## Academic Notes

## ** SPECIAL NOTICES**

## FACULTY ATTENDANCE FORM FOR SPRING COMMENCEMENT

Commencement is a most important celebration for a campus. The participation of faculty in the celebration demonstrates to our graduates, their family members, and even to prospective students how important they are to us. Your participation is requested in the Commencement ceremonies that will be held on May 8, 2010. The Commencement Attendance Form and Faculty Academic Apparel Rental Order Form are available online at http://www.indstate.edu/academicaffairs/commencement-faculty.htm. Apparel rental deadline is April 12, 2010. Together we can make this celebration an event that all of our graduates will never forget. We want and need for them to leave here with nothing but fond memories of a University that provided both a quality education and a caring environment.

## ACADEMIC NOTES PUBLICATION SCHEDULE FOR SPRING 2010

Below is the circulation schedule for the electronic copy of Academic Notes through May 10, 2010. All submissions for inclusion in Academic Notes are due in the Office of Academic Affairs no later than 10:00 a.m. on the Wednesday prior to the distribution of Academic Notes on the following Monday. Submissions must be in hard copy along with an e-mail, disk, or CD with the same information. The electronic version must be formatted either in Word with pages with signatures scanned and inserted as a picture OR PDF saved as text and image. (Do NOT send PDF just saved as an image.) Information submitted to Academic Notes that is not accompanied by an electronic version or that is incomplete or unusable will be returned to the appropriate office. Academic Notes is available using Acrobat Reader at http://www.indstate.edu/academicaffairs/academic_notes.htm

## ACADEMIC NOTES PUBLICATION SCHEDULE FOR SPRING 2010

| Deadline for Items | Issue Date |
| :---: | :---: |
| April 14 | April 19 |
| April 21 | April 26 |
| April 28 | May 3 |
| May 5 | May 10 |

## ACALOG NOTE

The format for curriculum proposals has changed to correspond with the structure of Acalog, the new version of the electronic catalogs. Some proposals will be published under the old structure and some under the new structure during this transition period.

## Improved Electronic Catalog

The new electronic version of the undergraduate catalog is posted at
http://www.indstate.edu/academics/catalogs.htm Some advantages of the new format are:
It is easily searchable and searchable from the internet

- It is easier for students and advisors to find and choose the courses students need
- Students create a personal portfolio of courses in which they are interested
- Links to information such as department web sites, advising information, and video clips can easily be added
Every page can easily be printed.
If you have questions, please contact Academic Affairs, extension 3662.


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# COURSE REVISIONS <br> FOUNDATIONAL STUDIES 

## COLLEGE OF ARTS AND SCIENCES: Psychology

## PSY 350 - Environmental Psychology

3 credits
This course will overview current research and theories regarding the relationship between people and their physical environment (built and natural). In doing this, the course will explore various supportive roles the environment plays in human behavior, and identify scientific methods for assessing, understanding, and improving the "fit" of environments for their users.
Note: Psychology 101 is suggested, but not required as a prerequisite for this course.
General Education Credit: [GE2000: Social and Behavioral Studies-Elective]
Remove note, add prerequisites, and change General Education Credits to Foundational Studies Credit:

## PSY 350 - Environmental Psychology

3 credits
This course will overview current research and theories regarding the relationship between people and their physical environment (built and natural). In doing this, the course will explore various supportive roles the environment plays in human behavior, and identify scientific methods for assessing, understanding, and improving the "fit" of environments for their users.
Prerequisites: PSY 101
Foundational Studies Credit: [FS 2010: Integrative Upper-Division Electives]
Preferred effective term: Fall 2010

## PSY 485 - Psychology and Society

3 credits
Students utilize skills and knowledge acquired in basic and liberal studies courses to integrate scientific, social, and individual behavior dimensions of a current social or public policy issue. Students explore factors associated with the development and continuation of the issue, and propose possible solutions using concepts and knowledge from psychology and related fields. Topics will vary.
Prerequisites: 78 credits and seven of nine required Liberal Studies courses.
Note: May be repeated for credit with consent of the Department Chairperson.
See the General Education section of the Catalog for a complete description of the capstone requirement.
General Education Credit: [GE 2000: Capstone course (majors only)]
Capstone Course: Capstone Course
Remove note, add repeatable, change General Education Credit to Foundational Studies Credit, and remove capstone to:

## PSY 485 - Psychology and Society

3 credits
Students utilize skills and knowledge acquired in basic and liberal studies courses to integrate scientific, social, and individual behavior dimensions of a current social or public policy issue. Students explore factors associated with the development and continuation of the issue, and propose possible solutions using concepts and knowledge from psychology and related fields.

