



Academic Notes

March 9, 2009

AN 2008-2009

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**

<u>Deadline for Items</u>	<u>Issue Date</u>
March 11	March 16
March 18	March 23
March 25	March 30
April 1	April 6
April 8	April 13
April 15	April 20
April 22	April 27
April 29	May 4
May 6	May 11

THESES, DISSERTATIONS, AND RESEARCH PROJECTS

COLLEGE OF ARTS AND SCIENCES: Biology

Maria Thaker will defend her dissertation entitled *Hormonal Mediation of Alternative Strategies: Integrating Antipredator Responses, Polymorphism and Learning*, on Monday, March 16, 2009, at 4:00 p.m., in Science Building, room 205. Member of her committee are: Dr. Diana Hews, Chairperson; Dr. Mike Angilletta, Dr. Steve Lima, Dr. Bill Mitchell, and Dr. Brad Brubaker.

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

Jing Han will defend her thesis entitled *Object-Oriented Building Extraction and Three-Dimensional Representation of Building Temperatures in Indianapolis, U.S.A.* on Thursday, March 19, 2009, 2:00-4:00 p.m., in Science Building, room 110. Members of her committee are: Dr. Qihao Weng, Chairperson; Dr. Paul Mausel and Dr. Brian Ceh.

Steve Hardin will defend his thesis entitled *An Exploratory Analysis of the Relationship between Teleconnections and Selected Pollution Parameters*, on Wednesday, March 18, 2009, at 10:00 a.m., in the Science Building, room 112. Members of his committee are: Dr. Gregory D. Bierly, Chairperson; Dr. Jay D. Gatrell and Dr. Ryan R. Jensen.

COLLEGE OF EDUCATION: Curriculum, Instruction, and Media Technology

Hui-kuei Hsieh will defend her dissertation entitled *The Impact of Interactive Multimedia Kits and Websites on Self-directed Learning in Chinese Pronunciation and Tones*, on Thursday, March 19, 2009, at 8:00 a.m., in the College of Education, room 1010. Members of her committee are: Dr. Susan Kiger, Chairperson; Dr. Susan Powers and Dr. Karen Liu.

COLLEGE OF TECHNOLOGY: Ph.D. Technology Management

Randy Hancock will defend his dissertation entitled *Technology Assessment for Spaceship Two, Space Tourism, and Private Spaceflight*, on Tuesday, March 24, 2009, at 9:00 a.m., in the Myers Technology Center, room 111. Members of his committee are: Dr. Donna Trautman, Bowling Green State University and Dr. Anthony F. Gilberti, Fairmont State University, Co-Chairpersons; Dr. David P. Beach, Indiana State University; Dr. Chi Yeh, NASA Kennedy Space Center; and Dr. Vincent Childress, North Carolina A & T State University.

Samuel L. Rohr will defend his dissertation entitled *Improving Student Retention of Future Members of the Science, Business, and Technology Workforce*, on Friday, March 20, 2009, at 9:00 a.m., in the Myers Technology Center, room 111. Members of his committee are: Dr. George Maughan, Indiana State University and Dr. Anthony F. Gilberti, Fairmont State University, Co-Chairpersons; Dr. David P. Beach and Dr. Marion Schafer, Indiana State University; and Dr. Vincent Childress, North Carolina A & T State University.

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.

CURRICULUM

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UNDERGRADUATE APPROVALS

PROGRAM REVISIONS

COLLEGE OF ARTS AND SCIENCES: Science Education

Science Education Major (Dual Field) (56-64 semester hours)

CIP Code: 131316 Major Code: 3822

Brief Summary:

The Science Education Major as it currently exists is outdated, confusing, and not actually possible to complete without the granting of petitions. The Science Education Advisory Committee and the Coordinator for Science Education have made changes to the science education program to make it more streamlined, comprehensible to students and advisors, and to better prepare students to meet the challenges they face as science educators in the twenty-first century.

The biggest change centers around the addition of an extensive core of science classes from all of the science disciplines that are licensable in the State of Indiana and the selection of at least one concentration. The science core will enable our students to make an informed decision concerning their concentration, will prepare them in all the areas they need to teach science at the middle school level, and will help them see the connections among the various science disciplines.

