

# Department of Earth & Atmospheric Sciences Curriculum for Earth/Space Science Teaching Major

(Grades 5-12)

March 8, 2006

NEW 2006

- 1<sup>st</sup> Semester
- (4) ENGL 106 Fr Composition
  - (3) EAS 109\* The Dynamic Earth
  - (5) MA 161 Plane Analytic Geometry & Calculus I
  - (4) CHM 115<sup>a</sup> General Chemistry

16 Total Credits

- 3<sup>rd</sup> Semester
- (4) PHYS 172<sup>b</sup> Modern Mechanics
  - (3) EAS 243\* Earth Materials
  - (4) MA 261 Multivariate Calculus

BLOCK I--Theory into Practice (courses taken together)

- (3) EDCI 205 Exploring Teaching as a Career
  - (3) EDCI 285 Multiculturalism & Education
- 17 Total Credits

- 5<sup>th</sup> Semester
- (3) EAS 3xx (Surface Processes)\*
  - (3) xxx xxx STAT or CS course\*
  - (3) xxx xxx Language & Culture
  - (3) xxx 3xx Great Issues
  - (1) SCI 130C\* (Teamwork Module)
  - (1) SCI 130B\* (Technical Writing Module)
  - (1) SCI 130A\* (Tech Presentation Module)
- 15 Total Credits

- 2<sup>nd</sup> Semester
- (4) CHM 116<sup>a</sup> General Chemistry
  - (3) xxx xxx Liberal Arts Elective
  - (3) EAS 118\* Intro to Earth Science
  - (1) EAS 1xx\* Fr Seminar in Earth & Atms Science
  - (5) MA 162 Plane Analytic Geometry & Calculus II
- 16 Total Credits

- 4<sup>th</sup> Semester
- (3) PHYS 241<sup>b</sup> Electricity and Optics
  - (1) PHYS 252<sup>b</sup> Electricity & Optics Lab
  - (3) EAS 3xx (Earth History)\*
  - (4) MA 262 Linear Algebra & Differential Equations

BLOCK II--Theory into Practice (courses taken together)

- (3) EDPS 235<sup>c</sup> Learning & Motivation
  - (3) EDPS 265 The Inclusive Classroom
- 17 Total Credits

- 6<sup>th</sup> Semester
- (3) EAS 3xx (Plate Tectonics)\*
  - (3) EAS/ASTR+ (Select from + below)
  - (3) XXX 3xx Liberal Arts Elective
  - (3) xxx xxx Language & Culture
  - (2) EDCI 270 Intro to Educ. & Computing
  - (3) EDST 200 History & Philosophy of Education
- 16 Total Credits

Summer Session or Maymester  
(4) EAS 490\* (Geology Field Experience)

- 7<sup>th</sup> Semester
- (3) EDCI 424 Teaching of Earth/Physical Science
  - (3) xxx xxx Liberal Arts Elective
  - (3) xxx xxx Language & Culture
  - (3) EAS/ASTR+ (Select from + below)
  - (3) xxx xxx Multidisciplinary Science course
- 15

- 8<sup>th</sup> Semester
- (2) EDCI 428<sup>d</sup> Teaching Science in the Middle and Junior High School
  - (10) EDCI 498<sup>e</sup> Supervised Teaching of Secondary School Subjects
- 12 Total Credits

+ Select 2 courses from the following: EAS 104, 105, 115, 116, 120, 138, 221, 225; ASTR 263, 264 (List to be updated)

\*Core course required by Department of Earth & Atmospheric Sciences

<sup>a</sup> CHM 111 and 112 may be substituted for CHM 115 and 116

<sup>b</sup> PHYS 220 and 221 may be substituted for PHYS 172 and 241 + 252

<sup>c</sup> Also fulfills College of Science Liberal Arts requirement

<sup>d</sup> Six-week course; <sup>e</sup> Student teaching

Total Credits = 128

## **EARTH/SPACE SCIENCE TEACHING MAJOR**

### **Recommended Courses (to meet Liberal Arts Electives and State requirements)**

(3) EDPS 235

(3) PSY 120

Select one course from the following list:

HIST 152, A&D 255, MUS 250, POL 101, PHIL 110

### Core Electives

Programming Electives: CS 159, CS 177.

Statistics Electives: STAT 301, 503, 511; EAS xxx ( to be developed).

### **Requirements for Entry into Upper Division in Earth Space Science Teaching for Students Beginning Fall 2006**

A student pursuing a major in earth space science teaching must satisfy the following requirements before being permitted to enter the upper division.

1. Completion of MA 161, MA 162, CHM 115 (or 111), 116 (or 112); and PHYS 152, 172 (or 220), or equivalents  
each with a grade of C or better, and
2. Completion of required lower-division courses in the student's major area, each with a grade of C or better.

For the application of these requirements, entry into the upper division is defined as registration for the semester that includes EAS 3xx.

### Graduation Requirement

To graduate in any EAS major, a student must have an average grade point index of 2.00 or above in EAS courses required for the major. This requirement applies to students who enroll in their EAS major after the Fall 2001 semester.

The University requires that at least 32 credits hours must be at the 300 level or above.

See <http://www.education.purdue.edu/oppl/> for additional requirements for licensing.