Department of Secondary Education

The following programs are housed in the Department of Secondary Education:
- English Education
- Foreign Language Education
- Mathematics Education
- Science Education
- Social Science Education

The undergraduate programs offered by the department are designed to prepare students to meet Florida teacher certification requirements and to become highly competent secondary teachers. Specialized courses in the teaching of mathematics, science, and social science are also offered for students majoring in elementary, early childhood, and special education.

© SCIENCE EDUCATION

Requirements for the B.S. Degree (BSB, BSC, BSY): In addition to the courses listed below, students must complete "Preliminary Requirements for Students Entering Teacher Education Programs."

Prerequisites (State Mandated Common Prerequisites) for all Tracks: These prerequisites must be met by transfer students as well as USF students. A grade of "C" is the minimum acceptable grade.
- EDF X005 Introduction to Education 3
- EDG 2701 Teaching Diverse Populations 3
- EME 2040 Introduction to Educational Technology* 3
*equivalent course or demonstrated competency may be substituted

For Biology Teacher Education -
- Biology with Lab 8
- Chemistry with Lab or Physics with Lab 8
- Electives in Science 6

For ChemistryTeacher Education -
- Chemistry with Lab 8
- Biology with Lab or Physics with Lab 8
- Electives in Science 6

For Physics Teacher Education -
- Physics with Lab 8
- Biology with Lab or Chemistry with Lab 8
- Electives in Science 6

In addition to EDG 2701, lower division courses must include 6 credit hours with an international or diversity focus (see list of approved courses under "Preliminary Requirements for Students Entering Teacher Education Programs" on the first page of the College of Education section). Professional education courses taken at the community college will transfer as general electives.

Professional Education Core for all Tracks (29 cr. hrs.): The required courses in the professional education core are as follows:
- EDF 3214 Human Development and Learning 3
- EDF 3604 Social Foundations of Education (Exit) 3
- EDF 4620 Curriculum and Instruction 3
- EDF 4430 Measurement for Teachers 3
- EEX 4070 Integrating Exceptional Students in the Regular Classroom 2
- FLE 4365 ESOL Competencies and Strategies 3
- SSE 4940 Internship: Science Education 10
- SSE 4936 Senior Seminar in Science Education 1-2

Required Courses for All Science Education Majors (15 cr. hrs.):
- SCE 4237 Science, Technology, Society (Exit) 4

SCE 4305 Communication Skills in Science 3
SCE 4320 Teaching Middle Grade Science 3
SCE 4330 Teaching Methods in Secondary School Science 3

Areas of Specialization
(Divided into 3 Tracks Below)

Biology Education
Prerequisites (19 cr. hrs.):
- BSC 2010* Biology I with lab 4
- BSC 2011* Biology II with lab 4
- CHM 2045* General Chemistry I with lab 4
- PHY 2053* General Physics I with lab 4
One of the following:
- BSC 2085* Human Anatomy Physiology 3
- CHM 2046 General Chemistry II w/Lab or 4
- PHY 2054 General Physics II w/Lab 4

Specialization (29 cr. hrs.):
- PCB 3063* General Genetics 3
- PCB 3023C Cell Biology 4
- PCB 3043C Principles of Ecology 3
- PCB 3043L Principles of Ecology Lab 1
- PCB 4074 Organic Evolution 3
- MCB 3030C Introduction to Microbiology 4
- BSC 4057 Environmental Issues (Exit) 3
- MAC 2291 Engineering Calculus I 3

Chemistry Education
Prerequisites (20 cr. hrs.):
- BSC 2010* Biology I with lab 4
- CHM 2045* General Chemistry I with lab 4
- CHM 2046* General Chemistry II with lab 4
- PHY 2053* General Physics I with lab 4
- PHY 2054* General Physics II with lab 4
- BSC 2011* Biology II with lab 4

Specialization (28 cr. hrs.):
- CHM 2046 General Chemistry I w/Lab 4
- CHM 2210 Organic Chemistry I 3
- CHM 2210L Organic Chemistry I Lab 1
- CHM 3120C Elementary Analytical Chemistry 4
- CHM 3400 Elementary Physical Chemistry I 3
- CHM 3610C Intermediate Inorganic Chemistry 4
- CHM 4070 Historical Perspectives in Chemistry (Exit) 3
- BCH 3023 Biochemistry 3
- MAC 2281 Engineering Calculus I 3

Physics Education
Prerequisites (20 cr. hrs.):
- BSC 2010* Biology I with lab 4
- CHM 2045* General Chemistry with lab 4
- CHM 2046* General Chemistry II with lab or 4
- BSC 2011* Biology II with lab 4
- PHY 2048* General Physics with lab and 4
- PHY 2049* General Physics with lab or 4
- PHY 2053* General Physics with lab and 4
- PHY 2054* General Physics with lab 4

Specialization (31 cr. hrs.):
- MAC 2281 Engineering Calculus I 3
- MAC 2282 Engineering Calculus II 3
- MAC 2283 Engineering Calculus III 3
- PHY 2020 Conceptual Physics 3
- PHY 3101 Modern Physics 3
- PHY 3221 Mechanics I 3
- PHY 3323C Electricity & Magnetism I 4
- PHY 4031 Great Themes in Physics (Exit) 3
- Electives in Physics 6
A Physics Education major will need a three credit hour course in computer applications in physics.

*May be part of General Education Requirements

In addition to EDG 2701, lower division courses must include 6 credit hours with an international or diversity focus (see list of approved courses under "Preliminary Requirements for Students Entering Teacher Education Programs" on the first page of the College of Education section). Professional education courses taken at the community college will transfer as general electives.