Topics will vary.
Prerequisites: 78 credits and seven of nine required liberal studies courses.
Repeatable: may be repeated for credit with consent of the Department Chairperson.
Foundational Studies Credit: [FS 2010: Integrative Upper-Division Electives]
Preferred effective term: Fall 2010

## COLLEGE OF ARTS AND SCIENCES: Women's Studies Interdisciplinary Programs

## WS 200 - Introduction to Women's Studies

3 credits
An interdisciplinary survey of the major issues and current research on women and gender. Issues studied might include, but would not be limited to: acquaintance rape, body image, eating disorders, reproductive rights, popular culture, sexuality, social activism, and Title IX.
Note: this course counts toward elective credit in the Women's Studies minor sequence.
General Education Credit: [GE2000: Multicultural Studies-U.S. Diversity]
Change General Education credit to Foundational Studies Credit:
WS 200 - Introduction to Women's Studies
3 credits
An interdisciplinary survey of the major issues and current research on women and gender. Issues studied might include, but would not be limited to: acquaintance rape, body image, eating disorders, reproductive rights, popular culture, sexuality, social activism, and Title IX.
Note: this course counts toward elective credit in the Women's Studies minor sequence.
Foundational Studies Credit: [FS 2010: Ethics and Social Responsibility]
Preferred effective term: Fall 2010

## COURSE BANKING

## SCOTT COLLEGE OF BUSINESS: Analytical

OMA 480- Quality Control Methods
Preferred effective term: Spring 2011

## UNDERGRADUATE APPROVALS

## NEW COURSES

COLLEGE OF ARTS AND SCIENCES: Chemistry and Physics

## PHYS 315 - Advanced Laboratory I

1 credit
Advanced experiments in atomic, nuclear physics, solid state physics, and optics.
Prerequisite: PHYS 216L.
A-F Grading
Preferred effective term: Fall 2010

## PHYS 316 - Advanced Laboratory II

1 credit

## COLLEGE OF NURSING, HEALTH, AND HUMAN SERVICES: Physical Education

## PE 477 - Psychological Aspects of Sport Injury

3 credits
This course is designed to explore the various topics related to the psychological aspects of sport injury. The focus is on theory and application. It examines issues associated with the onset, treatment, and rehabilitation of sport injury. Case studies are used to explore assessment and relevant intervention approaches. This is a participation intensive course. Students must be prepared to talk in class, contribute to discussion, and read the assigned readings prior to covering them in class.
Note: Open to graduate students. Graduate students are required to do additional work of a research nature.
A-F Grading
Preferred effective term: Fall 2010

## COLLEGE OF TECHNOLOGY: Aviation Technology

## AVT 143 - Introduction to Flight

1 credit
An introduction to the Indiana State University flight training program for aviation management majors. Students must also complete the requirements for and obtain the FAA basic ground instructor certificate.
Co-requisite: AVT 141 or consent of instructor.
Course Completion: minimum 5-instruction credits in the department's flight training laboratory or minimum 5-instruction credits in an aircraft.
S-U Grading
Preferred effective term: Fall 2010
AVT 150 - Foundations of Technology: Introduction to Aerospace Technology
3 credits
This course focuses on the development of appropriate knowledge and skills in regard to introductory engineering and technology. The specific facet of this introductory technology and engineering course further explores the application of aerospace knowledge and skills while enriching technological and engineering-based problem solving skills.
A-F Grading
Preferred effective term: Fall 2010

## AVT 317 - Technically Advanced Aircraft

3 credits.
An introduction to technically advanced aircraft. Course includes an introduction to advanced avionics, electronic flight instruments, navigating with the use of a glass cockpit display, automated flight controls, glass cockpit information systems, component failures, and emergencies.

Prerequisite: AVT 241, 243, and an instrument rating or consent of instructor.
A-F Grading
Preferred effective term: Fall 2010

## COLLEGE OF TECHNOLOGY: Electronics, Computer, and Mechanical Engineering Technology

ECT 150 - Foundations of Technology: Introduction to Digital Electronics 3 credits<br>The emphasis of this course is the development of knowledge and skills utilized by engineering and technology professionals. This introductory course focuses on exploration and application of digital electronics while further enriching the student's technological and engineering-based problem solving skills.<br>A-F Grading<br>Preferred effective term: Fall 2010

## ECT 151 - Foundations of Technology: Introduction to Computer Integrated Manufacturing

3 credits
The overall goal of this course is to assist students in developing relevant knowledge and skills to better understand the basics premises of technology and engineering, with a focus on computer integrated manufacturing technology.
A-F Grading
Preferred effective term: Fall 2010

## MET 150- Foundations of Technology: Introduction to the Principles of Engineering Technology

3 credits
This course focuses on the development of appropriate knowledge and skills in regard to introductory engineering and technology. The specific facet of this introductory technology and engineering course further explores the application of the principles of engineering technology while enriching technological and engineering-based problem solving skills.
A-F Grading
Preferred effective term: Fall 2010

## MET 151 - Foundations of Technology: Introduction to Engineering Technology Design and Development

3 credits
This course focuses on the development of appropriate knowledge and skills in regard to introductory engineering and technology. The specific facet of this introductory technology and engineering course further explores the application of technology design and development while enriching technological and engineering-based problem solving skills.
A-F Grading
Preferred effective term: Fall 2010
MET 152 - Foundations of Technology: Introduction to Engineering and Technical Design 3 credits
This course focuses on the development of appropriate knowledge and skills in regard to
introductory engineering and technology. The specific facet of this introductory technology and engineering course further explores the application of technical design knowledge and skills while enriching technological and engineering-based problem solving skills.
A-F Grading
Preferred effective term: Fall 2010

