Academic Notes

October 5, 2009 **AN 2009-2010**

ANNOUNCEMENT

SCIENCE EDUCATION

Under the current licensure rules students cannot be licensed under the physical science concentration. Students should choose either a physics or chemistry concentration instead.

DARS for Science Education now reflects this change in licensure at the state level.

ACADEMIC NOTES PUBLICATION SCHEDULE FOR FALL 2009

Below is the circulation schedule for the electronic copy of *Academic Notes* through December 14, 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://www.indstate.edu/academicaffairs/academic_notes.htm

ACADEMIC NOTES PUBLICATION SCHEDULE FOR FALL 2009

Deadline for Items	Issue Date
October 7	October 12
October 14	October 19
October 21	October 26
October 28	November 2
November 4	November 9
November 11	November 16
November 18	November 23
November 25	November 30
December 2	December 7
December 9	December 14

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.

CURRICULUM

INDEX

GRADUATE PROPOSALS

COLLEGE OF EDUCATION: Elementary, Early, and Special Education

SPED 685 - Grant Development and Program Evaluation
3 credits
This course provides students with the necessary skills to develop and submit grants to state agencies, federal agencies, and private foundations, and to evaluate existing or proposed programs in special education.

Change description to:

SPED 685 - Grant Development and Program Evaluation
3 credits
This course provides students with the necessary skills to develop and submit grants to state agencies, federal agencies, and private foundations, and to evaluate existing or proposed programs.
Preferred effective term: Spring 2010

UNDERGRADUATE APPROVALS

PROGRAM REVISIONS

COLLEGE OF ARTS AND SCIENCES: Chemistry and Physics

Physics Major (62-65 credits)
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 (61-66 credits)
CIP Code: 400801 Major Code: _____

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:

Professional Physics Concentration (23-26 semester credits)

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 (21-24 semester credits)

Chemical physics focuses on areas where the techniques of chemistry and physics are brought together for the study of atoms 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

Engineering Physics Concentration (21-24 credits)

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 2010

CORRECTIONS

COLLEGE OF NURSING, HEALTH, AND HUMAN SERVICES: Health, Safety, and Environmental Health Sciences

The health sciences major program changes were published as approved on September 21, 2009. The addition of total credits 64-73 was incorrect. The correct number of credits is reflected in italics.

Health Sciences Major (*60-73 credits)*
CIP Code: 511504 Major Code: _____