport, and Exercise Science

Dropped:

MINOR IN SPORTS MEDICINE, 23 hours

Department of Technology

TECHNOLOGY: GRAPHIC ARTS/PRINTING (TGRA)

New:

283 Packaging Technology (3) Explores the effective use of packaging within graphic communications. Using current

software specific to packaging, students will acquire an understanding of the process as images are created and applied to sound packaging principles. Additional content will cover packaging as it relates to the specific substrates and output processes.

Prerequisite: TGRA 182.

386 Planning and Finishing (3) Designed to provide an understanding of the requirements of today's finishing operations, also covers the many aspects of mailing and fulfillment vital to today's print operations. Included will be an understanding of the specifications and requirements necessary to produce materials in a cost effective manner.

486 Advanced Management Systems (3) Designed to cover the latest in the facilitation and control of distribution of graphic information, this course will cover database management, variable data publishing, and Digital Rights Management.

Prerequisite: senior standing.

COLLEGE OF ARCHITECTURE AND PLANNING

Department of Landscape Architecture

Revised:

MASTER OF LANDSCAPE ARCHITECTURE (MLA), 39-57 hours

Admission requirements

Applicants must meet the admission requirements of both the Graduate School and the Department of Landscape Architecture.

Degree requirements

Program 1: 39 hours, (graduate)

Students with degrees in landscape architecture from a Landscape Architecture Accreditation Board-accredited program are required to enroll in the following minimum program of study:

| PREFIX | NO | SHORT TITLE | CR HRS |
|--------------|-----|-------------------------------|--------|
| LA | 650 | LA Methods | 3 |
| | 651 | Research Methods in Land Arch | 3 |
| | 653 | Readings in LA | 3 |
| LA electives | | | 6-12 |
| Electives | | | 12-18 |
| THES | 698 | Thesis (1-6) | |
| | or | | |
| CRPR | 698 | Creative Project (3 or 6) | 6 |
| | | | 39 hrs |

At least one elective must be a studio course.

Candidates will complete a minimum of 39 hours of graduate work.

Program 2: 46 hours (graduate), 19 hours (undergraduate)

The following is the required program of study for candidates holding professional degrees in related environmental design and planning areas (i.e., architecture, interior design, urban and regional planning, etc.). Foundation courses at the undergraduate level are required for all candidates in this program except where prior equal course work is documented. This degree program is known as a first professional degree program in landscape architecture.

| | | | |
|----|-----|--------------------------------|---|
| LA | 573 | Environmental Systems | 3 |
| | 602 | Site Design | 4 |
| | 603 | Community & Urban Space Design | 4 |
| | 604 | LA Planning and Design | 4 |
| | 605 | Comprehensive Landscape Plan | 4 |
| | 606 | Comprehensive Site Design | 4 |
| | 622 | LA History | 3 |
| | 645 | Planting Designs | 3 |
| | 650 | LA Methods | 3 |
| | 651 | Research Methods | 3 |
| | 652 | Creative Project Design Sem | 2 |
| | 653 | Readings in LA | 3 |
| | 668 | Internship (0) | |
| | or | | |
| | 669 | Internship (0) | 0 |

| | | | |
|-----------|--|--|--------|
| Electives | | | 6 |
| | | | 46 hrs |

Foundation undergraduate courses

| | | | |
|----|-----|-----------------------|---|
| LA | 311 | LA Engineering 1 | 4 |
| | 312 | LA Engineering 2 | 4 |
| | 341 | Plants 1 | 4 |
| | 413 | LA Engineering 3 | 4 |
| | 460 | Professional Practice | 3 |

19 hrs

Program 3: 57 hours (graduate), 22 hours (undergraduate)

The following is the required program of study for candidates not holding professional degrees in landscape architecture or related environmental design and planning areas. Foundation courses at the undergraduate level are required for all candidates in this program except where prior equal course work is documented. This degree program is known as a first professional degree program in landscape architecture.