## COLLEGE OF TECHNOLOGY: Technology Management

CNST 150 - Foundations of Technology: Introduction to Civil Engineering Technology 3 credits
This course focuses on the development of appropriate knowledge and skills in regard to introductory engineering and technology. The specific facet of this introductory technology and engineering course furthers explore the application of civil engineering technology while enriching technological and engineering-based problem solving skills.
A-F Grading
Preferred effective term: Fall 2010

## CTE 330 - Introduction to Adult and Career Education

3 credits
Introduction to adult and career education is divided into four content areas to ensure students learn and develop the necessary skills to engage in life and career planning: enhancing educational skill sets, career concepts and applications, social conditions affecting career development, and implementing a strategic career plan.
A-F Grading
Preferred effective term: Fall 2010

## TCED 150 - Foundations of Technology: Introduction to Biotechnology

3 credits
This course focuses on the development of appropriate knowledge and skills in regard to introductory engineering and technology. The specific facet of this introductory technology and engineering course further explores the application of biotechnology while enriching technological and engineering-based problem solving skills.
A-F Grading
Preferred effective term: Fall 2010

## COURSE REVISIONS

## COLLEGE OF ARTS AND SCIENCES: Mathematics and Computer Science

## MATH 412 - Abstract and Linear Algebra

3 credits
An introduction to algebraic structures, with emphasis on the number systems encountered in middle and high schools. Also covered are elements of linear algebra, including matrices and determinants. This course does not count towards the mathematics major.
Prerequisites: MATH 131 or 301.
Note: open to graduate students. Graduate students are required to do additional work of a research nature.

Change title, description, and prerequisites to:

## MATH 412 - Abstract Algebra

3 credits
An introduction to groups, rings, and fields, including polynomial rings, divisibility, and unique factorization domains.
Prerequisite: MATH 380
Note: open to graduate students. Graduate students are required to do additional work of a research nature.
A-F Grading
Preferred effective term: Fall 2010

## COLLEGE OF TECHNOLOGY: Aviation Technology

## AVT 325 - Crew Resource Management

2 credits
A study of crew resource management techniques designed for pilots and cabin crew of multicrew operations as well as dispatchers, mechanics, and air traffic control personnel. The course covers the theoretical aspects of modern crew resource management training with relevant references to, and examination of, human factor related aviation incidents and accidents.

Change credits to:

## AVT 325 - Crew Resource Management

3 credits
A study of crew resource management techniques designed for pilots and cabin crew of multicrew operations as well as dispatchers, mechanics, and air traffic control personnel. This course covers the theoretical aspects of modern crew resource management training with relevant references to, and examination of, human factor related aviation incidents and accidents.
A-F Grading
Preferred effective term: Spring 2011

## COURSE REVISIONS

 FOUNDATIONAL STUDIES CREDIT
## COLLEGE OF ARTS AND SCIENCES: Economics

## ECON 446 - Theory of Economic Development

3 credits
History, theory, reality, and problems of economic development; current constraints on sustained growth and alternative development models.
Prerequisites: ECON 200 and 201, or consent of instructor.
Note: Open to graduate students. Graduate students are required to do additional work of a research nature.

Add Foundational Studies credit to:

## ECON 446 - Theory of Economic Development

3 credits
History, theory, reality, and problems of economic development; current constraints on sustained growth and alternative development models.
Prerequisites: ECON 200 and 201, or consent of instructor.
Note: Open to graduate students. Graduate students are required to do additional work of a
research nature.

## Foundational Studies Credit: [FS 2010: Global Perspective and Cultural Diversity]

A-F Grading
Preferred effective term: Fall 2010

## COLLEGE OF ARTS AND SCIENCES: Women's Studies

## WS 301 - Gender, Nation, and Class

3 credits
An interdisciplinary and international study of the dynamics and intersections of gender, nation, and class. Using material from the humanities, art, social sciences, and sciences, this course examines the impact of race, ethnicity, national origin, sexuality, and class on women.
Prerequisites: WS 201
Note: students who have taken WS 200 may petition the Women's Studies Director to take the course.

