

# SCIENCE TEACHER EDUCATION-BIOLOGY TEACHER SPECIALIZATION

**Program Code:** STBSBIO

**Meta-Major:** EDUC

**Location(s):** Cocoa, Melbourne, Palm Bay, Titusville, Online

**Delivery Method(s):** On-Campus, Hybrid, 50% or more Online

**Previous Degree Required:** AS/AA

**Eligible for Financial Aid:** Yes

**Additional Limited Access Application Process Required:** No

**Program Testing Requirements:**

**Classification of Instructional Programs (CIP) Code:** 13.1316

**Florida Department of Education CIP Code:** 1101313161

The Biology Teacher Education Bachelor's degree is designed to provide a seamless articulation for students who complete an Associate of Arts Degree, with the prerequisite elective courses illustrated below. Before completing the BS track, students will need to earn a grade of "C" or higher in the following courses.

- EDF 1005 Introduction to the Teaching Profession\*
- BSCC 1010 General Biology 1 with lab\*
- BSCC 1011 General Biology 2 with lab\*
- CHM 1045 General Chemistry 1 with lab\*
- CHM 1046 General Chemistry 2 with Lab
- STA 2023 Statistics\*
- CHM 2210 Organic Chemistry 1 with Lab\*

Candidates transferring from another institution must meet admission requirements prior to being accepted into the education program at Eastern Florida State College (EFSC). Students already enrolled at EFSC do not have to reapply to EFSC, only to the bachelor's program. Procedures for determining candidate's admission are as follows:

Admission to an educator preparation program is contingent upon meeting the following Department of Education's Teacher Educator Certification requirements:

1. Earn a 2.5 overall GPA;
2. Complete all general education and state mandated common prerequisite courses with a C- or higher in each;
3. Pass all sections of the General Knowledge Test.
4. Complete the Eastern Florida State College Bachelors admissions application.

Note: Students in an AS degree program must meet all general education requirements and the mandatory State program prerequisites. Additional hours would be needed to be admitted to the Biology Teacher program due to higher level math and sciences courses.

[Visit the program page for more details and how to apply.](#)

The AA degree would be the recommended and preferred pathway to this degree. It is suggested that students take the ACCUPLACER for Math placement.

\* Common Program Prerequisites

Code	Title	Credit Hours
<b>Associate Degree</b>		
	Complete Associate Degree	60

## Education Core

EDF 2720	Children in Schools: Legal, Ethical, and Safety Concerns <sup>2</sup>	3
EDF 4430	Measurement, Evaluation, and Assessment	3
EDG 3214	Human Development and Learning	3
EDG 3343	Instructional Strategies	3
EDG 4410	Classroom Management <sup>2</sup>	3
EEX 4242	Teaching Exceptional Students in Secondary Settings <sup>2</sup>	3
RED 4335	Subject Area Reading <sup>2</sup>	3
SCE 4943	Seminar in Student Teaching	3
SCE 3940	Internship <sup>1,4</sup>	4
TSL 4324	ESOL Strategies for the Content Area Teacher <sup>3</sup>	3
SCE 4941	Student Teaching in Science (Senior Internship) <sup>4</sup>	9

## Science Core

PCB 3063	Genetics	3
MCBC 3020	Biology of Microorganisms	5
PCB 4422	Ecology and Evolutionary Biology <sup>1</sup>	4
PCB 3134	Cell Biology	3
ZOOC 4603	Developmental Biology	5

**Total Credit Hours** **120**

1

Courses to be modified in the fall 2022.

2.

*Students are required to complete a minimum of 15 hours of field-based experience with children and youth in school or similar settings and not via virtual modes of film or Internet. Students must obtain security clearance before obtaining hours in public schools.*

3.

*Students must volunteer 15 hours in diverse classroom settings including ELL, high performing, and/or Improving classrooms. Students must obtain security clearance before obtaining hours in public schools.*

4.

*Students are required to complete semester-long practicum in a classroom of the grade/subject intended to teach. Children and youth must be in a school or similar setting and not via virtual modes of film or Internet. Students must obtain security clearance before obtaining hours in public schools.*

## Admission Requirements

Admission to the bachelor's program requires an AS or AA degree from a regionally accredited school or college.

