# Academic Notes 

## ACADEMIC NOTES PUBLICATION SCHEDULE FOR SPRING 2009

Below is the circulation schedule for the electronic copy of Academic Notes through May 11, 2009. 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://www1.indstate.edu/academicaffairs/academic_notes.htm

## ACADEMIC NOTES PUBLICATION SCHEDULE FOR SPRING 2009

## Deadline for Items

April 22
April 29
May 6

## Issue Date

April 27
May 4
May 11

## 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, decreasing the number of printed catalogs
If you have questions, please contact Academic Affairs, extension 3662.


## NEW DEPARTMENT

## COLLEGE OF ARTS AND SCIENCES: Institute of Interdisciplinary Programs

Rationale. This section includes both the context from which the Proposal developed and explanations of the benefits of administrative restructuring.

Since the 1970s academia has witnessed an increasing number of efforts dedicated to interdisciplinary research and dialogue. While their campus forms take a variety of shapes according to the particular needs of the institution, these schools, centers, programs, and institutes all exist for one primary purpose: to create, support, and sustain the same level of intellectual energy between and among the traditional disciplines that heretofore has thrived only within a departmental framework. Because of the dynamic nature of this approach to the generation, application, and dissemination of knowledge, such units encourage students and faculty to pursue interests and engage in conversations that more naturally extend across disciplines.

The academic community in the United States has now fully acknowledged the importance of interdisciplinarity to the new learning environment-one that often generates questions and frames problems that the traditional university model was not designed to confront effectively. The thirty year history and growth of the Association for Integrative Studies, which supports and fosters interdisciplinarity across its many member campuses and organizations and by other agencies and organizations, including the Association of American Colleges and Universities, underscores the dramatic shift in Academia toward this approach to knowledge. The clear preference of extramural funding sources for projects that explicitly pursue interdisciplinary lines of inquiry also demonstrates the established and growing status of and need for structures that foster interdisciplinary work. A search of the websites of primary federal funding agencies-National Science Foundation, National Institutes for Health, National Endowment for the Arts, and the National Endowment for the Humanities-finds significant attention directed to interdisciplinary projects. (A search of "funding" alone generated 374 of 576 hits on the NSF site for Interdisciplinary/Interdisciplinary Studies; 304 hits were cited on the NIH website; 156 and 99 hits were cited on the NEA and NEH websites, respectively. Narrative descriptions of initiatives, programs, and projects on these websites repeatedly emphasize the value of interdisciplinary work.) During summer 2008, the American Council on Education Fellows Program organized a two-day conference that focused on how key academic administrators and institutional partners (communities, funding agencies, professional organizations, et al), can foster work in interdisciplinarity on university campuses.

Some might suggest that the University recognized the need for interdisciplinary programs of study early. While it existed, the Humanities Department included "Study of Religion" and "Interdisciplinary Study in the Humanities" as curricular paths to the major in Humanities, itself characterized as interdisciplinary. The Liberal Studies program (then titled "General Studies") was offered as an Associate of Arts degree at least a decade before it was approved as a Bachelor's degree granting program (2000). Certainly, distinct interdisciplinary programs have existed at Indiana State since the creation in 1972 of African and African American Studies (titled then "Black Studies"). Other distinct interdisciplinary programs were developed over the
next three decades: Latin American/Latino Studies (1974), American Studies (1974), Women's Studies (1976), and International Studies (1990). However, the decentralized program development process produced uneven results, confusion, and unproductive competition for limited resources. Among the most common obstacles to program stability over the years has been erratic and inconsistent administrative support, under-supported and inconsistent administrative structures, limited and unstable budgets, confusing relationships with established departments, and a lack of reliable physical presence. All these factors have combined to undercut the effectiveness of interdisciplinary programs and limit their visibility on campus. It is clear that program survival is a testament to the unwavering commitment of program faculty across decades, as well as persistent student demand and community support. Some interdisciplinary programs have survived these challenges; most have not.

The relevant recent effort to reform the interdisciplinary environment at ISU in light of this history occurred in Fall, 2002, when Dean Michelfelder of the College of Arts and Sciences appointed a Taskforce on Interdisciplinary Programs and charged it with assessing the environment for interdisciplinary programs at ISU and providing recommendations as to the most effective administration of the programs. The Taskforce returned a Report to the Dean in January, 2004. No subsequent action was taken pursuant to the recommendations made by this Taskforce. In Fall, 2006, Dean Thomas Sauer established a new Taskforce, composed of representatives of African and African American Studies, International Studies, Liberal Studies, and Women's Studies, and charged it with creating a viable administrative structure for a new Interdisciplinary Programs unit. The task force continued its work through the 2007-2008 year. Deliberations early in fall 2007 generated the first resolution submitted to the faculties of the respective programs: The Task Force on Interdisciplinary Programs recommends that an Interdisciplinary Programs unit be created within the College of Arts and Sciences to support the growth and continued strength of Interdisciplinary

Programs in the Arts and Sciences. The founding programs of the Interdisciplinary Programs unit will be International Studies, Liberal Studies, and Women's Studies.

The respective faculty governance bodies of the founding programs approved this recommendation, authorizing the preparation of a proposal. Two forums, open to all program faculty members, were conducted in April 2008 to discuss early thinking about the structure of the proposed unit. Feedback from participating faculty contributed to the full draft of the proposal, which was submitted to respective program faculty for deliberation and vote August 16,2008 . The final section of this proposal records the votes of the program faculty. The faculty of these programs now submits this proposal for the Institute for Interdisciplinary Programs.

For the first time, the Institute for Interdisciplinary Programs promises the Indiana State community the following:

1. A central location;
2. Stable administrative structure;
3. Diverse and expanding curricular choices; and,
4. A center for collaborative faculty research, robust co-curricular programming, and student engagement.

The International Studies, Liberal Studies, and Women's Studies programs will be the initial academic programs housed in the Institute for Interdisciplinary Programs. Further, a process will be established by which other academic programs may subsequently join the Institute. As the administrative home for International Studies, Liberal Studies, and Women's Studies, the Institute will serve a current student population of approximately 70 undergraduates (seeking either the degree in Liberal Studies, the minor in International Studies, or the minor in Women's Studies) and more than 50 faculty members from across the disciplines of the College of Arts and Sciences and the University.

Curriculum. This section discusses the curricular impact of the Proposal. What will be gained, as well as lost? Does the proposed change affect licensure or certification for students? Does it affect a program's accreditation?

This proposal does not include any new or revised curricula. The Institute will house the Liberal Studies degree (BS, BA, AS) and the minors in International Studies and Women's Studies. The three founding academic programs are pursuing no substantial changes in their current curricula; however, each program's faculty are engaged in ongoing reviews of existing curricula with the aim of supporting a smooth transition to the proposed configuration, maximizing existing resources, and responding to the dynamic curricular climate within each area.

The Institute offers valuable potential for increased collaboration characterized by the sharing of curricular resources, the pursuit of new lines of curricular and research interests, and the development of new academic programs. It provides faculty in established departments a clear and creative means to engage with colleagues with shared pedagogical and research interests that will foster vital faculty communities (e.g. communities of scholars and teachers committed to Latin American/Latino Studies, social justice, public art, etc.). The Institute can provide a mechanism and a motivation to revitalize undersubscribed or neglected curricular attempts to feature area studies within disciplines (e.g. sections of introductory courses with an international focus-Economics 100, Communication 101). The Institute will create a new path to bring students, who might not find their way by traditional means, into a wider spectrum of courses and departments (e.g. a business major constructs a second major in Liberal Studies with a concentration on Asian Studies and enrolls in Languages, Literatures and Linguistics, Political Science, Economics, etc.).