## Add Foundational Studies to:

WS 301 - Gender, Nation, and Class
3 credits
An interdisciplinary and international study of the dynamics and intersections of gender, race, and nation. Using material from the humanities, art, social sciences, and sciences, this course examines the impact of race, ethnicity, national origin, sexuality, and class on women.
Prerequisites: WS 201
Foundational Studies: [FS 2010: Global Perspectives and Cultural Diversity]
Note: Students who have taken WS 200 may petition the Women's Studies Director to take the course.
A-F Grading:
Preferred effective term: Fall 2010

## GRADUATE APPROVALS

## NEW COURSES

## SCOTT COLLEGE OF BUSINESS: Analytical

## OMA 505 - Business Statistics III

3 credits. This course emphasizes more advanced topics of business statistical applications.
Students cannot receive credit for both OMA 505 and OMA 405 unless they have consent of the Department Chairperson.
Prerequisite: BUS 305 or equivalent with a minimum grade of C or consent of Department
Chairperson.
A-F Grading
Preferred effective term: Fall 2010

## OMA 545 - Advanced Operations Management

3 credits
This course extends the work done in MBA 623. Some of the latest techniques and concepts in production and service operations management are taught. Possible topics include operations
strategy, service system design, supply chain management, project management, production planning and control, and enterprise resource planning. The main emphasis of the course is to focus on current and strategic issues.
Prerequisite: MBA 623 or equivalent with a minimum grade of $\mathrm{C}+$, or consent of Department Chairperson. Students cannot receive credit for both OMA 445 and OMA 545 unless they receive the consent of the Department Chairperson.
A-F Grading
Preferred effective term: Fall 2010

## COLLEGE OF NURSING, HEALTH, AND HUMAN SERVICES: Physical Education

## PE 577 - Psychological Aspects of Sport Injury

3 credits
This course is designed to explore the various topics related to the psychological aspects of sport injury. The focus is on theory and application. It examines issues associated with the onset, treatment, and rehabilitation of sport injury. Case studies are used to explore assessment and relevant intervention approaches. This is a participation intensive course. Students must be prepared to talk in class, contribute to discussion, and read the assigned readings prior to covering them in class.
A-F Grading
Preferred effective term: Fall 2010

## PE 616 - Administration and Management for Coaches

3 credits
A focus on skills needed to successfully organize and administer the managerial functions of the coaching profession. Leadership and management theory is covered along with universal business skills.
A-F Grading
Preferred effective term: Fall 2010

## PE 617 - Coaching and Training of Elite Athletes

3 credits
The study of cutting edge physiological, pedagogical, psychological, biomechanical, and sociological information relative to the coaching and training of elite athletes.
A-F Grading
Preferred effective term: Summer I 2010

## PE 618 - Advanced Coaching Philosophy and Ethics

3 credits
A focus on concepts within philosophy and ethics of coaching are explored and understood. Coaching theory is covered along with ethical decision making skills.
A-F Grading
Preferred effective term: Fall 2010

## PE 647 - Diversity and Sport

3 credits
This course is designed to understand and discuss multiculturalism and diversity in sport. A-F Grading

## PE 675 - Advanced Strength and Conditioning Theory

3 credits
This course is designed to explore the theory and practice of strength and conditioning to include the history of strength development, current advanced applications, and future direction.
A-F Grading
Preferred effective term: Fall 2010

## COURSE REVISIONS

## COLLEGE OF ARTS AND SCIENCES: Earth and Environmental Systems

## GEOG 610 - Field Geography Techniques

3 credits
Principles and techniques of identifying, classifying, interpreting, and coding landscape features and patterns in selected areas of Indiana and Illinois.

Change prefix, title, and description to:
ENVI 610 - Field Techniques
3 credits
A survey of principles and techniques of field work in spatial science and allied fields. The course focuses on identifying, classifying, interpreting, and coding landscape features.
A-F Grading
Preferred effective term: Fall 2010

## GEOG 645 - Advanced Quantitative Methods in Geographic Research

3 credits
Continuation of 611. Multiple correlation techniques, curvilinear correlation, and analysis of variance are examined.
Prerequisites: MATH 445/545 or equivalent and consent of instructor.
Note: Students are required to formulate and solve quantitative geographic problems.
Change prefix, title, description, and remove prerequisites and note to:
ENVI 645 - Advanced Spatial Analysis and Quantitative Methods
3 credits
This course provides students with an overview of topics and techniques in spatial analysis including multivariate statistics. All students will complete a research project that utilizes the collection, manipulation, analysis, and representation of quantitative data appropriate to their research interests.
A-F Grading
Preferred effective term: Fall 2010

## COLLEGE OF NURSING, HEALTH, AND HUMAN SERVICES: Physical Education

PE 680 - Advanced Physiology of Exercise
3 credits
Advanced treatment of the effects of acute and chronic exercise or lack of exercise on the human organism with emphasis given to mechanisms. Additional attention will be devoted to
controversies, traditional practices, fads, and human performance.
Prerequisites: kinesiology, physiology of exercise.
Change title, description, and remove prerequisites to:
PE 680 - Cardiorespiratory Physiology
3 credits
A graduate survey of human cardiorespiratory physiology and the adjustments within the system in response to exercise and other stressors.
A-F Grading
Preferred effective term: Fall 2010

## PE 681 - Seminar in Exercise Physiology

3 credits
Critique of research and individual studies.
Prerequisites: 680 or consent of instructor.
Change title, description, and remove prerequisites to:
PE 681 - Neuromuscular Physiology
3 credits
This course examines mechanisms by which the nervous system controls motor function to include endurance training, strength training, fatigue, blood flow, muscle soreness, muscle potentiation, environmental factors influencing force output, power, effects of gender and aging on force production.
A-F Grading
Preferred effective term: Fall 2010