**Apply for Admission:** Students must complete the online *Application for Admission* to the bachelor's program at Eastern Florida State College and pay applicable application fees. See the "Programs and Admission Requirements" listing for specific admission requirements. Students who are in their last semester of the Associate's degree may also apply.

**Request Admissions Credentials:** Request the associate's degree transcripts and all previous non-EFSC college transcripts to be sent to:

Office of the Registrar  
Eastern Florida State College  
1519 Clearlake Rd

Cocoa, FL 32922

## Transcript Evaluation

Transcripts will be evaluated by the Registrar's Office for courses applicable to the selected degree program. While an AAS degree is not acceptable for entrance into BS programs, if the student has an AAS degree, or an associate's degree that is not from a regionally accredited institution, but one that is accredited by a body recognized by the U.S. Department of education, a course-by-course evaluation will be done in accordance with EFSC's transfer practices to determine course transfer eligibility.

Course	Title	Credit Hours
<b>Year 1</b>		
<b>Term 1</b>		
EDF 2720	Children in Schools: Legal, Ethical, and Safety Concerns	3
EDG 3214	Human Development and Learning	3
MCBC 3020	Biology of Microorganisms	5
PCB 4422	Ecology and Evolutionary Biology	4
<b>Credit Hours</b>		<b>15</b>
<b>Term 2</b>		
EDG 3343	Instructional Strategies	3
PCB 3063	Genetics	3
PCB 3134	Cell Biology	3
TSL 4324	ESOL Strategies for the Content Area Teacher	3
<b>Credit Hours</b>		<b>12</b>
<b>Term 3</b>		
EDF 4430	Measurement, Evaluation, and Assessment	3
EEX 4242	Teaching Exceptional Students in Secondary Settings	3
<b>Credit Hours</b>		<b>6</b>
<b>Year 2</b>		
<b>Term 4</b>		
EDG 4410	Classroom Management	3
RED 4335	Subject Area Reading	3
SCE	3940 Internship	4
ZOOC 4603	Developmental Biology	5
<b>Credit Hours</b>		<b>15</b>
<b>Term 5</b>		
SCE 4941	Student Teaching in Science (Senior Internship)	9
SCE 4943	Seminar in Student Teaching	3
<b>Credit Hours</b>		<b>12</b>
<b>Total Credit Hours</b>		<b>60</b>

1

New courses under development.

## Graduation Requirements

Responsibility for meeting the requirements for graduation rests with the student. Students must fulfill all admissions requirements in addition to the program requirements to receive a degree from EFSC. The bachelor's degree is awarded to those students who have:

1. Filed an 'Intent to Graduate' Application and paid the graduation fee. Applications submitted after the published deadline will incur a late fee.
2. Earned a minimum of 120 unduplicated credit hours as outlined in the program of study.
3. Earned an overall cumulative grade point average of 2.0 or higher in the 3000-4000 level courses attempted. Transfer work will be included in attempts.
4. Earned at least 39 of the 120 credit hours in 3000-level courses or above (upper-division), or as specified in the program requirements.
5. Completed 36 semester hours of general education coursework in accordance with the Associate in Arts general education requirements.
6. Demonstrated proficiency in a foreign language through any of the following means: completion of two years of high school instruction in the same foreign language (with a grade of D or higher); completion of a college-level course at the Elementary-2 level (or higher) in a foreign language or in American Sign Language (ASL) (e.g., [SPN 1121](#) Spanish 2, [FRE 1121](#) French 2, [ASL 1150](#) American Sign Language 2; achievement of minimum scores on a foreign language proficiency exam; achievement of appropriate scores on nationally standardized examination programs in accordance with recommendations established by the statewide Articulation Coordinating Committee (ACC); or documented completion of a high school diploma from a foreign country where the student studied in a language other than English.
7. Civic Literacy Competency: Senate Bill 1108 amends s.1007.25, Florida Statutes (F.S.), to require ANY student entering a FCS institution in the 2021-2022 school year and thereafter to complete a course AND pass an assessment to demonstrate competency in civic literacy prior to the award of a baccalaureate degree. This rule applies to all students who are entering into baccalaureate programs under the 2021-22 catalog year regardless of prior postsecondary coursework earned in Florida or out-of-state, prior admit terms at Eastern Florida State College, or prior degrees earned.

