### General Studies

Shall include courses and/or experiences in the humanities, social studies, mathematics, and science.

**Humanities:**
- **EH 101** English Composition I 3
- **EH 102** English Composition II 3
- **CMST 101** Public Speaking 3
- *Literature (See AGSC List)* 3
- **Humanities/Fine Arts (See AGSC List)** 3
- **Fine Arts (See AGSC List)** 3

**Social Science:**
- *History (See AGSC List)* 3
- **PY 101 Introduction to Psychology** 3
- **Non-History Social Science (See AGSC List)** 3
- **Any Course in Area IV (See AGSC List)** 3

*Students must take a two-course sequence in Literature or History.

**Science:**
- **Natural Sciences (lab required with each course)**
  - **BY 123 Intro to Biology I & Lab** 4
  - **BY 124 Intro to Biology II & Lab** 4

**Mathematics:**
- **MA 125 Calculus I** 4

**Other:**
- **HPE 200 Quality of Life** 2
- **CH 115/116 General Chemistry I & Lab** 4
- **CH 117/118 General Chemistry II & Lab** 4
- **A Physics sequence**
  - **PH 201-202 College Physics I & II & Labs** OR
  - **PH 221-222 General Physics I & II & Labs** 8
- **ES 101/102 Physical Geology & Lab** 4
- **An Astronomy course & lab** 4
- **AST 101/111 Astronomy of the Universe & Lab** OR
- **AST 102/112 Astronomy of Stellar Systems & Lab OR**
- **AST 103/113 Astronomy of Solar Systems & Lab**

### Professional Studies

**These courses must be taken prior to admission to TEP.**
- **EDU 200 Education as a Profession** 3
- **ECY 300 Survey of Special Education** 3
- **EDF 362 Foundations of Education I** 3
- **EPR 363 Foundations of Education II** 3
- **EHS 401 Secondary Education Curriculum** 3

**These courses require admission to TEP before they can be taken.**
- **EDR 442 Reading in Content Areas** 3
- **EHS 456 Classroom Management in Secondary Schools** 3
- **EHS 467 Secondary Science Methods** 3
- **EHS 497 Special Problems in Education: Diversity** 3
- **EPR 410 Intro to Measurement and Evaluation** 3

**Internship:**
- **Students must take EHS 489 and EHS 490 in the same term.**
- **EHS 490 Internship** 6
- **EHS 489 Internship Seminar in Secondary Education** 3

### Teaching Field

Must include at least 32 semester hours in the teaching field with a minimum of 19 hours at the upper division level. (List all courses required for the teaching field.)

- **CH 235/CH236 Organic Chemistry I & Lab** 4
- **CH 237/CH238 Organic Chemistry II & Lab** 4

See attached additional requirements on page 2.

**Dean of Education:**

**Date:** May 8, 2014
Class B General Science Program Checklist
Teaching Field Courses

NOTE: This General Science program has a concentration in Biology built into it. Biology Majors must complete 40 hours in Biology (BY) courses approved for the major including BY123 and BY 124 and 32 more hours from the courses taken to satisfy the requirements listed below. At least 9 hours must be 400-level or higher. For teacher certification purposes, at least 19 hours must be at the 300-400 level.

Courses already counted in the Core Area III BY 123 and BY 124 8 hours

Other Required Biology Courses 32 hours

BY 210 Genetics 3

One Course from EACH of the Following Areas

Ecology/Evolution (One Course) 3-4
BY 407 Microbial Ecology (3 hours)
BY 429 Intro to Evolutionary Process (3 hours)
**BY 430 Evolution- Capstone Experience (3 hours)
BY 435 Natural History of Vertebrates & Lab (4 hours)
BY 467 Population Ecology (3 hours)
BY 470 Ecology (3 hours)
BY 474 Chemical Ecology (3 hours)

Organismal Biology (One Course) 4
BY 255 Invertebrate Zoology (4 Hours)
BY 256 Vertebrate Zoology (4 Hours)
BY 260 Botany 4 (4 Hours)
BY 271 Biology Microorganisms & Lab (4 hours)
BY 442 Experimental Phycology (4 hours)

Physiology/Development (One Course) 3-4
BY 314 Embryology (3 hours)
BY 405 Microbial Physiology (3 hours)
**BY 408 Principles of Human Physiology- Capstone Experience (4 hrs)
BY 409 Principles of Human Physiology & Lab (4 hours)
BY 410 Comparative Animal Physiology (3 hours)
BY 450 Plant Physiology (4 hours)

Cellular/Molecular (One Course) 3
BY 311 Molecular Genetics (3 hours)
By 330 Cell Biology (3 hours)

Biology Electives as Approved by Advisor 14-16

Additional biology courses to total 40 hours. These courses may be chosen from the courses that are listed above or other selected biology courses from the course catalog except BY 101, 102, 107, 111, 112, 116, or 261. These courses will not count toward the biology electives. Students entering Fall 2010 or later must complete a Major Fields Test and Capstone course- BY 408, BY 430, BY 494 (Undergraduate Research), or BY 497 (Honors Research) for graduation.

**Students seeking a major in Biology should consult with an advisor in the College of Arts and Sciences to insure that they meet the current major requirements from the Department of Biology.