## PE 688 - Graded Exercise Testing and Exercise Prescription

3 credits
The study of the use of graded exercise testing in the evaluation of exercise capacity. Modes of evaluation and protocols for evaluation will be discussed with application of the results to normal and cardiac populations. Practical experiences in the laboratory will include measurement involving treadmills, ergometers, electrocardiography, and metabolic cart.
Prerequisites: 680 or consent of instructor.
Change title, description, and remove prerequisites to:
PE 688 - Exercise Testing in Exercise Science
3 credits
The study of field and laboratory tests that evaluate human performance and/or allow evaluation of physiological responses during exercise. Modes of exercise, protocols for evaluation, and test results are discussed with application to normal and special populations.
A-F Grading
Preferred effective term: Fall 2010

## COURSE REACTIVATIONS

## COLLEGE OF NURSING, HEALTH, AND HUMAN SERVICES: Athletic Training

## ATTR 655 - Clinical Experience I

## 2 credits

Clinical experience in athletic training allows students to broaden their experience and to develop advanced clinical skills.

Prerequisite: admittance into the graduate athletic training program.
Change title, credits, description, and add repeatable to:

## ATTR 655 - Clinical Experience in Athletic Training I

0-2 credits
Advanced practical experience in athletic training with student facilitated discussion.
Prerequisite: admittance into the graduate athletic training program.
Repeatable: May be repeated for a maximum of two credits.
A-F Grading
Preferred effective term: Fall 2010

## ATTR 656 - Clinical Experience II

1 credit
Clinical experience in athletic training allows students to broaden their experience and to develop advanced clinical skills.
Prerequisite: admittance into the graduate athletic training program.
Change title, credits, description, and add repeatable to:

## ATTR 656 - Clinical Experience in Athletic Training II

## 0-2 credits

Advanced practical experience in athletic training with student facilitated discussion.
Prerequisite: admittance into the graduate athletic training program.
Repeatable: may be repeated for a maximum of two credits.
A-F Grading
Preferred effective term: Fall 2010

## COURSE BANKING

## COLLEGE OF NURSING, HEALTH, AND HUMAN SERVICES: Physical Education

PE 540 - Women in Sport
Preferred effective term: Fall 2010

## NEW PROGRAMS

BAYH COLLEGE OF EDUCATION: Curriculum, Instruction, and Media Technology
Certificate in Curriculum, Instruction, and Media Technology for Higher Education and Industry (12 credits)

## Brief Summary:

Curriculum, Instruction, and Media Technology is an area that is needed in many areas including higher education, K-12, business, industry, government, military, health care, etc., where instruction and/or training is needed. Discussions with Dr. Dorothy Carole Yaw at the Department of Human Resource Development of College of Technology revealed the need for a certificate program of Curriculum, Instruction, and Media Technology for Higher Education and Industry for M.S. HRD students whose career goals focus on teaching in the community colleges, industry, and the military.

Therefore, the proposed Certificate Program in Curriculum, Instruction, and Media Technology (CIMT) for Higher Education and Industry will provide an opportunity to introduce graduate study in CIMT not just to those students who may be contemplating enrollment in the M.S. in Educational Technology and MEd in Curriculum and Instruction programs but also those who seek an M.S. degree in HRD. Graduate study in CIMT may also be a specialization for another major at the graduate level. Credits from the certificate program may be applied to the M.S. in Educational Technology, M.Ed. in Curriculum and Instruction, and M.S. in HRD programs.

Applicants across the globe are encouraged to apply. The criteria for admission on the certificate program are the same as the criteria for admission for graduate study at Indiana State University at the master's level: Applicants must offer proof of a Bachelor Degree and an acceptable grade point average from an accredited college or university. International applicants should have a TOEFL (Test of English as a Foreign Language) score of at least 550 (paper), 213 (computer), or 70 (iBT); or provide equivalent evidence of language proficiency.

## Student Learning:

Students who complete the Certificate Program in Curriculum, Instruction, and Media Technology (CIMT) for Higher Education and Industry will have the knowledge and skills that are required for effective teaching in the community colleges, industry, and the military.

Competencies designed into the program focus on curriculum and instruction for face-to-face and online settings. Core concepts include design, development, utilization, management, and evaluation of education, instruction, and training activities that meet AECT (Association for Educational Communications and Technology) standards.

## Proposed Catalog Copy:

## Certificate in Curriculum, Instruction, and Media Technology for Higher Education and Industry (12 credits)

Students who complete the Certificate Program in Curriculum, Instruction, and Media Technology for Higher Education and Industry will have the knowledge and skills that are required for effective teaching in the community colleges, industry, and the military. Competencies designed into the program focus on curriculum and instruction for face-to-face and online settings. Core concepts include design, development, utilization, management, and evaluation of education, instruction, and training activities that meet the Association for Educational Communications and Technology standards. Applicants must offer proof of a bachelor degree and a grade point average of 2.7 or higher from an accredited college or university. International applicants should have a TOEFL score of at least 550 (paper), 213 (computer), or 70 (iBT); or provide equivalent evidence of language proficiency. The Certificate Program in Curriculum, Instruction, and Media Technology for Higher Education and Industry is a project-based program. Students gain knowledge and skills in curriculum, instruction, and media technology through experiential learning.