The establishment of the Institute makes students better able to take advantage of complementarity across existing but now fully separate programs. The establishment of a shared "home" makes it significantly more likely that faculty and academic advisors will be able to make good recommendations across programs. For example, a minor in either International Studies or Women's Studies would benefit from completing electives in global studies, including global feminism. Faculty and academic advisors will be more likely to encourage students with broader and multiple program interests to use the flexibility of the Liberal Studies degree to design a program that meets their academic interests. The Institute will foster piloting new academic programs under the Liberal Studies degree. Currently, students cannot major in International Studies, Women's Studies, or any recognized interdisciplinary areas (e.g. Global Studies, Religious Studies, American Studies, etc.), regardless of interest or motivation. The establishment of the Institute supports program concentrations in Liberal Studies in addition to individual concentrations currently available to students.
Preferred effective term: Fall 2009

## DEPARTMENT REVISION

## COLLEGE OF ARTS AND SCIENCES: Biology

## Formalization of the Department of Biology

The regular faculty of the provisional Biology Department hereby proposes to be formally recognized as the Department of Biology.

Attached is the required proposal, as detailed in "Procedures for Administrative Restructuring, Adopted by Faculty Council, January 16, 2008, College of Arts and Sciences" located at http://www1.indstate.edu/cas/Admin Restruct Procedures.htm .

## Proposal for Forming the Department of Biology

In March, 2008, the Dean of the College of Arts and Sciences merged the Department of Life Sciences and the Department of Ecology and Organismal Biology into a provisional Department of Biology. The regular faculty members of the provisional Department hereby propose to change the status of the department from provisional to regular department within the College. The resulting unit will retain the name Department of Biology.

- Rationale: A strong Department of Biology is critical for the wellbeing and reputation of any university, and a provisional department cannot function at an optimal level. We wish to move forward and fully engage in our mission to: 1) advance and disseminate new knowledge in biology; (2) emphasize experiential learning through traditional courses, Web-based courses, and independent research; and (3) foster activities that involve the public and contribute to the wellbeing of the community.
- Curriculum: A change from provisional to regular status will allow the department to move forward with development of a curriculum that will prepare students for emerging opportunities in biology. The change will not negatively affect any licensure, certification, or accreditation. Some housekeeping changes will include: 1) converting the names of all degree programs from "Life Sciences" to "Biology" so that they accurately reflect the CIP code and the new name of the department; and 2) merging the three Ph.D. programs into a single program with concentrations.
- Staffing: When, on March 4, 2008, the Dean and Provost recommended the creation of the provisional department, they also agreed that "as soon as [they] agree that conditions in the provisional Department warrant the change to regular status, and as soon as new vacancies among the current seventeen biology positions generate sufficient resources, the Dean will request the change of status and authorization to conduct a national search for a regular department chairperson." With this request, we assert that conditions in the provisional Department now warrant creation of a regular Department of Biology, and that as soon as sufficient resources become available, we be allowed to hire a new departmental chairperson via an external search. Until such a search is concluded successfully, the procedure described in the University Handbook for identifying an interim chairperson will be followed (UH October 2005: III, 19).
- Facilities: A change from provisional to full status will not create any new space issues.
- Technical Support: A change from provisional to full status will not create any new requirements for equipment, technical support, or new services.
- Budget: A change from provisional to full status will not create any new budgetary needs, beyond those associated with appointment of a new chairperson.
- Resources: A change from provisional to full status will not alter the current allocation of resources.
Preferred effective term: Fall 2009


## CURRICULUM

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# UNDERGRADUATE PROPOSALS 

## COURSE REVISIONS

## COLLEGE OF ARTS AND SCIENCES: Chemistry and Physics

## CHEM 371 - Environmental Chemistry

3 credits
A quantitative approach to examination of the chemical and physical processes that affect the distribution of chemical elements and compounds in the Earth's biosphere. The course is designed to provide students with a foundation of the fundamental chemical and physical principles applicable to understanding the impact of humankind on the environment.
Prerequisites: CHEM 106 and 106L.
Note: Unless otherwise stated, all chemistry courses require laboratory work.
Change description and prerequisites to:
CHEM 371 Environmental Chemistry
3 credits
A survey of environmental chemistry including the atmosphere, surface and ground waters, soils, and selected aspects of geochemistry. Both descriptive and quantitative approaches to a variety of topics are explored. An emphasis is placed upon applications of thermodynamics and kinetics to the natural unpolluted environment as the basis for an examination of the effects of human activities upon these systems.
Prerequisite: CHEM 351.
A-F Grading
Preferred effective term: Fall 2009

## CHEM 469 (B-G) - Topics in Physical Chemistry

1-3 credits
The study of a selected topic in physical chemistry. Examples include: chemical kinetics, molecular spectroscopy, and quantum mechanics.
Prerequisites: CHEM 462 or 465.
Note: May be repeated when topic is different. Open to graduate students. Graduate students are required to do additional work of a research nature.

Change prerequisites to:

## CHEM 469 (B-G) - Topics in Physical Chemistry

1-3 credits
The study of a selected topic in physical chemistry. Examples include: chemical kinetics, molecular spectroscopy, and quantum mechanics.
Prerequisites: CHEM 352 and 352L.
Note: May be repeated when topic is different. Open to graduate students. Graduate students are required to do additional work of a research nature.
Preferred effective term: Fall 2009

## CHEM 487-Bioinformatics

3 credits
Provides hands-on training in bioinformatics. Students will acquire the theoretical knowledge and practical skill required to effectively utilize essential network-based bioinformatics programs and databases, typically accessed from standard laptop computers. Training includes experience with high performance parallel computing and an introduction to problem-solving in bioinformatics using the Perl programming language.
Prerequisites: CHEM 106, BIO 102, or consent of instructor.
Note: [Also listed as BIO 487.] Open to graduate students. Graduate students are required to do additional work of a research nature.

Change prerequisites to:
CHEM 487-Bioinformatics
3 credits
Provides hands-on training in bioinformatics. Students will acquire the theoretical knowledge and practical skill required to effectively utilize essential network-based bioinformatics programs and databases, typically accessed from standard laptop computers. Training includes experience with high performance parallel computing and an introduction to problem-solving in bioinformatics using the Perl programming language.
Prerequisites: CHEM 351, BIO 102, or consent of instructor.
Note: [Also listed as BIO 487.] Open to graduate students. Graduate students are required to do additional work of a research nature.
A-F Grading
Preferred effective term: Fall 2009

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

## PE 363 - Dance Repertory

1 credit
The course provides experience in performing dance works that have been created by faculty or other dance artists.
Prerequisites: PE 169, 170, and 353, or consent of instructor(s).
Note: Required for dance minors and open to non-minors, it may be taken twice for credit, only once to be counted toward the dance minor.

Change prerequisites to:

## PE 363 - Dance Repertory

1 credit
The course provides experience in performing dance works that have been created by faculty or other dance artists.
Prerequisites: PE 170 and 353, or consent of instructor(s).
Note: Required for dance minors and open to non-minors, it may be taken twice for credit, only once to be counted toward the dance minor.
A-F Grading
Preferred effective term: Fall 2009

## PROGRAM REVISIONS

## COLLEGE OF ARTS AND SCIENCES: Chemistry and Physics

## Physics Major (62-65 credits) <br> CIP Code: 400801 Major Code: 1423

## Brief Summary:

The Department of Chemistry and Physics would like to rename the Professional and Chemical Physics Emphases to Concentrations.

## Student Learning:

## Proposed Catalog Copy:

Physics Major 62-63 credits
Core Curriculum (40 credits):
Required Chemistry:
CHEM 105 - General Chemistry I credits: 3
CHEM 105L - General Chemistry I Laboratory credits: 1
CHEM 106-General Chemistry II credits: 3
CHEM 106L - General Chemistry II Laboratory credits: 1
Required Mathematics:
MATH 131 - Calculus I credits: 4
MATH 132 - Calculus II credits: 4
Required Physics:
PHYS 205 - University Physics I credits: 4
PHYS 205L - University Physics I Laboratory credits: 1
PHYS 206 - University Physics II credits: 4
PHYS 206L - University Physics II Laboratory credits: 1
PHYS 215 - Modern Physics I credits: 3
PHYS 215L - Modern Physics I Laboratory credits: 1
PHYS 216 - Modern Physics II credits: 3
PHYS 216L - Modern Physics II Laboratory credits: 1
PHYS 310 - Analytical Mechanics credits: 3
PHYS 341 - Electricity and Magnetism credits: 3
Students must complete one of the concentrations below in order to fulfill the program requirements:

This concentration is built around the physics core curriculum to supply the background and experience needed to enter graduate school or become a research physicist.