The selection of a concentration will provide our students with a greater depth of knowledge in at least one of the sciences and will enable them to become licensed to teach in that concentration at the high school level. This differs from the current program in that they would only be required to select one area. Under the current program, students must select two areas which makes for an extremely large number of credit hours to be completed. We believe that it is in students' interest to select more than one area, particularly if they intend to teach at a smaller, rural high school, and we would encourage this through advising. The existence of the science core will make it easier for students to both select a concentration and to possibly select more than one concentration.

Under current licensure guidelines (Rules 2002), only one area of concentration is needed for Science Education Licensure.

Student Learning:

Students are unable to complete the current Science Education Major in a timely fashion and all need curriculum petitions in order to graduate. In most cases, the new program reduces the number of required credit hours for the major and we hope this will lead to increased student graduation rates and an increase in the numbers of licensed secondary science teachers.

To revise the program, the Science Education Advisory Committee examined the Indiana Academic Standards for Science in order to determine the content necessary for our students to be able to competently teach science in secondary schools. We also examined the licensing standards for science teachers to ensure that the revisions were consistent with state guidelines on the preparation of secondary science teachers. These changes will allow for a more coherent science education program, will provide students with a reasonable background in all of the science content areas, and will allow us to more consistently assess science education students for licensure.

Proposed Catalog Copy:

Science Education Major (51-62 credits)

CIP Code: 131316 Major Code: _____

The science education major is an interdisciplinary program. This program contains three components: the science core area, a concentration (in biology, chemistry, earth space science, or physics), and professional education courses. Students who complete the science education major will have satisfied the Basic Studies requirement in Quantitative literacy and the Liberal Studies requirement in Scientific and Mathematical Studies.

Core Science Requirements (36-38 semester credits):

BIO 101--Principles of Biology I 3 credits
BIO 101L--Principles of Biology I Lab 1 credit
BIO 102--Principles of Biology II 3 credits
BIO 102L--Principles of Biology II Lab 1 credit
CHEM 105--General Chemistry I 3 credits
CHEM 105L General Chemistry I Lab 1 credit
CHEM 106--General Chemistry II 3 credits
CHEM 106L--General Chemistry II Lab 1 credit
GEOG 111--The Physical Environment 3 credits
GEOG 111L--The Physical Environment Lab 1 credit

GEOL 160--Introduction to Earth and Sky Sciences 3 credits
GEOL 160L--Introduction to Earth and Sky Sciences Lab 1 credit
or
GEOL 170--Physical Geology 3 credits
GEOL 170L--Physical Geology Lab 1 credit

MATH 131--Calculus I 4 credits

PHYS 105--General Physics I 3 credits
PHYS 105L--General Physics I Lab 1 credit
or
PHYS 205--University Physics I 4 credits
PHYS 205L--University Physics I Lab 1 credit

PHYS 106--General Physics II 3 credits
PHYS 106L--General Physics II Lab 1 credit
or
PHYS 206--University Physics II 4 credits
PHYS 206L--University Physics II Lab 1 credit

Science Education Concentrations (15 - 24 semester credits):

All students in the science education program must complete the core science courses and at least one concentration in biology, chemistry, earth space science, or physics.

Biology Concentration (24 semester hours)

Required Biological Sciences (16 hours):

BIO 330—General Physiology 3 hours
BIO 330L—General Physiology Laboratory 1 hour
BIO 350—Ecology and Evolution 3 hours
BIO 350L—Ecology and Evolution Laboratory 1 hour
BIO 374—Cellular and Microbial Biology 3 hours
BIO 374L—Cellular and Microbial Biology Laboratory 1 hour

BIO 380—Genetics 3 hours
BIO 380L—Genetics Laboratory 1 hour

Prerequisites for Required Biology courses (8 hours):

CHEM 351—Organic Chemistry I 3 hours
CHEM 351L—Organic Chemistry I Laboratory 1 hour
CHEM 352—Organic Chemistry II 3 hours
CHEM 352L—Organic Chemistry II Laboratory 1 hour