## Required Courses:

CIMT 620 (3 credits) Instructional Design

CIMT 657 (3 credits) Courseware Design and the Web
CIMT 660 (3 credits) Curriculum Fundamentals
CIMT 740 (3 credits) The Technology of Distance Learning
Preferred effective term: Fall 2010

## PROGRAM REVISIONS

## COLLEGE OF ARTS AND SCIENCES: Earth and Environmental Systems

## M.A. Geography ( 37 credits minimum)

CIP Code: 450701 Major Code: 2175

## Brief Summary:

The proposed change is in response to the revision and renaming of the the Ph.D. program in geography to a Ph.D. program in Spatial and Earth Sciences. The changes reflect new course prefixes that have resulted from the creation of the new department (ENVI) and the program revisions. The program edits also include the elimination of a 1-credit course GEOG613 and the introduction of a new seminar ENVI 733 as an option under the required seminar. The elimination of 613 is deemed appropriate given the introduction of a new, more inclusive course option that covers similar topics (ENVI 733.)

## Proposed Catalog Copy:

## M.A. Geography ( 36 credits minimum)

CIP Code: 450701 Major Code: $\qquad$

## Research Requirement (6 credits):

## Thesis Option:

GEOG 699 - Master’s Thesis 6 credits

## Non Thesis Option:

GEOG 629 - Individual Research in Physical Geography 6 credits
GEOG 649 - Individual Research in Economic Geography 6 credits

## Core Courses ( 21 credits):

ENVI 610 - Field Geography Techniques 3 credits
ENVI 611 - Research in Geography 3 credits
ENVI 645 - Advanced Quantitative Methods in Geographic Research 3 credits
ENVI 512 - Advanced Cartography 3 credits
GEOG 612 - Development of Geographic Thought 3 credits
6 credits of geography electives

## Seminar (3 credits):

Choose one of the following for three credits:
GEOG 700 - Seminar in Physical Geography 1-6 credits
GEOG 710 - Seminar in Economic Geography 1-6 credits
GEOG 711 - Seminar in Location Theory 3 credits
ENVI 733 - Seminar in Earth and Environmental Systems 3 credits

6 credit hours outside geography in a discipline closely allied to the student's research area (to be determined in consultation with the student's advisor).

## Culminating Experience:

Successful defense of thesis or research project(s).

## Note:

One-half of the credit hours must be taken in courses numbered 600 and above.
Preferred effective term: Fall 2010

## COLLEGE OF ARTS AND SCIENCES: Earth and Environmental Systems

## Ph.D. Geography ( 22 credits minimum) <br> CIP Code: 450701 Major Code: 2178

## Brief Summary:

The proposed title and program changes are in response to the newly reconfigured department of Earth and Environmental Systems and our focus on interdisciplinary environmental issues.

We are proposing changes to the name, core requirements, and establishment of two concentrations (Geography and Earth Sciences) that will result in the development of a more interdisciplinary broad-based PhD degree that is more inclusive of, and highlights the research interests of, the Earth and Environmental Systems faculty, and will draw on a broader range of prospective students interested in interdisciplinary studies in the spatial and earth sciences.

The term Spatial and Earth Sciences is proposed because it is a more all-embracing term related to spatial research, earth, and environmental/human systems. Spatial Sciences and Earth Sciences are commonly used names in Geography. For example, Spatial Sciences is now used by NSF in association with the geography grant program and Earth Sciences is a general term that encorportates physical geography as well as other geoscience disciplines. The term also more aptly reflects the broad research interests of the faculty in areas dealing with geographic information science, (which includes GIS, and Remote Sensing), geosciences, climatology, paleoecology, biogeography, geoarchaology, geomorphology, paleoceanography, human geography, and physical geography. The traditional areas of the geography degree are maintained but a broader range of topics are now incorporated. Additional students will be attacted to the revised program as it will appeal to a wider range of interests with the new interdisciplinary focus.

We view this revised degree program as timely and filling a unique niche related to interdisiplinary studies in the spatial and earth sciences. The interdisiplinary education received by students in our program will provide them with a strong background necessary for positions in universities as well as in the public and private sectors which are seeking researchers with expertise to address interdisciplinary spatial, environmental, and geoscience issues.

We believe there will be increased interest in the revised program. In particular, we will draw from the existing pool of traditional geography graduate students and from a new pool of students that include those wishing to work with faculty who have expertise in the geoscience research areas of geoarchaeology, environmental sciences, paleoecology, paleoceanography, and
dendrochronology.
Additionally, faculty who contribute to the new program will broaden the base of external reseach funding to support graduate student research. We believe these new research dollars will greatly enhance the PhD program by providing additional research assistantships.