| | | | |
|----|-----|--------------------------------|---|
| LA | 500 | Context for Land Arch | 1 |
| | 573 | Environmental Systems | 3 |
| | 601 | LA Design Principles | 4 |
| | 602 | Site Design | 4 |
| | 603 | Community & Urban Space Design | 4 |
| | 604 | LA Planning and Design | 4 |
| | 605 | Comprehensive Landscape Plan | 4 |
| | 606 | Creative Project Studio | 4 |
| | 622 | LA History | 3 |
| | 645 | Planting Designs | 3 |

| | | |
|-----|-----------------------------|---|
| 650 | LA Methods | 3 |
| 651 | Research Methods | 3 |
| 652 | Creative Project Design Sem | 2 |
| 653 | Readings in LA | 3 |
| 661 | Design Communications | 3 |
| 668 | Internship (0) | |
| or | | |
| 669 | Internship (0) | 0 |

| | |
|-----------|--------|
| Electives | 9 |
| | <hr/> |
| | 57 hrs |

| | | |
|----------------------------------|------------------------------|--------|
| Foundation undergraduate courses | | |
| LA | 280 LA Computer Applications | 3 |
| | 311 LA Engineering 1 | 4 |
| | 312 LA Engineering 2 | 4 |
| | 341 Plants 1 | 4 |
| | 413 LA Engineering 3 | 4 |
| | 460 Professional Practice | 3 |
| | | <hr/> |
| | | 22 hrs |

Other courses may substitute for LA 280 with departmental approval.

All MLA candidates are also required to make a public presentation upon completion of a thesis or creative project.

COLLEGE OF COMMUNICATION, INFORMATION, AND MEDIA

Department of Communication Studies

COMMUNICATION STUDIES (COMM)

Dropped:

625 Interviewing (3)

654 Group Communication (3)

New:

630 Health Communication (3) Examines theories, research, and applications of symbolic processes by which people individually and collectively understand, share ideas about, and experience health and illness. Overviews significant concepts and issues in health communication scholarship with particular attention to communication processes and communicative implications of health beliefs, practices, policies, and organizations.

645 Intercultural Communication (3) Explores how various cultural world views shape communication, and how various communication strategies, structures, and practices can increase the potential for meaningful intercultural communication. Introduces a variety of epistemological approaches to intercultural theory and research.

655 Instructional Communication (3) Examines research, theory, practice, and philosophy in communication education. Overviews instructional communication scholarship including student learning, teacher behaviors, and communication processes that impact higher education, and instructional skill development.

COLLEGE OF FINE ARTS

School of Art

Revised:

Visual Arts Studio

Degree requirements

| <i>PREFIX</i> | <i>NO</i> | <i>SHORT TITLE</i> | <i>CR HRS</i> |
|----------------------------|-----------|---------------------------|---------------|
| AHS | 698 | Art History Seminar | 3 |
| ART | 601 | Critique Seminar (3-15) | 6 |
| CRPR | 698 | Creative Project (3 or 6) | 6 |
| 500-level studio electives | | | 12 |
| Academic electives | | | 6 |
| | | | <hr/> |
| | | | 33 hrs |

MASTER OF FINE ARTS, VISUAL ARTS, 60 hours

| <i>PREFIX</i> | <i>NO</i> | <i>SHORT TITLE</i> | <i>CR HRS</i> |
|------------------------------|-----------|---------------------------|---------------|
| Core requirements, 33 hours | | | |
| AED | 604 | Teaching Studio Art | 3 |
| AHS | 698 | Art History Seminar | 3 |
| ART | 600 | Writing Practicum | 3 |
| | 601 | Critique Seminar (3-15) | 15 |
| | 602 | Professional Practice | 3 |
| CRPR | 698 | Creative Project (3 or 6) | 6 |
| Complete one studio emphasis | | | |
| Animation, 18 hours | | | |
| ART | 511 | Advanced Animation (3-9) | 9 |
| | 611 | Animation Studio (3-9) | 9 |
| or | | | |
| Glass, 18 hours | | | |
| ACR | 531 | Advanced Glass (3-9) | 9 |
| | 631 | Glass Studio (3-9) | 9 |
| | | | <hr/> |
| | | | 18 hrs |
| Studio/academic electives | | | 9 |
| | | | <hr/> |
| | | | 27 hrs |
| | | | <hr/> |
| | | | 60 hrs |

The MFA, visual arts program would allow students to earn a terminal degree in the visual arts through studio and seminar

courses. A total of 60 credit hours must be earned in a minimum six semesters.

ART (ART)

New:

290 Basic Art Media and Techniques (3) Introductory art-making course for non-art majors. Students learn a range of basic drawing, painting, and ceramics media and techniques through projects, sketchbooks, art critiques, and collaborative activities in an art studio atmosphere. May be repeated.