## Required Mathematics:

MATH 231 - Calculus III credits: 4
MATH 333 - Differential Equations credits: 3

## Required Physics:

PHYS 311 - Analytical Mechanics II credits: 3
PHYS 342 - Electricity and Magnetism II credits: 3
PHYS 355 - Introduction to Mathematical Physics credits: 3
PHYS 420 - Thermodynamics and Statistical Mechanics credits: 3
PHYS 497 - Introduction to Quantum Mechanics credits: 3
PHYS 499 - Introduction to Research in Physics credits: 1-4

## Chemical Physics Concentration (22-23 semester credits)

Chemical physics focuses on areas where the techniques of chemistry and physics are brought together for the study of toms and molecules; their interactions in gases, liquids, and solids; and the detailed structure and dynamics of material changes. Chemical physicists are employed by a wide range of businesses, particularly the pharmaceutical, photographic and microelectronic industries.

## Required Chemistry:

CHEM 321 - Analytical Chemistry credits: 4
CHEM 461 - Physical Chemistry I credits: 4
CHEM 461L - Experimental Physical Chemistry I credits: 1
CHEM 462 - Physical Chemistry II credits: 4
CHEM 462L - Experimental Physical Chemistry II credits: 1

## Required Mathematics:

MATH 333 - Differential Equations credits: 3
Required Physics:
PHYS 497 - Introduction to Quantum Mechanics credits: 3
Choose one from the following:
CHEM 499 - Introduction to Research in Chemistry credits: 1-4
PHYS 499 - Introduction to Research in Physics credits: 1-4

The engineering physics concentration focuses on applying the principles of physics to develop new technologies and solve interdisciplinary engineering problems. Graduates may pursue an advanced degree in applied physics or engineering, or function as productive engineering professionals.

## Required Physics:

PHYS 356 - Computational Physics credits: 3
PHYS 499 - Introduction to Research in Physics credits: 1-4

## Required Mechanical Engineering Technology:

MET 103 - Introduction to Technical Graphics with CAD credits: 3
MET 130 - Introduction to Engineering and Technology credits: 2
MET 203 - Introduction to Solid Modeling credits: 3
MET 404 - Engineering Design and Management credits: 3
Required Computer Science:
CS 256 - Principles of Structured Design credits: 3

## Electives:

3 credits from approved courses.
Preferred effective term: Fall 2009

## GRADUATE PROPOSALS

## COURSE REVISIONS

## COLLEGE OF ARTS AND SCIENCES: Chemistry and Physics

## CHEM 587 - Bioinformatics

3 credits
Provides hands-on training in bioinformatics. Students will acquire the theoretical knowledge and practical skill required to effectively utilize essential network-based bioinformatics programs and databases, typically accessed from standard laptop computers. Training includes experience with high performance parallel computing and an introduction to problem-solving in bioinformatics using the Perl programming language.
Prerequisites: CHEM 106, BIO 102, or consent of instructor.
Note: [Also listed as BIO 587.] Open to graduate students. Graduate students are required to do additional work of a research nature.

Change prerequisites to:

## CHEM 587 - Bioinformatics

3 credits
Provides hands-on training in bioinformatics. Students will acquire the theoretical knowledge and practical skill required to effectively utilize essential network-based bioinformatics programs and databases, typically accessed from standard laptop computers. Training includes experience with high performance parallel computing and an introduction to problem-solving in bioinformatics using the Perl programming language.
Prerequisites: CHEM 351, BIO 102, or consent of instructor.
Note: [Also listed as BIO 587.] Open to graduate students. Graduate students are required to do additional work of a research nature.
A-F Grading
Preferred effective term: Fall 2009

## COLLEGE OF TECHNOLOGY: Technology Management

## CTE 572 - Developing Teaching Materials for Vocational-Technical Education

 3 creditsPlanning and construction of teaching devices to improve presentations. Development of cutaways, mock-ups, scale models, charts, transparencies, and other media.

Change title, description to:
CTE 572 - Developing Teaching Materials for Career and Technical Education 3 credits
Planning and construction of teaching devices to improve presentations. Development of instructional aids and integrating technology into instruction.
A-F Grading
Preferred effective term: Summer II 2009

## CTE 581 - Organization and Coordination of Vocational Education

3 credits
A study of local, area, state, regional, and federal relationships necessary for effective vocational education.
Prerequisites: 381 or equivalent.
Cross-listed: (Also listed as Administrative Systems and Business Education 581 and Family and Consumer Sciences 581.)

Change title, description and cross-listing to:
CTE 581 - Organization and Coordination Career and Technical Education
3 credits
A study of local, area, state, regional, and federal relationships necessary for effective career and technical education.
Prerequisites: 381 or equivalent.
Cross-listed: (Family and Consumer Sciences 581.)
A-F Grading
Preferred effective term: Summer II 2009
CTE 583 - Implementation and Administration of Vocational-Technical Organizations 3 credits
Various organizations with which a trade and industrial teacher is involved. Student organizations, advisory committees, memberships and participation in professional
organizations.
Change title to:

## CTE 583 - Implementation and Administration of Career and Technical Education Organizations

3 credits
Various organizations with which a trade and industrial teacher is involved. Student
organizations, advisory committees, membership, and participation in professional organizations.
A-F Grading
Preferred effective term: Summer II 2009

## CTE 585 - Industrial Cooperative Education

3 credits
Development, organization, and selection of course materials for the related ICT programs.
Study of school-employer relationships and expectations of program participants.
Change title and description to:
CTE 585 - Instructional Strategies in Career and Technical Education Programs
3 credits
Development, organization, and selection of instructional techniques and materials for community colleges. Study of teaching and evaluation techniques for community colleges.
A-F Grading
Preferred effective term: Summer II 2009

## CTE 594 - Industrial-Vocational-Technical Education Workshop

1-3 credits
Designed to meet specific needs of educators in vocational areas; technical, professional, and administrative problems.

Change title and description to:
CTE 594 - Career and Technical Education Workshop
1-3 credits
Designed to meet specific needs of educators in career and technical education areas; technical, professional, and administrative problems.
A-F Grading
Preferred effective term: Summer II 2009

## UNDERGRADUATE APPROVALS

## NEW COURSES

## COLLEGE OF EDUCATION: Elementary, Early, and Special Education

## ELED 101 - Introduction to Teaching

1 credit
This course provides students with the opportunity to develop an understanding of teaching as a career choice and the requirements of the teaching profession. This course requires hours of community engagement and experiential learning working with children in community agencies during the semester.
A-F Grading

## ELED 200 - Best Practices in Teaching

2 credits
Students examine the role of the elementary teacher and the philosophical and practical elements of effective teaching demonstrated through best practice. This course will introduce students to multiple instructional strategies and allow students to reflect upon their ideal usage in the elementary classroom. Required field work provides opportunities for structured observations in educational settings.
Prerequisites: Successful completion of ELED 101.
A-F Grading
Preferred effective term: Fall 2009

## ELED 400 - Theory to Practice

3 credits
This course complements the TOTAL internship semester by scaffolding the intern's full-time supervised work in a school setting with an in-depth study of the culture of elementary school. All aspects of teaching and learning are discussed with particular attention to best practice principles. Required credits in elementary classroom.
Prerequisites: Admission to BCP-I and successful completion of Phases I and II.
A-F Grading
Preferred effective term: Fall 2009