We propose to revise the major core requirements to include courses that focus on skills necessary in both concentrations. Current core courses have been revised to be consistent with the broader research focus of the new program. The 9-12 hour core consists of a research design and proposal preparation course (ENVI 611), a quantatative methods course (ENVI 645), and a field techniques course (ENVI 610) or other credit or non-credit field experience approved by the Graduate Affairs Committee. A 700 level seminar (ENVI 733) has been created that will focus on current interdisciplinary issues in spatial and earth sciences.

Two concentrations are proposed in Geography and Earth Science consisting of a minimum of 9 additional hours. The geography concentration is intended to encompass the traditional research fields in geographic information systems, remote sensing, and human geography. The earth scicence concentration incorporates physical geography, climatology, geosciences, geoarchaeology, paleoecology, biogeography, dendrochronology, environmental sciences, and Quaternary envirionments.

In the Geography concentration all students must complete a minimum of 9 additional hours of coursework in geography (GEOG) at the 600-level or above (excluding dissertation hours) completed in consultation with and approved by the student's dissertation committee. The required nine hours must be completed while in residency at ISU.

In the Earth Science concentration all students must complete a minimum of 9 additional hours of earth science coursework (ANTH, ENVI, or GEOL) at the 600-level or above (excluding dissertation hours) completed in consultation with and approved by the student's dissertation committee. The required nine hours must be completed while in residency at ISU.

In summary, a minimum of 78 semester hours of graduate credit are required, including an acceptable dissertation (899--18 hrs.), 9-12 hours of core courses, 9 hour specialization (Geography or Earth Science), 3-6 hours of electives in the Department (ANTH, ENVI, GEOG, or GEOL), and a minimum of 6 hours of cognate courses taken outside the Department of Earth and Environmental Systems selected in consultation with and approved by the student's dissertation committee.

The student's dissertation committee will determine courses to be taken within the major and outside the department, as well as additional requirements that may be appropriate. These requirements may include, but are not limited to, courses to remove any deficiencies. The College of Graduate and Professional Studies requires that at least one-half of the credit hours must be taken in courses numbered 600 and above. Selection of the dissertation advisor and committee should be done no later than the end of the first academic year. Demonstration of "research proficiency" is required for all doctoral students prior to being admitted to candidacy. Students will have met the research proficiency by completing all core courses with a B (3.0) or better. The student must submit an acceptable dissertation proposal, satisfactorily pass oral preliminary examinations and must demonstrate satisfactory performance on a final oral
examination and dissertation defense. To help ensure teaching proficiency, each Ph.D. candidate must participate in the teaching program of the department for at least two semesters or one semester and a full summer session.

## Brief Summary:

Student interest is demonstrated in applications and at recruitment events at professional meetings and the curriculum of similar interdisciplinary environmental programs. Because of the wide range of students that can be accommodated by the Spatial and Earth Science PhD Program, we anticipate that this will attract additional students to the graduate program. The proposed curricular revision will enable students to achieve the outcomes detailed in the department's graduate studies student outcome statements (which is being updated to accommodate the revised program). Doctoral students will be able to synthesize past research in the spatial and earth sciences, conduct original research of complex environmental, human, or earth systems depending on specialization, develop skills in data collection methods and techniques within their chosen specialization, think and evaluate critically, and employ interdisciplinary collaboration in the conduct of research.
Primary assessments of these outcomes will be evaluated through course work, field experiences, multiple research presentations at national and/or regional meetings, preliminary exams, a dissertation, and the dissertation defense.

## Proposed Catalog Copy:

## Ph.D. Spatial and Earth Sciences ( 83 credits minimum) <br> CIP Code: 450701 Major Code: <br> $\qquad$

## Core Courses ( $\mathbf{9 - 1 2}$ credits)

ENVI 611-3 credits; ENVI 645-3 credits; ENVI 733-3 credits; ENVI 610-3 credits or an appropriate substituting credit or non-credit field experience approved by the student's dissertation committee 0-3 credits.

## Departmental Electives (3-6 credits)

Selected from ANTH, ENVI, GEOG, or GEOL graduate courses.

## Cognate Courses (6 credits)

A minimum of 6 hours of cognate courses outside the Department, chosen in consultation with and approved by the student's dissertation committee.

## Culminating Experience (18 credits)

Dissertation Research (18 credits): 899-3 credits

## All students must complete one of the following concentrations:

## Concentrations ( 9 credits)

Earth Science. A minimum of 9 additional credit hours of earth science coursework (ANTH, ENVI, or GEOL) at the 600-level or above chosen in consultation with and approved by the student's dissertation committee.

## Or

Geography. A minimum of 9 additional credit hours of coursework in geography (GEOG, ENVI) at the 600-level or above chosen in consultation with and approved by the student's dissertation committee.

## Other Requirements:

For the Ph.D. degree, the College of Graduate and Professional Studies requires students to complete a minimum of 65 hours of graduate credit, exclusive of the dissertation. These credits may include those applied toward a Master's degree. Thirty of the 65 credits must be completed at Indiana State University. At least one-half of the credits for the degree must be taken in courses numbered 600 and above.