Open only to non-art majors.

School of Music

MUSIC HISTORY AND MUSICOLOGY (MUHI)

Revised:

441 Jazz History (2) A historical survey of jazz in America introducing students to the major stylistic eras and artists of jazz from the music's origins in the late 19th century to the present.

Prerequisite: MUHI 200.

Open only to music majors and minors.

MUSIC EDUCATION (MUSE)

Revised:

355 Instrumental Music Methods 1 (3) Focuses on developing the knowledge, performances, and dispositions required of school instrumental music educators in elementary and middle school settings. Topics include administration, curriculum development, literature selection, instructional planning, and teaching strategies.

Prerequisite: C or better grades in MUSE 100, and 150; or permission of the director of the school.

Open only to music majors and minors.

375 Instrumental Music Methods 2 (3) Focuses on developing the knowledge, performances, and dispositions required of school instrumental music educators in the high school setting. Topics include administration, curriculum development, literature selection, instructional planning, and teaching strategies.

Prerequisite: C or better grades in MUSE 100, and 150, and MUSP 290; or permission of the director of the school.

Open only to music majors and minors.

465 Jazz Pedagogy (2) Designed to prepare the future educator to run a jazz program in multiple school settings. Includes preparation in the administration and teaching techniques for the jazz ensemble and combo. Budgets, guest artists/clinicians, and festivals will be covered.

Prerequisite: permission of the director of jazz studies

(only for jazz/commercial music minors); or junior standing.
Open only to music majors and minors.

MUSIC PERFORMANCE (MUSP)

Dropped:

250 Fundamentals of Jazz 1 (2)

460 Jazz Piano Class 1 (1)

461 Jazz Piano Class 2 (1)

New:

462 Jazz Piano Lab (1) An introduction to jazz piano technique primarily for non-pianists, addressing seventh chord types in all keys, chord inversions, voice leading, comping, and basic homophonic performance of jazz standard repertoire from lead sheets.

Open only to music majors and minors.

Revised:

204 Jazz Study (1-2) One instrument/voice lesson per week for students studying jazz/commercial style.

A total of 99 hours of credit may be earned, but no more than 2 in any one semester or term.

Open only to music majors and minors.

231 Jazz Combo (1) Players of appropriate instruments are organized into small groups according to proficiency for the study of commercial and jazz music. These groups may include trios, quartets, quintets, and sextets.

Prerequisite: permission of the director of jazz studies.

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

251 Jazz Styles (2) Studies and analyzes jazz solos from specific genres, such as Early Jazz, Bebop, Cool etc., utilizing the art of transcription. The course is hands-on and each student must bring their instrument.

Prerequisite: MUST 250.

Open only to music majors and minors.

456 Jazz Improvisation 1 (2) An introductory course in jazz improvisation focusing on chord/scale relationships, acquisition of basic melodic patterns in all keys, common harmonic progressions, swing rhythm and syncopation performance practice, and application of improvisatory concepts to the performance of blues, jazz standards, and basic modal compositions.

Open only to music majors and minors.

457 Jazz Improvisation 2 (2) Continued study of jazz improvisation focusing on modern jazz concepts. Topics to include altered extensions, use of melodic minor scale, symmetric scales, pentatonics, harmonic substitutions, playing "out" and performance of standard jazz repertoire from Bebop and Brazilian jazz to fusion and modern jazz.

Prerequisite: MUSP 456.
Open only to music majors and minors.

434 Immersion Experience (1-12) 3

MUSIC THEORY AND COMPOSITION (MUST)

Revised:

250 (MUSP 250) Jazz Theory (2) An introductory course in jazz theory covering chord symbol nomenclature, chord/scale theory, seventh chords and their extensions, modes of the major scale and melodic minor scale, standard harmonic progressions, song forms, voice leading, reharmonization, tritone substitutions, and more.

Prerequisite: MUST 102 and 112.
Open only to music majors and minors.

414 Jazz Arranging (2) Arranging for jazz ensembles and related groups. Topics include the study of instrumentation, transposition, orchestration, and harmonic/melodic techniques.

Prerequisite: MUST 311; or MUST 212 for composition majors; or permission of the instructor.
Open only to music majors and minors.