## SPED 321 - Special Education Law and Procedures

3 credits.
This course describes the procedural requirements mandated by current legislation for determining a child's eligibility for special education and the development of an Individual Education Program for a qualifying child. The legal foundations of special education are addressed as background for current legal requirements.
Prerequisite: Admission to BCP-1.
A-F Grading
Preferred effective term: Fall 2009

## COURSE REVISIONS

## COLLEGE OF EDUCATION: Elementary, Early, and Special Education

## ELED 250 - Teaching-Learning and Classroom Management

3 credits
This course investigates children's behavioral and interpersonal needs in relation to the way they learn and construct knowledge. For instructional and classroom management methodology, the effectiveness of various management systems will be examined with emphasis on understanding the role and responsibilities of teachers and children in the process.
Prerequisites: Successful completion of Block I and 2.5 cumulative grade point average. Change prerequisites to:

## ELED 250 - Teaching-Learning and Classroom Management

3 credits
This course investigates children's behavioral and interpersonal needs in relation to the way they
learn and construct knowledge. For instructional and classroom management methodology, the effectiveness of various management systems will be examined with emphasis on understanding the role and responsibilities of teachers and children in the process.
Prerequisites: Admission to BCP 1.
A-F Grading
Preferred effective term: Fall 2009

## ELED 259 - Measurement and Evaluation in the Elementary School

2 credits
This course is designed to assist the classroom teacher in developing skills to: gather information in a variety of ways (including observation, teacher-made tests, and standardized tests); critique and select appropriate assessment methods and materials; relate evaluation results to instruction; and foster effective communication of evaluations to parents.
Prerequisites: Successful completion of Block I and 2.5 cumulative GPA.
Change prerequisites to:
ELED 259 - Measurement and Evaluation in the Elementary School
2 credits
This course is designed to assist the classroom teacher in developing skills to: gather information in a variety of ways (including observation, teacher-made tests, and standardized tests); critique and select appropriate assessment methods and materials; relate evaluation results to instruction; and foster effective communication of evaluations to parents.
Prerequisites: Admission to BCP 1 and successful completion of Phase I.
A-F Grading
Preferred effective term: Fall 2009

## ELED 392 - The Teaching of Elementary School Social Studies

3 credits
An overview of the social studies curriculum of the elementary school with emphasis on teaching-learning techniques and experiences, selection of content, skill development, and uses of instructional materials. Required laboratory work involves experiences with elementary children.
Prerequisites: successful completion of Blocks I and II and admission to BCP-I. Change prerequisites to:
ELED 392 - The Teaching of Elementary School Social Studies
3 credits
An overview of the social studies curriculum of the elementary school with emphasis on teaching-learning techniques and experiences, selection of content, skill development, and uses of instructional materials. Required laboratory work involves experiences with elementary pupils.
Prerequisites: Admission to BCP-1 and successful completion of Phases I and II.
A-F Grading
Preferred effective term: Fall 2009

## ELED 394 - The Teaching of Elementary School Mathematics

3 credits
An overview of the mathematics curriculum of the elementary school with emphasis on activities, materials, devices, and teaching-learning techniques appropriate for children. Required laboratory work involves experiences with elementary pupils.

Prerequisites: MATH 205 and 305 and admission to BCP-I.
Change prerequisites to:
ELED 394 - The Teaching of Elementary School Mathematics
3 credits
An overview of the mathematics curriculum of the elementary school with emphasis on activities, materials, devices, and teaching-learning techniques appropriate for children. Required laboratory work involves experiences with elementary pupils.
Prerequisites: Admission to BCP-I; successful completion of Phases I \& II; and MATH 205 and 305.

A-F Grading
Preferred effective term: Fall 2009

## ELED 397 - Teaching Developmental Reading and Other Language Arts

3 credits
Emphasis is placed on teaching-learning techniques and uses of instructional materials for developing foundations of reading skills instruction and oral and written language programs in the elementary school. Required laboratory work involves experiences with elementary pupils.
Prerequisites: Successful completion of Blocks I and II and admission to BCP-I.
Change prerequisites to:
ELED 397 - Teaching Developmental Reading and Other Language Arts
3 credits
Emphasis is placed on teaching-learning techniques and uses of instructional materials for developing foundations of reading skills instruction and oral and written language programs in the elementary school. Required laboratory work involves experiences with elementary pupils.
Prerequisites: Admission to BCP-1 and successful completion of Phases I and II.
A-F Grading
Preferred effective term: Fall 2009

## ELED 398 - Corrective Reading in the Classroom

3 credits
Analysis, diagnosis, prescription, and correction of reading problems in the elementary school classroom with emphasis on types of treatment and methods for aiding children with learning difficulties. Required laboratory work involves experiences with elementary pupils.
Prerequisites: ELED 397 and admission to BCP-I.
Change prerequisites to:
ELED 398 - Corrective Reading in the Classroom
3 credits
Analysis, diagnosis, prescription, and correction of reading problems in the elementary school classroom with emphasis on types of treatment and methods for aiding children with learning difficulties. Required laboratory work involves experiences with elementary pupils.
Prerequisites: Admission to BCP-I and successful completion of Phases I and II.
A-F Grading
Preferred effective term: Fall 2009

## SPED 315 - Special Education Approaches-Curriculum and Assessment I

3 credits
Descriptions of materials and approaches to development, adaptation, and individualization in language arts, social studies, and other school content areas for learners with mild intervention
needs. Field experiences provide practice and implementation.
Note: To be taken concurrently with Elementary Education Block III. All Special Education courses may require observation and participation in field experiences in addition to in-class time.

Change note by removing co-requisite, and add prerequisite to:

## SPED 315 - Special Education Approaches-Curriculum and Assessment I

3 credits
Descriptions of materials and approaches to development, adaptation, and individualization in language arts, social studies, and other school content areas for learners with mild intervention needs. Field experiences provide practice and implementation.
Prerequisite: Admission to BCP-1.
Note: All Special Education courses may require observation and participation in field experiences in addition to in-class time.
A-F Grading
Preferred effective term: Fall 2009

## SPED 316 - Special Education Approaches-Curriculum and Assessment II

3 credits
Descriptions of materials and approaches to development, adaptation, and individualization in mathematics; specific reading needs; and other school content areas for learners with mild intervention needs. Field experiences provide practice and implementation. To be taken concurrently with Elementary Education Block IV.
Prerequisites: SPED 215, BCP-I, and Elementary Education Block II.
Note: All Special Education courses may require observation and participation in field experiences in addition to in-class time.

Change description and prerequisites to:

## SPED 316 - Special Education Approaches-Curriculum and Assessment II

3 credits
Descriptions of materials and approaches to development, adaptation, and individualization in mathematics, and other school content areas for learners with mild intervention needs. Field experiences provide practice and implementation. .
Prerequisite: Admission to $\mathrm{BCP}-1$.
Note: All Special Education courses may require observation and participation in field experiences in addition to in-class time.
A-F Grading
Preferred effective term: Fall 2009

## SPED 400 - Secondary School, Community, and Family Interactions

3 credits
This course addresses the interconnectedness among the secondary school, the community, and the family as program planning occurs for the school years and beyond to prepare the student with mild intervention to make the transition into adult living.
Note: All Special Education courses may require observation and participation in field experiences in addition to in-class time.

Change description, add co-requisite and prerequisite to:

## SPED 400 - Secondary School, Community and Family Interactions

3 credits
This course addresses the interconnectedness between the school, community, and family in
planning to prepare students with mild interventions for transition into adult living.
Prerequisite: admission to BCP-1.
Co-requisite: To be taken concurrently with the All Grade Block.
A-F Grading
Preferred effective term: Fall 2009

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

## PE 490 - Internship

3-6 credits
Supervised practice work experience obtained in appropriate agencies or businesses.
Prerequisites: PE 390, an approved course of study, and consent of instructor.
Note: Only students who select full-time experiences may register for 6 credits. Before placement will be considered, students must have completed Physical Education 390, an approved program of study, and/or received consent of the Exercise Science Internship Director. Placement of interns or practicum participants is conditional on the availability of internships and the University assumes no absolute responsibility to place each and every student in an internship or practicum.