## Note:

The student's dissertation committee will determine courses to be taken within the major and outside the department, as well as additional requirements that may be appropriate. These requirements may include, but are not limited to, courses to remove any deficiencies. The dissertation advisor and committee should be selected no later than the end of the first academic year. Demonstration of "research proficiency" is required for all doctoral students prior to being admitted to candidacy. Students will have met the research proficiency by completing all core courses with a B (3.0) or better. The student must submit an acceptable dissertation proposal, satisfactorily pass oral preliminary examinations, and must demonstrate satisfactory performance on a final oral examination and dissertation defense. To help ensure teaching proficiency, each Ph.D. candidate must participate in the teaching program of the department for at least two semesters or one semester and a full summer session.
Preferred effective term: Fall 2010

## COLLEGE OF NURSING, HEALTH, AND HUMAN SERVICES: Physical Education

## M.A./M.S. Physical Education (Exercise Science) (33 credits) CIP Code: 131314 Major Code: A570

## Brief Summary:

As a result of Program Prioritization, the three tracks, Adult Fitness program, the Exercise Science program, and the Coaching program are being reduced to two tracks: Exercise Science and Coaching. The new programs will maintain their names of Exercise Science and Coaching. The two new tracks will share a 9 credit hour core to include one new course. The Exercise Science track will also include three classes that will undergo a name change with modifications in content. The Coaching program will have one additional new course in the approved electives and one course with content modification. All optional emphasis areas will be deleted from the catalog.

## Student Learning:

These changes will update the program to current industry standards. The new program is streamlined easing class selection for students. An internship is added to the Exercise Science
track as a third alternative for the culminating experience.

## Proposed Catalog Copy:

## M.A./M.S. Physical Education (Exercise Science) (30 credits) <br> CIP Code: 131314 Major Code: <br> $\qquad$

The objective of this degree is to provide an opportunity for graduate students to further develop their knowledge and understanding in the area of Exercise Science.

## Exercise Science:

Core ( 9 credits): 601-3 credits; 666-3 credits; 675-3 credits
Required (12): 680-3 credits; 681-3 credits; 685-3 credits; 688-3 credits
Suggested Electives (M.S. degree-6 credits; M.A degree-3 credits): 583-3 credits; 584-3 credits; 585-3 credits; 616-3 credits; 660-3 credits; 665-3 credits; 682-3 credits; FCS 529-3 credits; ATTR 610-3 credits or approved by advisor.

Culminating Experience (3-6 credits): (M.S. degree) 602-3 credits or 629-3 credits; (M.A. degree) 699-6 credits
Preferred effective term: Fall 2010
COLLEGE OF NURSING, HEALTH, AND HUMAN SERVICES: Physical Education
M.A./M.S. Physical Education (Coaching) (32 credits minimum)

CIP Code: 131314 Major Code: A573

## Brief Summary:

As a result of Program Prioritization, the three tracks, Adult Fitness program, the Exercise Science program, and the Coaching program are being reduced to two tracks: Exercise Science and Coaching. The new programs will maintain their names of Exercise Science and Coaching. The two new tracks will share a 9 credit hour core to include one new courses. The Exercise Science track will also include three classes that will undergo a name change with modifications in content. The Coaching program will have two new course in the specialization requirement and two new courses in the approved electives.

## Student Learning:

These changes will update the program to current industry standards. The new program is streamlined easing class selection for students.

## Proposed Catalog Copy:

M.A./M.S. Physical Education (Coaching) (36 credits)

CIP Code: 131314 Major Code: $\qquad$

The objective of this degree is to provide an opportunity for graduate students to further develop their knowledge and understanding in the area of Coaching.

Core (9 credits): PE 601-3 credits; PE 666-3 credits; PE 675-3 credits;
Required (18 credits): PE 618-3 credits; PE 660-3 credits; PE 584 or PE 685-3 credits; PE 665-3 credits; PE 616-3 hrs; ATTR 610-3 credits

Suggested Electives (M.S. degree-6 credits; M.A degree-3 credits): PE 577-3 credits; PE 615-1-3 hrs; PE 647-3 credits; PE 680-3 credits; PE 681-3 credits; PE 510-2 credits; PE 511-2 credits; PE 512-2 credits; PE 513-2 credits; PE 516-2 credits; PE 518-2 credits; PE 519-2 credits; PE 520-2 credits or Advisor Approved Electives

Culminating Experience (3-6 credits): (M.S. degree) PE 602-3 credits or PE 629-3 credits or (M.A. degree) PE 699-6 credits

Preferred effective term: Fall 2010

## PROGRAM ELIMINATIONS

## COLLEGE OF NURSING, HEALTH, AND HUMAN SERVICES: Physical Education

## M.A./M.S. Physical Education (Adult Fitness)

CIP Code: 131314 Major Code: A571
Preferred effective term: Fall 2010