Department of Theatre and Dance

Revised:

MAJOR IN THEATRE, BA/BS, 58-64 hours

| PREFIX | NO | SHORT TITLE | CR HRS |
|-----------------------------|-----|--------------------------------|--------|
| Core requirements, 32 hours | | | |
| THEA | 102 | Computers in Theatre and Dance | 3 |
| | 103 | Aesthetics of Theatre 1 | 3 |
| | 104 | Aesthetics of Theatre 2 | 3 |
| | 105 | Freshman Experience | 0 |
| | 107 | Design Awareness | 3 |
| | 220 | Stagecraft | 3 |
| | 232 | Acting 1 | 3 |
| | 250 | Directing 1 | 3 |
| | 280 | Practicum (0-1) | 2 |
| | 317 | Pre-Modern Theatre History | 3 |
| | 319 | Modern Theatre History | 3 |
| | 405 | Senior Experience | 0 |
| | 435 | Shakespeare Performance | 3 |
| | | | 32 hrs |

Complete one option

Design and technology option, 32 hours

Directed electives, 26 hours

| | | | |
|------|-----|---------------------------|---|
| THEA | 123 | Color Studies | 3 |
| | 223 | Costume Technology | 3 |
| | 320 | Design Skills | 2 |
| | 321 | Rendering for the Theatre | 3 |
| | 326 | Stage Lighting Technology | 3 |
| | 327 | Sound Technology | 3 |
| | 420 | Scene Design | 3 |
| | 423 | Costume Design | 3 |

Electives, 6 hours

| | | |
|------|------|---------------------------------|
| COMM | 330 | Small Group Decision Making (3) |
| THEA | 221 | Advanced Stagecrafts (2) |
| | 224 | Form and Materials (2) |
| | 225 | Theatrical Drafting (3) |
| | 229 | Stage Makeup (2) |
| | 291 | Stage Management (3) |
| | 299X | Experimental Topics (3) |
| | 318 | Advanced Topics (3) |
| | 350 | Directing 2 (3) |
| | 380 | Advanced Practicum (1-9) |
| | 421 | Stage Properties (3) |
| | 426 | Lighting Design (3) |
| | 427 | Sound Design (3) |
| | 429 | Makeup and Hair Design (3) |

Up to one other THEA or DANC course not listed above as approved by the PDA or chairperson.

6

64 hrs

Design and technology option students must present a portfolio at the end of each spring semester and must pass an exit portfolio review at the end of the senior year to complete the option. Students failing to pass a portfolio review at the end of one academic year are considered on probationary status for the option; those failing to pass a portfolio review at the end of the succeeding year will be dropped from the option. The department recommends that the design and technology option students pursue a minor in art history through the Department of Art.

THEATRE (THEA)

New:

150 Introduction to Theatre Education (3) Explores the theory and practice of teaching theatre in the middle and secondary schools and in alternative programs like professional theatres or museums which feature interpreters. Provides classroom opportunities for beginning theatre students to determine what it means to be a theatre teacher, using creative dramatics tools and applied theatre education mini-lessons to explore the world of the successful theatre educator.

Prerequisite: permission of the department chairperson.

327 Theatre Sound Technology (3) Lecture-laboratory in the basic concepts, materials, hardware, and design principles of sound for the stage. Practical laboratory work in sound implementation for university productions.

COLLEGE OF SCIENCES AND HUMANITIES

Interdepartmental Programs

SOCIAL STUDIES

Revised:

TEACHING MAJOR IN SOCIAL STUDIES, 54 hours

All students seeking to become candidates for licensure in Social Studies will, via course completion and performance assessment, demonstrate mastery of the subject matter in the individual disciplines: economics, geography, government, psychology, sociology, and historical perspectives (United States and world history). See department statements for course requirements. They will demonstrate that mastery as a result of intensive preparation in two or more disciplines, one of which must be historical perspectives. Students will complete 27 hours in historical perspectives to facilitate preparation in both United States and world history, complemented by preparation in one other discipline (15 hours), and four other courses (12 hours), one from each of the four other disciplines, totaling 54 hours. Students are encouraged to pursue additional licensure in one or more of the other four disciplines.