Change description and add repeatable to:

## PE 490 - Internship

3-6 credits
Supervised practice work experience obtained in appropriate agencies or businesses.
Prerequisites: PE 390, an approved course of study, and consent of instructor.
Repeatable: up to 12 credits.
Note: Only students who select full-time experiences may register for 6 credits.
A-F Grading
Preferred effective term: Fall 2009

## COURSE ELIMINATIONS

## COLLEGE OF EDUCATION: Elementary, Early, and Special Education

## SPED 320 - Instructional Principles

Preferred effective term: Fall 2009

## PROGRAM REVISIONS

# COLLEGE OF ARTS AND SCIENCES: Chemistry and Physics 

Chemistry Major (69 credits)<br>CIP Code: 400501 Major Code: 1421

## Brief Summary:

We are proposing revision and renaming of the three tracks/concentrations of the chemistry program: the current "American Chemical Society Certified" track will be revised and called the "American Chemical Society-Certified" concentration; the current "Biochemistry Emphasis" track will be revised and called the "Pre-Professional" concentration; the current "Business Emphasis" track will be revised and called the "Business" concentration. The American Chemical Society-Certified concentration was designed in accord with new American Chemical Society (ACS) guidelines for bachelor's degree chemistry programs. This concentration will be appropriate for students who plan to attend graduate school in chemistry. The Pre-professional concentration will require two semesters of biochemistry as well as introductory biology courses, and is designed for students who plan to attend medical, dental, or other professional school. The Business concentration will require several courses in business and economics, and is designed for students who want to pursue a career in marketing, sales, or administration in the chemical or pharmaceutical industry.

We are proposing to create one new concentration (see separate F2 form) which will be called the "American Chemical Society-Certified Biochemistry" concentration. This concentration will differ from the ACS-Certified concentration in that it will require a number of biology courses and a second semester of biochemistry. It also meets the requirements of the ACS for bachelor's degree chemistry programs, so it is appropriate for students who plan to attend graduate school in biochemistry or any other branch of chemistry.

Under the proposed curriculum, all of the concentrations will require at least one foundational chemistry course from each of the five major areas of chemistry (analytical, biochemistry, inorganic, organic, and physical). This is not required under the current curriculum. In addition, the proposed curriculum is more mathematically rigorous than the current curriculum: all concentrations will require two semesters of calculus, calculus-based physics, and at least one semester of calculus-based physical chemistry.

We are proposing a small change to the chemistry minor as well: CHEM 421 will be allowed as an elective, and CHEM 461 will replace CHEM 465 as an elective.

## Student Learning:

These changes to the chemistry program are in response to the new American Chemical Society (ACS) guidelines for bachelor's degree chemistry programs. Two of our concentrations follow these guidelines and will be ACS-certified. Students who complete the chemistry degree under these certified concentrations will be well prepared to enter graduate school and compete with students from other institutions which have ACS-certified programs.

Students who complete any of the four concentrations under the proposed curriculum should be well prepared to pursue employment as chemists, having had courses in all five major areas of chemistry, rigorous calculus-based courses, and hundreds of laboratory hours. In recent years our students have had a high rate of success in obtaining jobs after graduation, so these improvements to the program should only increase that success rate. In surveying the chemistry curricula of peer institutions, we found that the majority of these programs require at least two semesters of calculus, as well as calculus-based physical chemistry. Under the proposed curriculum, our program will be similar to that of our peer institutions, so we expect that our graduates will in the future be even more competitive in the job market relative to graduates from other institutions.

## Proposed Catalog Copy:

## Chemistry Major (69 or 75 credits, including extra-departmental requirements)

 CIP Code: 400501 Major Code: $\qquad$Chemistry majors must complete the required chemistry, mathematics, and physics courses of the core curriculum together with the courses required for one of the four chemistry concentrations. Electives must be selected from the list of approved advanced electives courses.

## Core curriculum (50 semester credits)

## Required Chemistry:

CHEM 105 - General Chemistry I 3 credits
CHEM 105L - General Chemistry I Laboratory 1 credit
CHEM 106-General Chemistry II 3 credits
CHEM 106L - General Chemistry II Laboratory 1 credit
CHEM 321 - Analytical Chemistry 4 credits
CHEM 341 - Inorganic Chemistry 3 credits
CHEM 351 - Organic Chemistry I 3 credits
CHEM 351L - Organic Chemistry Laboratory I 1 credit
CHEM 352 - Organic Chemistry II 3 credits
CHEM 352L - Organic Chemistry Laboratory II 1 credit
CHEM 400 - Senior Seminar in Chemistry 1 credit
CHEM 431 - Biochemistry I 3 credits
CHEM 461 - Physical Chemistry I 4 credits
CHEM 461L - Experimental Physical Chemistry I 1 credit

## Required Mathematics:

MATH 131 - Calculus I 4 credits
MATH 132 - Calculus II 4 credits

## Required Physics:

PHYS 205 - University Physics I 4 credits
PHYS 205L - University Physics I Laboratory 1 credit
PHYS 206 - University Physics II 4 credits
PHYS 206L - University Physics II Laboratory 1 credit

## Approved Advanced Elective Courses

## Chemistry:

Any 300- or 400-level course, with the exception of 330 and 399. A maximum of 4 credits of 499 may be counted.

## Biology:

BIO 330 - General Physiology 3 credits
BIO 330L - General Physiology Laboratory 1 credit
BIO 374 - Cellular and Microbial Biology 3 credits
BIO 374L - Cellular and Microbial Biology Laboratory 1 credit
BIO 380 - Genetics 3 credits
BIO 380L - Genetics Laboratory 1 credit
BIO 408 - General Immunology 3 credits
BIO 408L - General Immunology Laboratory 1 credit
BIO 476 - Microbial Physiology 3 credits
BIO 482 - Recombinant DNA 2 credits
BIO 482L - Recombinant DNA Laboratory 2 credits

Mathematics:
MATH 333 - Differential Equations 3 credits
MATH 341 - Probability and Statistics 3 credits
MATH 413 - Linear Algebra I 3 credits
Physics:
Any advanced physics course that carries a prerequisite of 206 or higher.

## All students must choose one of the following concentrations along with the core:

American Chemical Society-Certified Concentration (19 semester credits):
This program is designed for the student who wishes to pursue an advanced degree or a career as a professional chemist.

## Required Chemistry:

CHEM 340 - Techniques in Inorganic Chemistry 2 credits
CHEM 355 - Organic Chemistry Laboratory Techniques 2 credits
CHEM 421 - Instrumental Methods of Analysis 4 credits
CHEM 421L - Instrumental Methods of Analysis Lab 0 credits
CHEM 462 - Physical Chemistry II 4 credits
CHEM 462L - Experimental Physical Chemistry II 1 credit
Electives:
6 credits of advanced coursework from approved electives listed above. At least 3 credits must be in chemistry.

American Chemical Society-Certified Biochemistry Concentration ( 25 semester credits): This program is designed for the student who wishes to pursue an advanced degree or a career as a professional chemist in the area of biochemistry and the biological sciences.

## Required Chemistry:

CHEM 355 - Organic Chemistry Laboratory Techniques 2 credits
CHEM 431L - Biochemistry Laboratory 1 credit
CHEM 432 - Biochemistry II 3 credits

## Required Biology:

BIO 101 - Principles of Biology I 3 credits
BIO 101L - Principles of Biology I Laboratory 1 credit
BIO 102 - Principles of Biology II 3 credits
BIO 102L - Principles of Biology II Laboratory 1 credit

## Elective Chemistry:

3 credits of advanced coursework in chemistry from approved chemistry electives listed above.