*Students who were previously exempted from the civic literacy competency or graduated as having met the competency must still meet the graduation competency under the new requirements if they return or pursue a bachelor's degree in fall 2021 or later.*

### A. Course Requirement

Complete one of two State-designated courses: AMH 2020 – US History since 1877 or POS 2041 – American National Government, with a grade of "C" or higher.

Students may also earn credit for the courses through credit-by-exam:

- Advanced Placement Government and Politics: United States (Minimum Score 3)
- Advanced Placement United States History (Minimum Score 4)
- CLEP: American Government (Minimum Score 50)

Note: students who earn credit for either course through other credit-by-exam mechanisms, such as Cambridge AICE or International Baccalaureate, will meet the course requirement but must still take an assessment.

### B. Course and Assessment

Students who earn credit for the courses through credit-by exam are considered to have satisfied both the course and assessment (FCLE) requirement:

- Advanced Placement Government and Politics: United States (Minimum Score 3)
- Advanced Placement United States History (Minimum Score 4)
- CLEP: American Government (Minimum Score 50)

*Note: students who earn credit for either course through other credit-by-exam mechanisms not listed in the rule, such as Cambridge AICE or International Baccalaureate, will be considered as having met only the course requirement. These students will need to be assessed using the approved assessment Florida Civic Literacy Exam.*

Visit the [College website](#) for more details on how to meet these requirements, including an FAQ, and how to schedule the FCLE at an EFSC Center.

8. Completed at least 25% (30 credits) of the credit hours required for the degree through regular instruction at EFSC. Credit by Examination may not be used to satisfy this requirement.
  9. Completed at least 25 percent of the upper-division courses required for the bachelor's program at EFSC, including the capstone course if applicable.
  10. Completed all coursework with a final grade. Students with a grade of "Incomplete" will not be processed for graduation until a final grade is posted. For graduation in the term of application, the final grade must be posted within the first three weeks of the following term.
    - If a final grade is not posted within the first three weeks of the following term, student must reapply and repay for graduation. Student may request to have the "I" converted to an 'F' if the course is not required for graduation.
  11. Submitted all outstanding transcripts and removed all financial obligations to the college. Final transcript and diploma will not be released until student has removed all financial obligations to the college.
4. Identify potentially issues that could be encountered in the classroom as relates to the child's and or adolescent's development, and how you would handle that situation as a classroom teacher.
    - *Core Ability Supported: Think Critically and Solve Problems*
  5. Create lesson plans incorporating active learning in science.
    - *Core Ability Supported: Think Critically and Solve Problems*
  6. Create an alternative assessment assignment that demonstrates learning of a concept taught and present it to the class.
    - *Core Ability Supported: COMMUNICATE EFFECTIVELY*
  7. Students will create a digital portfolio and present to the class.
    - *Core Ability Supported: COMMUNICATE EFFECTIVELY*
  8. Perform peer-reviewed literature searches to find practice-based and research articles focused on comprehension, oral language, phonological awareness, phonics, fluency, vocabulary, and integration of reading components.
    - *Core Ability Supported: PROCESS INFORMATION*
  9. Identify aspects of safety as pertains to school level and how to incorporate that in your future classroom.
    - *Core Ability Supported: PROCESS INFORMATION*
  10. Students will evaluate learning techniques for teaching science in diverse student populations in Schools.
    - *Core Ability Supported: MODEL ETHICAL & CIVIC RESPONSIBILITY*
  11. Students will evaluate and learning techniques and implement teaching techniques for teaching science in diverse student populations in Schools.
    - *Core Ability Supported: MODEL ETHICAL & CIVIC RESPONSIBILITY*

## Learning Outcomes: Science Teacher Education-Biology Teacher Specialization

1. Research and investigate the Consent Decree and describe the accommodations needed for ESOL learners in the classroom.
  - *Core Ability Supported: PROCESS INFORMATION*
2. Students will evaluate learning techniques for working with diverse student populations including ESOL, High and low Socioeconomic Schools.
  - *Core Ability Supported: MODEL ETHICAL & CIVIC RESPONSIBILITY*
3. Students will evaluate learning techniques for working with Exceptional Education classes in Schools.
  - *Core Ability Supported: MODEL ETHICAL & CIVIC RESPONSIBILITY*