See departments for required courses in areas of concentration. The following courses are required for disciplines that are not the student's areas of concentration (the four other courses described above):

Economics: ECON 116 Survey of Economic Ideas (3)
 Geography: GEOG 150 Global Geography (3)
 Political Science: POLS 130 American National Government (3)
 Psychology: PSYS 100 Intro to Psychological Science (3)
 Sociology: SOC 100 Principles of Sociology (3) 12

SENIOR HIGH, JUNIOR HIGH/MIDDLE SCHOOL EDUCATION PROGRAM

| PREFIX | NO | SHORT TITLE | CR | HRS |
|--|-----|-------------------------------|----|-----|
| <i>Professional education sequence, 45 hours</i> | | | | |
| EDFO | 420 | Soc, Hist, Phil Found of Ed | 3 | |
| EDJH | 385 | Prin of Tchng in Mid Schl | 3 | |
| EDMU | 205 | Intro to Multicul Ed | 3 | |
| EDPS | 251 | Development Secondary | 3 | |
| | 390 | Educational Psychology | 3 | |
| EDSE | 320 | Read Div Sec Cont Class | 3 | |
| | 380 | Princ of Tchng in Sec School | 3 | |
| | 460 | Student Tchng: Sec Schl | 7 | |
| | 465 | Elective Student Teaching | 5 | |
| SS | 150 | Intro Soc Studies Ed-Sec Lev | 3 | |
| | 350 | Teaching SS Jr Hi/Mid School | 3 | |
| | 395 | Teaching SS in Sec Schools | 3 | |
| | 460 | St Teach in Hist & Social Sci | 3 | |

45 hrs

See Professional Education Assessment/Decision Points, p. 374, for additional information.

Department of Anthropology

ANTHROPOLOGY (ANTH)

Revised:

301 History of Method and Theory in Anthropology (3)

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

Prerequisite: ANTH 101 or permission of the instructor.
Open only to juniors and seniors.

369 Paid Internship in Anthropology (1-3) Paid, supervised field or laboratory experience in anthropology. Employment should supply an opportunity to use and further knowledge of anthropology.

Prerequisite: permission of the internship director.
 A total of 3 hours of credit may be earned.

A total of 3 hours of internship credit will count towards the major or minor either from ANTH 369 or 479.

Open only to anthropology majors or minors.

479 Unpaid Internship (1-3) Unpaid field or laboratory experience that uses knowledge of anthropology in a specific project or work content.

Prerequisite: permission of the internship director.
 A total of 3 hours of credit may be earned.

A total of 3 hours of internship credit will count towards the major or minor either from ANTH 369 or 479.

Open only to anthropology majors or minors.

Department of Computer Science

Revised:

MAJOR IN COMPUTER SCIENCE, 66-72 hours

| PREFIX | NO | SHORT TITLE | CR | HRS |
|--------|-----|-------------------------|----|-----|
| CS | 120 | Computer Science 1 | 4 | |
| | 121 | Computer Science 2 | 4 | |
| | 222 | Advanced Programming | 3 | |
| | 224 | Des/Analy of Algorithms | 3 | |
| | 230 | Computer Org and Arch | 3 | |
| | 239 | Professional Issues | 1 | |
| | 327 | Dist Proc and Networks | 3 | |
| | 335 | Programming Languages | 3 | |
| | 346 | Database Design | 3 | |
| | 376 | Operating Systems | 3 | |
| | 380 | Theory of Computation 1 | 3 | |
| | 495 | Software Engineering 1 | 3 | |
| | 498 | Software Engineering 2 | 3 | |

12-16 hours from

| | | | | |
|------|-----|-------------------------|-----|--|
| CS | 124 | Discrete Structures (3) | | |
| | | or | | |
| MATH | 215 | Discrete Systems (4) | 3-4 | |
| MATH | 161 | Applied Calculus 1 (3) | | |
| | | or | | |
| | 165 | Calculus 1 (4) | 3-4 | |
| MATH | 162 | Applied Calculus 2 (3) | | |
| | | or | | |