Chemistry Concentration (16 semester hours)

Required Chemistry (16 hours):

CHEM 321—Analytical Chemistry 4 hours
CHEM 351—Organic Chemistry I 3 hours
CHEM 351L—Organic Chemistry I Laboratory 1 hour
CHEM 352—Organic Chemistry II 3 hours
CHEM 352L—Organic Chemistry II Laboratory 1 hour
CHEM 465—Survey of Physical Chemistry 4 hours

Earth Space Science Concentration (15 semester hours)

Required Courses (15 hours):

GEOG 316—Weather and Climate 3 hours
GEOG 411—Conservation of Natural Resources 3 hours
GEOL 270—Historical Geology 3 hours
GEOL 360—General Astronomy 3 hours
GEOL 361—Oceanography 3 hours

Physics Concentration (18 semester hours)

Required Physics Courses (14 hours):

PHYS 215—Modern Physics I 3 hours
PHYS 215L—Modern Physics I Laboratory 1 hour
PHYS 216—Modern Physics II 3 hours
PHYS 216L—Modern Physics II Laboratory 1 hour
PHYS 310—Analytical Mechanics 3 hours
PHYS 341—Electricity and Magnetism 3 hours

Required Mathematics Courses (4 hours):

MATH 132—Calculus II 4 hours

Students pursuing the Science Education major must also fulfill the requirements of the Teacher Education Program, listed below.

Professional Education Courses taught in the College of Arts and Sciences (5 semester credits):

SCED 396L--The Teaching of Science in the Junior High/Middle School 2 credits

SCED 398L--The Teaching of Science in High School 2 credits
SCED 402--Teaching an Integrated Unit in Science 1 credit

Professional Education Courses taught in the College of Education (30 credits):

CIMT 301—Teaching I 3 credits
CIMT 302—Teaching II 3 credits
CIMT 400—Teaching III 3 credits
CIMT 400L—Teaching Practicum 1 credit
CIMT 401—Student Teaching 11 credits
ESPY 202—Psychology of Children and Adolescents 3 credits
ESPY 341—Education in a Multicultural Society 3 credits
SPED 226—The Exceptional Learner in the Regular Classroom 3 credits
Preferred effective term: Fall 2009

PROGRAM ELIMINATIONS

COLLEGE OF ARTS AND SCIENCES: Biology

Biology Major Area (56-57 credits)
CIP Code: 260101 Major Code: 2635
Preferred effective term: Fall 2009

Biology Minor Area (24 credits)
CIP Code: 260101 Major Code: 2635
Preferred effective term: Fall 2009

COLLEGE OF ARTS AND SCIENCES: Chemistry and Physics

Chemistry Major Area (44 credits)
CIP Code: 400501 Major Code: 1423
Preferred effective term: Fall 2009

Chemistry Minor Area (24 credits)
CIP Code: 400501 Major Code: 1423
Preferred effective term: Fall 2009

Physics Teaching Major Area (40 credits)
CIP Code: 400801 Major Code: 3523
Preferred effective term: Fall 2009

Physics Teaching Minor (32 credits)
CIP Code: 400801 Major Code: 3523
Preferred effective term: Fall 2009

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

Earth Space Science Teaching Major Area (34 credits)

CIP Code: 450701 Major Code: 2125

Preferred effective term: Fall 2009

Earth Space Science Teaching Minor Area (15 credits)

CIP Code 450701 Major Code: 2125

Preferred effective term: Fall 2009

GRADUATE APPROVALS

COURSE REVISIONS

COLLEGE OF ARTS AND SCIENCES: History

HIST 539 -A-C - Women in History

3 credits

An in-depth examination of women's history in the United States (A), Europe (B), or the Wider World (C) with particular attention to their status and roles in different historical periods and cultures, and to cultural constructions of femininity.

Note: May be taken three times for credit towards the major or minor when topics are different.

Change description and repeatable to:

HIST 539 A-C Women in History

3 credits

An in-depth examination of women's history in the United States (A), Europe (B), or the Wider World (C) with particular attention to their status and roles in different historical periods and cultures, and to cultural constructions of gender.

