

**SEMINOLE STATE COLLEGE  
ASSOCIATE IN SCIENCE IN BIOLOGY (210)  
Program Review Executive Summary**

**Date of Review:** Fall 2017

**Recommended Date of Next Review:** Fall 2022

**The Associate in Science in Biology Degree Program is central to the Seminole State College mission in the following ways:**

**Empowers people for academic success** by preparing students for a range of Life Science careers and at the same time improve their critical thinking skills necessary for success in all studies. **Empowers people for personal development** by training students to set and achieve educational goals by developing responsibility, organizational skills, and academic skills. The program places students in appropriate developmental or college level courses, allowing students the opportunity to progress through the curriculum to achieve success. **Empowers people for life-long learning** by providing a variety of courses that vary in content and have the purpose of broadening a student's appreciation of and creating a desire for continued learning once they have completed their education.

**Program Objectives and Goals:** Outcomes Specific to Associate in Science in Biology (210)

Outcome 3: Demonstrate a grasp of biological and related concepts foundational to advanced courses in Biology. Advanced courses shall be defined as courses commonly considered Junior and Senior level at baccalaureate or professional degree granting institutions.

Outcome 4: Demonstrate preparation for continued pursuit of Biology education leading to a baccalaureate or professional degree in a branch of Biology.

**Quality Indicators Such As:**

- **Student Learning Outcomes**
- **Effective Teaching**
- **Effective Learning Environments**
- **Capacity to Meet Needs of Constituencies**

- Instructors assess Student Learning Outcomes at the classroom level with a pre-test and post-test. The fact that all courses in the S.T.E.M. areas show improvement verifies that student learning takes place. In 2016-17, the average growth rate from pre-test to post-test scores was 55% for all thirteen of the Major Field courses.
- SSC provides faculty with the opportunity for professional development through funding opportunities and onsite technology training. The college employs faculty based on Higher Learning Commission guidelines and teaching ability.
- SSC is committed to creating effective learning environments with technology, increased tutoring and other academic support, and the development of a variety of delivery methods such as blended courses.
- The Biology Degree Program is meeting the needs of the service area as shown by the demand for the program with approximately 30 declared majors and 5 graduates per year.

**Productivity for Most Recent 5 Years**

**Number of Degrees:** 25  
**Number of Majors:** 150

**Other Quantitative**

**Number of Courses for Major:** 13

<b>Measures:</b> – Number of Courses for Major – Student Credit Hour in Major – Direct Instructional Costs – Roster of faculty members including the number of FTE faculty in the specialized courses within the curriculum	<p><b>Student Credit Hours in Major:</b> 16,688 for review period (Includes non-major enrollees)  <b>Direct Instructional Costs:</b> \$2,304,799 for review period (Total for four science degree programs)</p> <p><b>Roster of Life Sciences Faculty:</b></p> <table border="1" data-bbox="558 326 1906 688"> <thead> <tr> <th colspan="4" style="text-align: center;"><b>Current Full-Time Life Science Faculty</b></th> </tr> <tr> <th style="text-align: center;">Name</th> <th style="text-align: center;">Teaching Area</th> <th style="text-align: center;">Highest Degree</th> <th style="text-align: center;">Institution</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Holtz, Chris</td> <td style="text-align: center;">Science</td> <td style="text-align: center;">M.S.</td> <td style="text-align: center;">University of California, San</td> </tr> <tr> <td style="text-align: center;">Hernandez, Theran</td> <td style="text-align: center;">Science</td> <td style="text-align: center;">M.Ed.</td> <td style="text-align: center;">Grand Canyon University,</td> </tr> <tr> <td style="text-align: center;">Jobe, Noble</td> <td style="text-align: center;">Science</td> <td style="text-align: center;">Ph.D.</td> <td style="text-align: center;">Oklahoma State University</td> </tr> <tr> <td style="text-align: center;">Stanley, Kara</td> <td style="text-align: center;">Science</td> <td style="text-align: center;">M.S.</td> <td style="text-align: center;">West Texas A&amp;M University</td> </tr> <tr> <td style="text-align: center;">Tollett, Jarrod</td> <td style="text-align: center;">Science</td> <td style="text-align: center;">M.Ed.</td> <td style="text-align: center;">East Central University</td> </tr> <tr> <td style="text-align: center;">Walker, Susan</td> <td style="text-align: center;">Science</td> <td style="text-align: center;">M.S.</td> <td style="text-align: center;">Oklahoma State University</td> </tr> <tr> <th colspan="4" style="text-align: center;"><b>Current Adjunct Life Science Faculty</b></th> </tr> <tr> <td style="text-align: center;">Helseth, Dave</td> <td style="text-align: center;">Science</td> <td style="text-align: center;">M.S.</td> <td style="text-align: center;">Oklahoma State University</td> </tr> </tbody> </table>	<b>Current Full-Time Life Science Faculty</b>				Name	Teaching Area	Highest Degree	Institution	Holtz, Chris	Science	M.S.	University of California, San	Hernandez, Theran	Science	M.Ed.	Grand Canyon University,	Jobe, Noble	Science	Ph.D.	Oklahoma State University	Stanley, Kara	Science	M.S.	West Texas A&M University	Tollett, Jarrod	Science	M.Ed.	East Central University	Walker, Susan	Science	M.S.	Oklahoma State University	<b>Current Adjunct Life Science Faculty</b>				Helseth, Dave	Science	M.S.	Oklahoma State University
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<b>Duplication and Demand</b>	Degree program does not duplicate programs in the service area. Demand is low to moderate.																																								
<b>Effective Use of Resources</b>	The S.T.E.M. Division maximizes productivity using the available physical, technical, financial and personnel resources.																																								
<b>Strengths and Weaknesses</b>	<p><b>Strengths:</b> Faculty members are experienced, motivated, qualified, and caring instructors that work to coordinate course content to ensure a proper background for their students. Faculty members use a variety of methods to encourage student engagement and success. The size of SSC allows for smaller class sizes and more one on one involvement with the students. Instructors teach the course and the lab associated with the course. This allows for more personal attention for students.</p> <p><b>Weaknesses:</b> Scheduling and offering classes that have lab components are becoming more of a problem due to limited lab space and capital equipment. Support for at-risk students. Basic equipment depreciation. Instructors must teach the course and the lab associated with the course.</p>																																								
<b>Recommendations</b>	<ul style="list-style-type: none"> <li>• Increase student and faculty awareness of the advantage of receiving an associate degree before transferring to a four-year institution.</li> <li>• Encourage students to enroll in specific degree programs rather than choosing Liberal Studies.</li> </ul>																																								