| | | | |
|--------------------------|-----|---------------------------------|-----------|
| | 166 | Calculus 2 (4) | 3-4 |
| MATH | 221 | Probability and Statistics (3) | |
| | or | | |
| | 321 | Mathematical Statistics (4) | |
| | or | | |
| ECON | 221 | Business Statistics (3) | 3-4 |
| | | | <hr/> |
| | | | 12-16 hrs |
| 3-5 hours from | | | |
| BIO | 111 | Principles of Biology 1 (4) | |
| | or | | |
| CHEM | 111 | General Chemistry 1 (4) | |
| | or | | |
| GEOL | 201 | Earth, Life, and Time (3) | |
| | or | | |
| PHYC | 120 | General Physics 1 (5) | 3-5 |
| Electives, 12 hours from | | | |
| CS | 310 | Web Programming (3) | |
| | 315 | Game Programming (3) | |
| | 339 | Advanced Topics Seminar (3-6) | |
| | 345 | Human-Computer Interfaces (3) | |
| | 347 | Network Security (3) | |
| | 369 | Professional Experience (1-3) | |
| | 397 | Multitier Web Architectures (3) | |
| | 430 | Systems Programming (3) | |
| | 438 | Computer Graphics (3) | |
| | 446 | System Administration (3) | |
| | 455 | Data Mining (3) | |
| | 456 | Image Processing (3) | |
| | 457 | Applied Cryptography (3) | |
| | 499 | Independent Study (1-6) | |
| | | | 12 |
| | | | <hr/> |
| | | | 66-72 hrs |

COMPUTER SCIENCE (CS)

Dropped:

524 Design and Analysis of Algorithms (3)

535 Programming Languages (3)

536 Database Design (3)

570 Theory of Computation 1 (3)

New:

510 Introduction to 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. A student is expected to have taken CS 121 or the equivalent of two semesters of programming.

Not open to students who have credit in CS 310, 397, or 597.

Revised:

515 Game Programming (3) An introduction to game programming. Topics include active and passive rendering, sprite animation, collision detection, audio playback, input devices, deployment, and applications of artificial intelligence. Before enrolling, a student is expected to have taken CS 224 or the equivalent of two semesters of programming and an algorithms course.

Not open to students who have credit in CS 315.

527 Internetworking (3) The hardware and software of computer networks and distributed processing. Develops the important design parameters and a general design methodology. Before enrolling, a student is expected to have taken CS 224 or the equivalent of two semesters of programming and an algorithms course.

Not open to students who have credit in CS 327.

530 System Programming (3) Considers the computer system from the points of view of its architecture, operating system, and applications. Topics include processor organization, peripheral devices, I/O programming, system programs, monitor services, file organization, and real-time applications. Before enrolling, a student is expected to have completed CS 230 or the equivalent of an undergraduate computer architecture course.

Not open to students who have credit in CS 430.

538 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. Before enrolling, a student is expected to have taken CS 224 or the equivalent of two semesters of programming and an algorithms course.

Not open to students who have credit in CS 438.

545 Human-Computer Interaction (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. Before enrolling, a student is expected to have taken CS 224 or the equivalent of two semesters of programming and an algorithms course.

Not open to students who have credit in CS 345.

546 (536) Database Design (3) An introduction to database design, including physical representation, modeling, database systems, and implementation. Before enrolling, a student is expected to have taken CS 224 or the equivalent of two semesters of programming and an algorithms course.

Not open to students who have credit in CS 346.

555 Data Mining (3) Topics include data preprocessing, clustering analysis, data classification, mining association rules, data mining and database, complex data mining, Web mining, new applications in data mining such as intrusion detection and bio-informatics. Before enrolling, students are expected to have completed CS 224 or the equivalent of an undergraduate algorithms course.

Not open to students who have credit in CS 455.

556 Image Processing (3) Project based, dealing with 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. Before enrolling, students are expected to have completed CS 224 or the equivalent of an undergraduate algorithms course.

Not open to students who have credit in CS 456.

557 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 algorithms, arithmetic of congruences, and large prime numbers. Projects are implementations of related algorithms. LISP and JAVA are recommended languages. Before enrolling, a student is expected to have taken CS 224 or the equivalent of two semesters of programming and an algorithms course.

Not open to students who have credit in CS 457.

576 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. Before enrolling, students should have completed CS 230 or the equivalent of an undergraduate computer architecture course and CS 224 or the equivalent of two semesters of programming courses and an undergraduate algorithms course.

Not open to students who have credit in CS 376.

597 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. Before enrolling, a student is expected to have taken CS 224 or the equivalent of two semesters of programming and an undergraduate algorithms course.

Not open to students who have credit in CS 397.

614 Web Programming (3) Technical foundations for rich, interactive Web sites and current topics in Web programming. Client and server side Web programming to enable Web 2.0 applications.

Open only to students not in computer science or software engineering programs.