## Elective Biology (8 semester credits):

Two of the following three lecture courses with accompanying lab:
BIO 330 - General Physiology 3 credits
BIO 330L - General Physiology Laboratory 1 credit
BIO 374 - Cellular and Microbial Biology 3 credits
BIO 374L - Cellular and Microbial Biology Laboratory 1 credit
BIO 380 - Genetics 3 credits
BIO 380L - Genetics Laboratory 1 credit

## Pre-Professional Concentration (19 semester credits):

This program is designed for the student who wishes to pursue a career in medicine, dentistry, veterinary science, or other related fields.

## Required Chemistry:

CHEM 431L - Biochemistry Laboratory 1 credit
CHEM 432 - Biochemistry II 3 credits

## Required Biology:

BIO 101 - Principles of Biology I 3 credits
BIO 101L - Principles of Biology I Laboratory 1 credit
BIO 102 - Principles of Biology II 3 credits
BIO 102L - Principles of Biology II Laboratory 1 credit

## Electives:

7 credits of advanced coursework from approved electives listed above.

## Business Concentration (19 semester credits):

This program is designed for the student who wishes to pursue a career in marketing, sales, or administration in the chemical or pharmaceutical industry.

## Required Chemistry:

CHEM 431L - Biochemistry Laboratory 1 credit

## Required Business:

BUS 201 - Principles of Accounting I 3 credits
FIN 200 - Fundamentals of Finance 3 credits
MGT 301 - Survey of Management 3 credits
MKTG 301 - Introduction to Marketing 3 credits

## Required Economics:

ECON 200 - Principles of Macroeconomics 3 credits
ECON 201 - Principles of Microeconomics 3 credits
Preferred effective term: Fall 2009

## COLLEGE OF ARTS AND SCIENCES: Chemistry and Physics

## Chemistry Minor (23-24 credits)

CIP Code: 400501 Major Code: 1421

## Brief Summary:

We are proposing a small change to the chemistry minor: CHEM 421 will be allowed as an elective, and CHEM 461 will replace CHEM 465 as an elective.

## Student Learning:

These changes to the chemistry program are in response to the new American Chemical Society (ACS) guidelines for bachelor's degree chemistry programs. Two of our concentrations follow these guidelines and will be ACS-certified. Students who complete the chemistry degree under these certified concentrations will be well prepared to enter graduate school and compete with students from other institutions which have ACS-certified programs.

Students who complete any of the four concentrations under the proposed curriculum should be well prepared to pursue employment as chemists, having had courses in all five major areas of chemistry, rigorous calculus-based courses, and hundreds of laboratory hours. In recent years our students have had a high rate of success in obtaining jobs after graduation, so these improvements to the program should only increase that success rate. In surveying the chemistry curricula of peer institutions, we found that the majority of these programs require at least two semesters of calculus, as well as calculus-based physical chemistry. Under the proposed curriculum, our program will be similar to that of our peer institutions, so we expect that our graduates will in the future be even more competitive in the job market relative to graduates from other institutions.

Chemistry Minor (23-24 credits)
CIP Code: 400501 Major Code: $\qquad$

## Required Chemistry:

CHEM 105 - General Chemistry I credits: 3
CHEM 105L - General Chemistry I Laboratory credits: 1
CHEM 106-General Chemistry II credits: 3
CHEM 106L - General Chemistry II Laboratory credits: 1
CHEM 321 - Analytical Chemistry credits: 4
CHEM 351 - Organic Chemistry I credits: 3
CHEM 351L - Organic Chemistry Laboratory I credits: 1
CHEM 352 - Organic Chemistry II credits: 3
CHEM 352L - Organic Chemistry Laboratory II credits: 1

## Elective (select one from the following):

CHEM 371 - Environmental Chemistry credits: 3
CHEM 421 - Instrumental Methods of Analysis credits 4
CHEM 431 - Biochemistry I credits: 3
CHEM 461 - Physical Chemistry credits: 4
Preferred effective term: Fall 2009
COLLEGE OF EDUCATION: Elementary, Early, and Special Education
Elementary Education Major (124 credits minimum)
CIP Code: 131202 Major Code: 8542

## Brief Summary:

This revised program restructures the sequencing of courses and establishes a professional semester prior to student teaching. These changes afford the student early and continuous immersion into school cultures through working with children in educational and community settings. Students will graduate with a substantial increase in the number of meaningful and practical field experiences.

## Student Learning:

- Allows faculty to establish and maintain immediate contact with students interested in education
- Gives students a sustained semester-long internship in the schools prior to student teaching
- Provides the opportunity to enhance successful professional dispositions prior to student teaching
- Affords the opportunity to develop the theory to practice connection prior to student teaching
- Offers the opportunity to strengthen classroom/behavior management skills as a result of the close relationship between the Intern and the Coaching Teacher


## Proposed Catalog Copy:

## Elementary Education Major (124 credits minimum) CIP Code: 131202 Major Code:

The Teachers of Tomorrow Advancing Learning (TOTAL) program affords strong academic preparation and continuous immersion in school cultures through working with children in educational and community settings. Teacher candidates will graduate with a thorough understanding of Best Practices in Education through early field experiences, an internship semester, and student teaching.

The student who desires to be an elementary teacher must remain in good standing in the Teacher Education Program and complete the program outlined below which will satisfy requirements for the bachelor of science degree or the bachelor of arts degree, provided the foreign language requirement is fulfilled. Satisfactory completion of the program will also make the individual eligible for the Standard Instructional License in the state of Indiana provided that the individual satisfies the test requirements. Upon completion of this degree, the holder can be licensed in the elementary, primary, and intermediate school setting.

## General Education and Additional Subject Matter (71 credits minimum)

- An approved Fine Arts class 3-4 credits.
- COMM 302 - Speech Communication for the Teacher 3 credits. (satisfies the Communication requirement)
- ELED 272 - Introduction to Classroom Computer Use 3 credits (satisfies the Information Technology Literacy requirement)
- EPSY 341 - Education in a Multicultural Society 3 credits (satisfies the Multicultural Studies: U.S. Diversity requirement)
- HLTH 327 - School Health for the Elementary Teacher 3 credits
- MATH 205 - Mathematics for Elementary Teachers I 3 credits (May not be taken by correspondence)
- MATH 305 - Mathematics for Elementary Teachers II 3 credits (may not be taken by correspondence)
- MUS 325 - Music in the Education of Children 3 credits
- PE 348 - Methods of Teaching Physical Education in Elementary Schools 2 credits (satisfies the Physical Education requirement)
Choose one from the following:
- COMM 266 - Oral Interpretation of Children's Literature 3 credits.
- ENG 280 - Children's Literature 3 credits.

Choose one from the following:

- HIST 201 - The United States to 18773 credits (satisfies the Historical Studies requirement)
- HIST 202 - The United States since 18653 credits

A grade of C or better is required in each course as well as a minimum grade point average of 2.5 .

The professional education component in elementary education consists of a sequential pattern
of course work integrated into phases. Each subsequent phase has the previous phase as a prerequisite. Prior to enrolling in Phase II, the student must have been admitted to Becoming a Complete Professional I. Early and continuous experiences with children in school settings are included throughout the professional education component and are an integral part of the professional courses. These practicum experiences are required to successfully complete each professional course, but do not carry course credit.

