BSE REQUIREMENTS: LIFE/EARTH SCIENCE CONCENTRATION

**I. REQUIRED “MAJOR” COURSES**

REQUARED BIOLOGY COURSES (20 hrs):

- **_BIOL 1440** Biology I *#*
- **_BIOL 1441** Biology II *
- **_BIOL 2490** Genetics *
- **_BIOL 3403** Ecology
- **_BIOL 4415** Evolution

BIOLOGY ELECTIVES (8 hours from the following)

One of the following courses:

- **_BIOL 4401** Invertebrate Zoology
-OR-
- **_BIOL 3410** Vertebrate Zoology
-AND-

One of the following courses:

- **_BIOL 4404** Plant Taxonomy
-OR-
- **_BIOL 4470** Biology Seed Plants

EARTH SCIENCE (11 hours)

- **_PHYS 1401** Descriptive Astronomy
- **_SCI 3410** Earth Science
- **_GEOG 1305** Principles of Geography**

**II. REQUIRED EDUCATION COURSES**

- **_EDUC 1300** Education as a Profession
- **_EDUC 1240** Basic Educational Technology Skills***
- **_MSIT 3310** Development and Learning
- **_EDUC 3309** Cultural Perspectives: Family, School, Community Partnerships

Admission to teacher education required for the following professional education courses:

- **_EDUC 3321** Intro Strategies for Students with Diverse Learning Needs
- **_EDUC 4210** Integration of Technology
- **_MSIT 4305** Classroom management
- **_MSIT 4321** Curriculum Planning & Assessment
- **_MSIT 4325** Literacy Development
- **_SCI 4190** Internship I
- **_SCI 4400** Secondary Science Methods
- **_SCI 4680/4681** Internship II

**III. REQUIRED SUPPORTING COURSES**

CHEMISTRY (12 hrs)

- **_CHEM 1450** College Chemistry I*
- **_CHEM 1451** College Chemistry II*
- **_CHEM 2401** Organic Chemistry I

PHYSICS (8 hrs)

- **_PHYS 1410** College Physics I*
- **_PHYS 1420** College Physics II

MATHEMATICS (6-8 hrs)

Option A Recommended

- **_MATH 1580** Algebra and Trigonometry*
- **_MATH 2311** Statistical Methods I
-OR-

Option B

- **_MATH 1390** College Algebra*
- **_MATH 2311** Statistical Methods I

Graduation Requirements for the B.S. with a concentration in Life/Earth Science requires successful completion of a minimum of 133 hours, which must include 40 hours of upper division (3000-4000 level) and the General Education requirements outlined on the opposite side.

**Teacher Licensure**: A student with a B.S. degree in Biology who is interested in obtaining teaching licensure in Life science/earth science should contact the science education advisor in the Department of Biology (450-3146) or the Chair of the Department of Middle/Secondary Education and Instructional Technologies at (450-3177).

# If composite ACT is below 21, then BIOL 1440 with a C or better AND CHEM 1301 OR CHEM 1450 with a C or better is a prerequisite for enrollment in BIOL 1440.

* A “C” or better grade is or may be required for advancement to subsequent courses.

** Also a General Education Requirement

*** Only required if the competency exam is not passed

**NOTE**: A 2.5 GPA minimum must be maintained both cumulatively and in all “major” courses. Additionally, students must earn a “C” or higher in all “major” courses. These requirements must be met before students can participate in Internship II: SCI 4680 and SCI 4681.