636 Advanced Database Systems (3) Topics include relational databases, object databases, database administration, file structures and indexing, query processing, transaction management, and emerging database technologies and applications. Design and implementation of relational databases using Oracle. Before enrolling, students should have taken CS 346 or a similar undergraduate database course.

668 Graphs, Algorithms, and Applications (3) Concepts of

graph theory. Algorithms for graph traversal, shortest paths, connectivity, spanning trees, and matchings. Applications of graphs to computer programming, software engineering, VLSI design, networks and flows, and parallel programming. Before enrolling, a student is expected to have taken CS 224 or the equivalent of two semesters of programming courses and an undergraduate algorithms course.

670 Advanced Theory of Computation (3) Computability and decidability; introduction to the theory of computational complexity; the classes sP and NP; NP-completeness; examples of some NP-complete problems; nondeterminism and parallel computation; proving the correctness of programs. Before enrolling, a student is expected to have taken CS 380 or an undergraduate theory of computation course.

675 Model Checking (3) Overview of formal verification techniques in software engineering; system modeling with automata; temporal logics; algorithms and techniques of model checking to critical systems in industry. Before enrolling, students should have taken CS 224 or an undergraduate algorithms course and CS 335 or an undergraduate programming languages course.

Department of English

ENGLISH (ENG)

Revised:

230 Reading and Writing about Literature (3) Intensive study and practice of methods of inquiry, rhetorical and documentation conventions, and terminology associated with critical writing about literature. Develops skills for successful study, discussion, and writing about literature. Includes use of computers appropriate to English studies.

Prerequisite: ENG 104 or 114.

Open only to English majors and minors except by permission of the department chairperson.

494 Queer Literature/Queer Theory (3) Study of queer literature and queer readings of texts as well as exploration and discussion of prevalent queer theories.

Department of Geological Sciences

GEOLOGY (GEOL)

Dropped:

611 Regional Geology (3)

New:

330 Geological Field Tour (1-6) Rocks, structure, fossils, landforms, environmental geology, economic resources, and geologic history of a specific region, investigated mainly in the field. Individual course offerings specify geographic region of

focus, any on-campus class meeting component in addition to the extended field trip, and student assignments/evaluation.

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

413 Experimental Petrology (3) Students are introduced with several experimental apparatuses that are designed to simulate the behavior of Earth's materials at different P-T conditions. Student will learn various heterogeneous phase equilibria that are of interest to geologists. Students are expected to learn how to construct various phase diagrams and to apply appropriate melting systems to model the formation of solid Earth and the other terrestrial bodies.

Prerequisite: GEOL 310.

513 Experimental Petrology (3) Students are introduced with several experimental apparatuses that are designed to simulate the behavior of Earth's materials at different P-T conditions. Students will learn various heterogeneous phase equilibria that are of interest to geologists. Students are expected to learn how to construct various phase diagrams and to apply appropriate melting systems to model the formation of solid Earth and the other terrestrial bodies.

Prerequisite: GEOL 510.

Not open to students who have credit in GEOL 413.

530 Geological Field Tour (1-6) Rocks, structure, fossils, landforms, environmental geology, economic resources, and geologic history of a specific region, investigated mainly in the field. Individual course offerings specify geographic region of focus, any on-campus class meeting component in addition to the extended field trip, and student assignments/evaluation.

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

Revised:

425 Geophysics (3) An intensive survey of the study of properties of earth materials. The focus is on the first principles that govern geophysical properties, and the techniques used to measure those properties.

Prerequisite: MATH 161 or 165, and PHYC 110, or permission of the department chairperson.

525 Geophysics (3) An intensive survey of the study of properties of earth materials. The focus is on the first principles that govern geophysical properties, and the techniques used to measure those properties.

Prerequisite: MATH 161 or 165, and PHYC 110, or permission of the department chairperson.

Not open to students who have credit in GEOL 425.

Department of Psychological Science

PSYCHOLOGICAL SCIENCE (PSYS)

Revised:

284 Research Methods in Psychological Science (4)

Introduction to the use of the scientific method in the study of

human behavior. Analyze and evaluate experimental studies to gain experience with research techniques while using essential controls and acceptable procedures.

Prerequisite: PSYS 241 with a C- or better grade.

492 Research Seminar (3) Students conduct research in which they pose and answer one or more meaningful questions about a topic of interest and relevance to them. All students are expected to complete a literature review, to collect and analyze data, and to interpret and publicly report their findings.