ELED 335 - Early Childhood Teaching and Learning in the Kindergarten, 3 credits
Select one of the following Exceptional Learning Courses:
ELED 437 - Early Childhood: Theories and Practices in Working with Exceptional
Children, 3 credits (This course is a prerequisite to enrollment to BCP I)
SPED 102 - Introduction to Special Education, 3 credits
SPED 226 - The Exceptional Learner in the Regular Classroom, 3 credits

## Phase I-6 credits

ELED 101 - Introduction to Teaching, 1 hour
ELED 200 - Best Practices in Teaching, 2 credits
EPSY 202 - Psychology of Childhood and Adolescence, 3 credits

## Phase II - 8 credits - Admission to BCP I

ELED 250 - Teaching-Learning and Classroom Management, 3 credits
ELED 250L - Teaching-Learning and Classroom Management, 0 credits
ELED 259 - Measurement and Evaluation in the Elementary School, 2 credits
ELED 324 - Emergent Literacy, 3 credits

## Phase III - 18 credits

ELED 392 - The Teaching of Elementary School Social Studies, 3 credits
ELED 394 - The Teaching of Elementary School Mathematics, 3 credits
ELED 397 - Teaching Developmental Reading and Other Language Arts, 3 credits
ELED 398 - Corrective Reading in the Classroom, 3 credits
ELED 400 - Theory to Practice, 3 credits
SCED 393 - Science in the Elementary School, 2 credits
SCED 393L - Science in the Elementary School Laboratory, 1 hour

## Student Teaching - 12 credits

ELED 451 - Supervised Teaching, 6 credits
ELED 453 - Supervised Teaching, 3 credits
ELED 457 - Elementary and Special Education Capstone, 3 credits
Electives and Courses for Additional License Area (12 credits minimum)
Special Education
Reading
Early Childhood
English as a New Language
Middle School Math
Other approved licensed area
Preferred effective term: Fall 2009

# COLLEGE OF EDUCATION: Elementary, Early, and Special Education 

Special Education Major (33 credits minimum)<br>CIP Code: 131001 Major Code: 8545

## Brief Summary:

These changes in the special education program address all areas of this K-12 licensure area. They restructure the sequencing of courses and establish an elementary professional semester prior to student teaching. These changes afford the student early and continuous immersion into school cultures through working with children having diverse educational needs in educational and community settings. Students will graduate with a substantial increase in the number of meaningful and practical field experiences that include elementary and secondary level general education classrooms, special education resource classrooms, and special education selfcontained classrooms.

## Student Learning:

The Special Education program area is recommending making these changes to bring our program in line with the Elementary Education program changes being put forward concurrently. In reviewing data regarding student teachers, the EESE department realized that our students are well prepared technically for teaching. However, some students struggled with dispositions such as "Professional Behavior." As a department, we researched different program models available and developed the Teachers of Tomorrow Advancing Learning (TOTAL) program. Specifically, TOTAL:

- Allows faculty to establish and maintain immediate contact with students interested in special education
- Gives students a sustained semester-long internship in the schools prior to student teaching while working in both general and special education settings (co-teaching in general education classroom with inclusion and mainstreamed students, resource rooms, and self-contained classrooms)
- Provides the opportunity to enhance successful professional dispositions prior to student teaching (working with both general and special education students)
- Affords the opportunity to develop the theory to practice connection prior to student teaching (working with both general and special education students)
- Offers the opportunity to strengthen classroom/behavior management skills as a result of the close relationship between the Intern and the Coaching Teacher(s).


## Proposed Catalog Copy:

## Special Education Major (33 credits minimum)

CIP Code: 131001 Major Code: $\qquad$
The Teachers of Tomorrow Advancing Learning (TOTAL) program affords strong academic preparation and immersion in school cultures through working with children having diverse needs in educational and community settings. Teacher candidates will graduate with a thorough understanding of Best Practices through early field experiences, an internship semester and

The student who desires to be a special education teacher for mild interventions must remain in good standing in the Teacher Education Program and complete the program outlined below which will satisfy requirements for the bachelor of science degree or the bachelor of arts degree, provided the foreign language requirement is fulfilled. The Special Education Program at Indiana State University requires students to complete professional education along with the General Education and additional subject matter requirements for the elementary education major. Satisfactory completion of the program will make the individual eligible for the Initial Practitioner License in the state of Indiana provided that the individual satisfies the test requirements. Upon completion of this program, the holder can be licensed for mild intervention special education at all grade levels and for the general classroom in elementary, primary, and intermediate school settings.
(33 semester credits)
A minimum grade point average of 2.5 is required with no grade less than C. Also see the general education and additional subject matter and professional education for the elementary education major. Special education courses are sequenced and specified to be taken as part of particular phases of the elementary program. The courses listed below are additions to the elementary education program. Students in this program must complete all requirements for the elementary education major along with these additional courses.

## Required Courses:

SPED 102- Introduction to Special Education - 3 credits

## Phase I

(No required Sped courses this phase)

## Teaching-Learning Phase II:

SPED 200 - Students with Mild Intervention Needs - 3 credits
SPED 215 - Behavior Management - 3 credits
SPED 321 - Special Education Law and Procedures - 3 credits

## All Grade Phase:

SPED 315 - Special Education Approaches - Curriculum and Assessment I - 3 credits
SPED 316 - Special Education Approaches - Curriculum and Assessment II - 3 credits
SPED 400 - Secondary School, Community and Family Interactions - 3 credits
CIMT 400 - Teaching III - 3 credits
CIMT 400L - Teaching III Practicum - 1 credit
CIMT 410M - Teaching and Learning in the Middle Schools - 3 credits
Methods and Content Phase III (TOTAL Semester)
(No required Sped courses this phase)

## Student Teaching:

SPED 405 - Supervised Student Teaching in Elementary Education Inclusive Setting and Special Education Resource Setting - Mild Interventions - 3 credits
Preferred effective term: Fall 2009

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

## B.S. Mechanical Engineering Technology (81 credits) CIP Code: 150899 Major Code: D732

## Brief Summary:

This revision is to make the program meet the ABET (TAC) accreditation criteria, Industry Advisory recommendations, and to reflect the change in a required course MET 215. The major requires 83 credit hours instead of 84 . The proposed changes are summarized as follows:

1. MET 409 Senior Project is moved from the technical elective to the required category. ABET requires that the curriculum must include a capstone or some kind of integrating experience.
2. MET 329 Fluid Power Technology is moved from the technical elective to the required category to meet the Industry Advisory recommendation dated 30 April, 2008.
3. Current program waives the requirement of PHYS 106/106L if the students take elective MET 304 Engineering Analysis (Dynamics). In this proposal, MET 304 ( 3 credits) is moved to the required category and PHYS 106/106L (4 credits) is dropped. Note that MET 304 is more important to satisfy the accreditation and is also distance deliverable. The major still requires PHYS 105/105L (4 credits). An F-4 was sent to the Chememistry and Physics Department and they have expressed no reservation.
4. Current program requires MATH 115 and MET 215 Graphic Analysis. MET 215 used to be a higher level mathematics course requiring MATH 115 as pre-requisite. But recently MET 215 has been modified which does not require MATH 115 as pre-requisite, and is almost equivalent to MATH 115 except that it is more applied. Therefore, the students can take MATH 115 or MET 215 instead of taking both.
5. The major requires MATH 123 and MATH 301 in addition to MATH 115 or MET 215. a. Pre-requisite for MATH 123 is MATH 115 or equivalent. Our students will take MATH 115 or MET 215, they will meet the MATH 123 Pre-requisite.
b. Pre-requisite for MATH 301 is MATH 115, 201 or equivalent. Prior to taking MATH 301 our students will take MATH 115 or MET 215 and MATH 123. This will then satisfy the MATH 301 pre-requisite equivalency.
An F-4 was sent to the Math \& CS Dept and they have expressed no reservation.
6. MATH 123 will meet the Basic Studies: Quantitative Literacy requirement.
7. Current program requires 12 credits of electives: 6 credits of technical and 6 credits of management. Since some of the technical electives have been added to the required category and the curriculum already requires MET 404 and MET 405 which are engineering and design management related, the proposed program will require only 9 credits of electives in such a way that a minimum of 3 credits should be taken from each category. An F-4 was sent to the TM Dept and they have expressed no reservation.
8. MET 299 CAD Fundamentals (3 credits) is added in the technical elective list without affecting the required credits.