Repeatable: Up to 9 credits with different topic.

A-F Grading

Preferred effective term: Fall 2009

PROGRAM REVISIONS

COLLEGE OF ARTS AND SCIENCES: Psychology

M.A./M.S. General Psychology (32 credits minimum)

CIP Code: 420101 Major Code: 3769

Brief Summary:

The Doctor of Psychology program has, for a number of years, had the policy that any student earning two C+ grades in any required course will be expelled from the program. The General Psychology faculty voted to adopt the same policy for their Masters program.

Also, to address a banked course in the program, the department would like to remove the choice of PSY 601 and instruct the students to take PSY 602.

Proposed Catalog Copy:

M.A./M.S. General Psychology (32 credits minimum)

CIP Code: 420101 Major Code: _____

Any required course in which a grade lower than a B- is received must be repeated and any elective course in which a grade lower than a B- is received cannot be counted toward the 32 hours required for graduation. Students who receive two grades of C+ or lower will be expelled from the Program.

Master of Arts or Master of Science (32 credits minimum)

Research:

PSY 604 - Advanced Statistics credits: 3

PSY 602 - Proseminar: Theoretical and Methodological Foundations of Psychology credits: 3

Choose one of the following:

PSY 690J 1-hr

PSY 615 - History and Foundations of Clinical Psychology credits: 1

(to be taken during the fall term of a student's first year)

Note: A student is expected to engage actively in empirical research from the time of first enrollment, although initial investigations might not be work originating with the student.

Major:

25 additional hours of course work, including the culminating experience, must be taken. A minimum of 19 hours must be taken within the department. Up to 6 hours of course work outside the department may count toward the 25 hours. At least 6 hours (two courses) must be earned from among the following courses:

PSY 521 - History and Systems of Psychology credits: 2

PSY 603 - Proseminar: Learning and Cognition credits: 3

PSY 607 - Proseminar: Social Bases of Individual Behavior credits: 3

PSY 608 - Proseminar: Biopsychology credits: 3

Note: If the student has never had a course in learning or cognition, 603 must be one of the choices. The student's program will be determined in consultation with a departmental advisor. Later, each student will select a supervisor for the culminating experience (698 or 699), who may or may not be the initial advisor. If the latter, the supervisor will become the student's advisor.

Culminating Experience:

Candidates for the M.A.:

PSY 699 - Master's Thesis credits: 6

Note: For completion of a research thesis under the direction of a three-person committee headed by a primary supervisor.

Candidates for the M.S.:

PSY 698 - Individual Study in Psychology credits: 1-3

Note: The exact nature of the project will be determined in consultation with the project supervisor.

Candidates for the Psy.D. Program:

May complete and document portfolios that demonstrate basic research and practice competencies established by the department.

Preferred effective term: Fall 2009

COLLEGE OF ARTS AND SCIENCES: Psychology

Doctor of Psychology – Clinical Psychology (96 credits minimum)

CIP Code: 420101 Major Code: 3768

Brief Summary:

The Psy D. program has, for a number of years, had the policy that any student earning two C+ grades in any required course will be expelled from the program. The program would like to formalize this in their curriculum.

Proposed Catalog Copy:

Doctor of Psychology – Clinical Psychology (96 credits minimum)

CIP Code: 420101 Major Code: _____

The program typically requires four years of full-time study on campus plus a one-year clinical internship. A minimum of 96 credits of graduate study is required, distributed across the following areas of course work: psychology core, clinical/professional, electives, and dissertation. A 500-hour clinical placement and a full year of clinical internship or the equivalent is also a requirement for graduation. A list of the specific courses included among these requirements may be obtained from the department.

Any required course in which a grade lower than a B- is received must be repeated and any elective course in which a grade lower than a B- is received cannot be counted toward the 96 credits required for graduation. Students who receive two grades of C+ or lower will be expelled from the program.

There is no specific area of concentration requirement, but the student, in consultation with

his/her doctoral committee, may select an appropriate area of concentration from course work within and outside the department.

Preferred effective term: Fall 2009