Prerequisite: PSYS 284 and 385 and a minimum of 12 additional hours in psychology.

Open only to senior psychology majors.

Department of Sociology

SOCIOLOGY (SOC)

Dropped:

644 Family and Gender (3)

664 Advanced Seminar in Social Gerontology (3)

TEACHERS COLLEGE

Department of Educational Psychology

New:

Pending ICHE approval

MASTER OF SCIENCE IN EDUCATIONAL PSYCHOLOGY, 33 hours

| PREFIX | NO | SHORT TITLE | CR HRS |
|--------------|-----|---------------------------------|--------|
| Core courses | | | |
| EDPS | 600 | Adv Educational Psych | 3 |
| | 606 | Learn/Achievement Motivation | 3 |
| | 641 | Statistical Methods | 3 |
| | 643 | Research Design | 3 |
| 6 hours from | | | |
| EDPS | 603 | Human Development (3) | |
| | 627 | Child Development (3) | |
| | 628 | Adolescent Development (3) | |
| | 629 | Adult Development (3) | 6 |
| 3 hours from | | | |
| EDPS | 642 | Intermediate Statistics (3) | |
| | 741 | Applied Regression Analysis (3) | 3 |
| 3 hours from | | | |
| EDPS | 646 | Tests and Measurements (3) | |
| | 746 | Theory of Measurement (3) | 3 |

Electives

3 hours from (may not select if used as core program requirement)

| | | | |
|------|-----|------------------------------------|---|
| EDEL | 644 | Education in a Diverse Society (3) | |
| EDFO | 651 | Educational Sociology (3) | |
| EDMU | 660 | Multcl/Multieth Ed in Amer Sch (3) | |
| EDPS | 603 | Human Development (3) | |
| | 627 | Child Development (3) | |
| | 628 | Adolescent Development (3) | |
| | 629 | Adult Development (3) | |
| | 642 | Intermediate Statistics (3) | |
| | 730 | Nonparametric Statistics (3) | |
| | 741 | Applied Regression Analysis (3) | |
| PSYS | 691 | Systems of Psychology (3) | 3 |
| THES | 698 | Thesis (1-6) | 6 |

33 hrs

EDPS 643, 730, 741, 746, and PSYS 691 are taught on-campus only. EDPS 603, 629 are taught on-line only. All other courses are offered in both on-campus and on-line formats.

CERTIFICATE IN INSTRUCTIONAL DESIGN AND ASSESSMENT (IDA), 15 hours

An iLearn, Educational Psychology, Educational Technology Partnership

| <i>PREFIX</i> | <i>NO</i> | <i>SHORT TITLE</i> | <i>CR HRS</i> |
|---------------|-----------|----------------------------|---------------|
| EDPS | 600 | Adv Educational Psych | 3 |
| | 646 | Tests and Measurements | 3 |
| | 698 | Special Topics (3-9) | 3 |
| EDTE | 660 | Instructi Des and Tech | 3 |
| | 685 | Info Sys for Inst & Assess | 3 |

15 hrs

Department of Special Education

Revised:

MINOR IN EXCEPTIONAL NEEDS: EARLY CHILDHOOD SPECIAL EDUCATION, 15 hours

| <i>PREFIX</i> | <i>NO</i> | <i>SHORT TITLE</i> | <i>CR HRS</i> |
|---------------|-----------|-----------------------------------|---------------|
| SPCE | 210 | Thry/Pract in EC Spec Ed | 3 |
| | 215 | Assess Yng Chldrn w/Exc Nds | 3 |
| | 311 | Dev Meth Infs & Todds w/Exc | 3 |
| | 312 | Dev Meth PS Chldrn w/Exc | 3 |
| | 417 | Pract: Inf/Tods/PS Spec Nds (1-6) | 3 |

15 hrs

Admission to the Teacher Education Curriculum is waived for this program.

Ron Murphy, Associate Director
Office of Academic Systems

Department of Elementary Education

EDUCATION: ELEMENTARY (EDEL)

Dropped:

450 Senior Seminar in Early Childhood and Elementary Education (3)

455 Senior Seminar in Education (1)

468 Student Teaching: Kindergarten (6)

EDUCATION: READING (EDRD)

Dropped:

401 Reading in Today's Middle School (3)

431 Corrective Reading for the Middle School (3)