

SEMINOLE STATE COLLEGE
ASSOCIATE IN SCIENCE FOR LIFE SCIENCES (210)
Program Review Executive Summary

Date of Review: Fall 2012

Recommended Date of Next Review: Fall 2017

The Associate in Science for Life Sciences 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 for Life Sciences (210)

Outcome 3: Demonstrate a grasp of biological and related concepts foundational to advanced courses in Life Sciences. 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 Life Science education leading to a baccalaureate or professional degree in a branch of the Life Sciences.

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 Mathematics and Science areas show improvement verifies that student learning takes place. In 2010, the average growth rate was 55.7% for all thirteen of the Major Field courses. The overall ratio of post-test scores to pre-test scores was 4.8 to 1 (70.3% to 14.7%).
- 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 or hybrid courses.
- The Life Science Degree Program is meeting the needs of the service area as shown by the low to moderate demand for the program with approximately 29 declared majors and 11 graduates per year.

Productivity for Most Recent 5 Years

Number of Degrees: 54
Number of Majors: 145

<p>Other Quantitative Measures:</p> <ul style="list-style-type: none"> - 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>Number of Courses for Major: 13 Student Credit Hours in Major: 13,753 for review period (Includes non-major enrollees) Direct Instructional Costs: \$2,561,494 for review period (Total for four science degree programs)</p> <p>Roster of Life Sciences Faculty:</p> <table border="1" data-bbox="548 418 1902 813"> <thead> <tr> <th colspan="4">Current Full-Time Life Science Faculty</th> </tr> <tr> <th>Name</th> <th>Teaching Area</th> <th>Highest Degree</th> <th>Institution</th> </tr> </thead> <tbody> <tr> <td>Eberhart, Lori</td> <td>Life Science</td> <td>M.S.</td> <td>Oklahoma State University</td> </tr> <tr> <td>Helseth, Dave</td> <td>Life Science</td> <td>M.S.</td> <td>Oklahoma State University</td> </tr> <tr> <td>Jobe, Noble</td> <td>Life Science</td> <td>Ph.D.</td> <td>Oklahoma State University</td> </tr> <tr> <td>Laule, Gerhard</td> <td>Chemistry</td> <td>M.S.</td> <td>University of Arkansas</td> </tr> <tr> <td>Rush, Loretta</td> <td>Life Science</td> <td>M.Ed.</td> <td>East Central University</td> </tr> <tr> <td>Tollet, Jared</td> <td>Physical Sciences</td> <td>M.Ed.</td> <td>East Central University</td> </tr> <tr> <th colspan="4">Current Adjunct Life Science Faculty</th> </tr> <tr> <td>Williams, Beverly</td> <td>Science</td> <td>M.Ed.</td> <td>East Central University</td> </tr> <tr> <td>Wilson, Barbara</td> <td>Science</td> <td>M.S. & M.Ed.</td> <td>OU / East Central</td> </tr> </tbody> </table>	Current Full-Time Life Science Faculty				Name	Teaching Area	Highest Degree	Institution	Eberhart, Lori	Life Science	M.S.	Oklahoma State University	Helseth, Dave	Life Science	M.S.	Oklahoma State University	Jobe, Noble	Life Science	Ph.D.	Oklahoma State University	Laule, Gerhard	Chemistry	M.S.	University of Arkansas	Rush, Loretta	Life Science	M.Ed.	East Central University	Tollet, Jared	Physical Sciences	M.Ed.	East Central University	Current Adjunct Life Science Faculty				Williams, Beverly	Science	M.Ed.	East Central University	Wilson, Barbara	Science	M.S. & M.Ed.	OU / East Central
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<p>Duplication and Demand</p>	<p>Degree program does not duplicate programs in the service area. Demand is moderate to high.</p>																																												
<p>Effective Use of Resources</p>	<p>The MSE Division maximizes productivity using the available physical, technical, financial and personnel resources.</p>																																												
<p>Strengths and Weaknesses</p>	<p>Strengths: Faculty members are experienced, motivated, qualified, and caring instructors that work to coordinate course content to insure a proper background for their students. Faculty members are receiving training in the use of new instructional technology and are actively implementing more technology into the classrooms and labs as it becomes available. The size of SSC allows for smaller class sizes and more one on one involvement with the students.</p> <p>Weaknesses: Scheduling and offering classes that have lab components are becoming more of a problem due to limited lab space. Support for at-risk students. Basic equipment depreciation</p>																																												
<p>Recommendations</p>	<ul style="list-style-type: none"> • Increase student and faculty awareness of the articulation agreements between colleges and universities in the state system and the advantage of receiving an associate degree before transferring to a four-year institution. • Implement degree completion initiative that involves degree planning and tracking procedures for students that require students to experience increased, high quality one on one interaction and mentorship with Life Science faculty. 																																												