## Student Learning:

This revision will help toward the accreditation.

## Proposed Catalog Copy:

## B.S. Mechanical Engineering Technology (83 credits**) <br> CIP Code: 150899 Major Code: <br> $\qquad$

Required Courses:
MET: 103-3 credits; 130-2 credits; 203-3 credits; 302-3 credits; 304-3 credits; 306-3 credits; 329-3 credits; 403-3 credits; 404-3 credits; 405-3 credits; 406-3 credits; 408-3 credits; 409-3 credits; 413-3 credits; 430-1 credit
MFG: 370-3 credits; *371-3 credits
ECT: 160-3 credits; 280-3 credits
Mathematics and Computer Science: MATH: 123-3 credits; 301-3 hrs; CS: 151-3 credits MATH 115-3 credits or MET 215-3 credits
CHEM: 100-3 credits and 100L-1hr; PHYS: 105-3 credits and 105L-1 credit
Electives: 9 credits from the following:
Technical Electives: 3-6 credits from MET 299-3 hrs; 337-3 credits; 351-3 credits; 407-3 credits; other course(s) approved by the MET advisor.
Management Electives: 3-6 credits from TMGT: 471-3 credits; 473-3 credits; 478-3 credits;
MGT 301-3 credits
*or equivalent approved by the MET advisor.
**Include 8 credits of Liberal Studies, (CHEM $100 \& 100 \mathrm{~L}$ and PHYS $105 \& 105 \mathrm{~L}$ ), 3 credits of Basic Studies: Quantitative Literacy (MATH 123), and 3 credits of Basic Studies: Information Technology Literacy (CS 151).
Preferred effective term: Fall 2009

## GRADUATE APPROVALS

## PROGRAM REVISIONS

## COLLEGE OF BUSINESS

Master of Business Administration (33 credits minimum)
CIP Code: 520201 Major Code: 6560

## Brief Summary:

Change of MBA degree requirements.

## Student Learning:

Requirement is to have students complete a comprehensive exit exercise to assess learning in the program. Assessment required for AACSB accreditation.

The following item is to be added to MBA degree requirements in catalog: 4. Successful performance on a set of comprehensive exit exercises.

Master of Business Administration (33 credits minimum)
CIP Code: 520201 Major Code:
To qualify for the awarding of a master of business administration degree, the candidate must meet the following requirements in addition to any requirements of the School of Graduate Studies and Indiana State University:

1. Complete all degree program requirements
2. Complete all course work in the degree program with a cumulative grade point average of at least 3.0 on a 4.0 scale
3. Have a grade of C or lower in no more than two courses in his/her degree program
4. Successful performance on a set of comprehensive exit exercises.

## CURRICULA

Program Mission: Individuals who participate in the M.B.A. Program at Indiana State University will receive quality graduate-level preparation for a career as a manager or business professional in an ever-changing environment. The program emphasizes both theory and practice, and develops skills in problem solving, strategic thinking, and the management of organizational change.

The M.B.A. Program at Indiana State University is targeted toward individuals who hold an undergraduate degree, who are early in their business management or professional careers, and who are seeking advanced business knowledge and skills necessary for increased responsibility and career advancement.

## Program General Goals

Problem Solving: Each student will be able to systematically diagnose problems and/or opportunities, especially in business settings, and develop alternative courses of actions to resolve the problems or take advantage of the opportunity.

Strategic Thinking: Each student will have an understanding of long-range/strategic management and will be able to develop, implement, assess, and refine a strategic plan in a business setting.

Organizational Change: Each student will be able to systematically diagnose an organization's environment and operations to identify needed changes and to develop plans to successfully implement those changes in ways that achieve the organization's goal(s).
International/Global: Each student will have an understanding of global influences on business decisions/plans and/or develop plans for managing a business in a global environment.

Workgroup Functioning: Each student will be able to contribute to the success of his/her workgroup by occupying a leadership role and/or as a team member.

The M.B.A. Program includes an introductory course, business tools courses, core courses, a culminating experience, and elective course work. The tools courses generally precede the core courses. The culminating experience is generally taken after all required courses have been completed.

The M.B.A. Program assumes some fundamental knowledge and competencies related to business. Individuals who were undergraduate business majors would most likely have had these as part of their program. For those who were not business majors, the prerequisite knowledge and competencies can be met in a variety of ways including, for-credit classes, self-study and testing out, or special programs offered by the College of Business. The prerequisite areas that must be satisfied are: accounting-financial, finance, statistics, economics (micro and macro in one combined course or a combination of two), and U.S. business law. In addition, for those who were not business majors, the following two areas are strongly recommended: marketing and production and operation management.

Each individual admitted to the program will have his/her academic record evaluated by the M.B.A. director to determine which prerequisites should be met. If the prerequisites are satisfied by undergraduate course work, the work generally should have been taken within the five years preceding the program.

## Introductory Course (3 credits):

- MBA 610 - Advanced Management Practices 3 credits


## Business Tools ( 9 credits):

- MBA 612 - Quantitative Problem Solving 3 credits
- MBA 613 - Management Accounting 3 credits
- MBA 614 - Management Information Systems 3 credits


## Core Courses (12 credits):

- MBA 621 - Managing the Strategic Workforce 3 credits
- MBA 622 - Strategic Financial Decisions 3 credits
- MBA 623 - Strategic Supply Chain and Operating Decisions 3 credits
- MBA 624 - Strategic Marketing Management 3 credits

Culminating Experience ( $\mathbf{3}$ credits):

- MBA 690 - Dynamic Strategy: An Integrated Approach 3 credits


## Electives:

## Non-Concentration Option (two courses, 6 credits):

In addition to the required courses, students take an international business course and one
elective course.

## Concentration Option (three courses, 9 credits):

In addition to the required courses, students take three courses in the same functional or disciplinary area. This increases the program length to a minimum of 36 credits. All electives are subject to approval by the M.B.A. director. No more than 3 credits of electives may be taken outside the College of Business.

## International Requirement:

Each M.B.A. student will, at some point in his/her program, have significant exposure to global business. This requirement can be met by an international business course, a study abroad opportunity, an international business internship, work done as part of a graduate assistantship, or by taking courses designated as containing appropriate international study. Other options are possible. Students with substantial, professional-level full-time work experience (generally understood to be in excess of five years) in two or more countries can apply to the M.B.A. director for a waiver of the international experience requirement.

## NOTE:

Courses in the 500 series are open to undergraduates as $* 400$ series. Graduate students are required to do additional work of a research nature. A course taken at the 400 level may not be repeated at the 500 level.
Preferred effective term: Fall 2009

## CORRECTIONS

The effective term for the following course should be Summer I, 2009 and not Fall as previously published in Academic Notes of April 6, 2009. The correct term is displayed in italics and bold font.

## COURSE REACTIVATION

## COLLEGE OF EDUCATION: Elementary, Early, and Special Education

## ELED 580 - Introduction to Reading

3 credits
Exploration of the field of developmental reading as an area of study. The course is designed to acquaint students with the breadth of concerns of the elementary and middle school reading teachers.
Preferred effective term: Summer I 2009

## COLLEGE OF ARTS AND SCIENCES: Geography, Geology, and Anthropology

## GEOL 682 - Paleoceanography

3 credits
Seminar-based course discussing recent research on ancient oceans. Topics include microfossil and geochemical techniques used to assess environmental change, applications of paleoceanographic information for interpretations of ancient climate change, ocean changes through time, and case studies of selected ocean environments.
A-F Grading
Preferred effective term: Fall 2009

## GEOL 690 - Advanced Topics in Earth and Quaternary Sciences

## 3 credits

The study of selected topics in Earth and Quaternary science will be discussed. Examples include modern day global change in the context of Quaternary climate variability, humans as agents of change, and the impact of environmental pressures on ecosystems and organisms. A-F Grading
Preferred effective term: Fall 2009

