SEMINOLE STATE COLLEGE ASSOCIATE IN SCIENCE IN COMPUTER SCIENCE (226)

2018-19 Degree Program Evaluation

The information required to complete this annual evaluation process mirrors the information required by OSRHE Policy on Academic Program Review. Specifically, it covers the following Vitality of the Program items: (1) Program Objectives and Goals, (2) Quality Indicators, (3) Minimum Productivity Indicators, and (4) Other Quantitative Measures (for additional information see OSRHE Policy 3.7.5.B.1-4).

1. Program Objectives and Goals

Associate of Science in Computer Science Degree Program Outcomes

Outcomes for Transfer Degree Programs

- Outcome 1: Demonstrate successful articulation of Seminole State College transfer degree programs to state and professional institutions of higher learning granting professional and baccalaureate degrees in Oklahoma.
- Outcome 2: Demonstrate successful academic achievement by Seminole State College transfer degree students at primary receiving state baccalaureate institutions of higher learning in Oklahoma. Successful academic achievement is defined as the maintenance of satisfactory academic progress toward degree completion as determined by the receiving institution.

Outcomes Specific to Associate in Science in Computer Science

- Outcome 3: Demonstrate problem-solving skills related to the world of information systems.
- Outcome 4: Demonstrate preparation for continued pursuit of courses leading to a baccalaureate degree in Information Systems.

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2. Quality Indicators

Combined Course Embedded Assessment Results for 2018-19 for Major Field Courses in Degree Program

General Education Outcomes	Pre-Test % Correct	Post-Test % Correct	Difference
General Education Outcome 1	47%	83%	36%
General Education Outcome 2	47%	83%	36%
General Education Outcome 3	47%	83%	36%
General Education Outcome 4	46%	83%	37%
Specific Outcomes for AS Computer Science	Pre-Test % Correct	Post-Test % Correct	Difference
Degree Program Outcome 3	47%	83%	36%
Degree Program Outcome 4	36%	62%	27%

Other Data Indicating Quality Relevant to Degree Program Major Field

Degree Program Enrollment by Ethnicity

Academic Year	Ethnicity	Summer 2018		Fall 2018		Spring 2019	
2018-19	Total Students	11	100%	38	100%	33	100%
	Black	0	0%	3	8%	5	15%
	Indian	2	18%	7	18%	3	9%
	Asian	0	0%	0	0%	0	0%
	Hispanic	0	0%	1	3%	1	3%
	Hawaiian/Pacific Islander	0	0%	0	0%	0	0%
	White	8	73%	26	68%	22	67%
	Undeclared	1	9%	1	3%	2	6%

Degree Program Enrollment by Gender

Academic Year	Gender	Summer 2018	Fall 2018	Spring 2019
2018-19	Male	10	35	30
	Female	1	3	3

Student Feedback on Instruction: The average response scores ranged from 4.5 to 4.8 for the rated scale questions. Therefore, all of the averaged responses fell between "usually applies" and "almo always applies" with those responses describing desired attributes or behaviors. The average response score for the rated-scale questions pertaining to all classes was 4.6

Graduate Exit Survey: "Quality of teaching in your major field of study" scored highest overall with 80.58% of students choosing excellent or above average while the "quality of computer laboratory equipment" repeatedly as a weakness with a score of 51.6%. This may continue to be a problem for the program as computer science was not included in the renovations afforded by the Title III grant and infrastructure updates like computer equipment are budgeted through the IT department, not STEM directly.

ETS Proficiency Profile Test: Mathematics portion of the ETS test was 1.3 points below the national mean for the current year. The Critical Thinking portion of the ETS test was 0.3 of a point below the national mean for the current year.

Faculty Survey on Student Engagement: Faculty Survey on Student Engagement reflects that 61% of faculty members employ student success techniques that result in the faculty identifying student behavior that should result in successful completion of the course and program. In January 2019, faculty members participated in professional development led by the Assessment of Student Learning Committee. The training pertained to engagement of traditional and non-traditional students. Faculty members received access to this survey at the professional development meetings. Faculty interacted with each other to plan methods to further engage students.

3. Minimum Productivity Indicators

Productivity Indicators

Academic Year	Semester	Declared Majors	Graduates
2018-19	Summer 2018	9	3
	Fall 2018	38	1
	Spring 2019	33	5

Does the degree program meet the minimum OSRHE standards for productivity this year?

Majors Enrolled (25 per year): Yes Degree Conferred (5 per year): Yes

Comments/Analysis: We are in the process of modifying our current degree program. With the modifications, we are going to strengthen our core offerings. This in turn will allow our students to transfer to various four-year schools to stay on track for graduation.

With only one part time computer science instructor, any production in this major is promising. As we continue to develop the program and increase the amount of time spent developing the program as our computer science instructor transitions to a full time position we expect the graduate production to increase as well.

4. Other Quantitative Measures

Number of Sections Taught and Enrollment for Each Course in Major Field of Degree Program

Prefix	Number	Major Field Course Title	Number of Sections	Total Students	Ave. Class Size	Total Credit Hours Generated
CS	1313	Programming in Java	1	18	18	54
CS	1183	Information Security	1	17	17	51
CAP	2603	Advanced Microsoft Access	1	9	9	27
CS	2013	Programming in C ++ I	1	23	23	69
CS	2023	Programming in C++ II	1	14	14	42

Credit Hours Generated in Major Field Courses of Degree Program By Level (from table above)

Academic	1000 Level Credit Hours	2000 Level Credit Hours	
Year	Generated	Generated	
2018-19	105	138	

Note: Credit Hours Generated columns represent the student credit hours generated by all the major field courses of the degree program for the given academic year. The hours <u>do not</u> represent the number of student credit hours generated only by those students declaring this major.

Direct Instructional Costs

Academic Year	Instructional Costs*	Costs Shown By Division or Program?
2018-19	\$39,552.00	Computer Science

^{*}When cost data are not available by degree program, use total division budget for instructional costs for each degree program.

Credit Hours Generated by Courses in Major Field That Are Part of General Education Requirements in Other Degree Programs

Major Field Course Information				
Prefix	Number	Title	Credit Hours Generated	
		Na		

Name	Teaching Area	Highest Degree	Institution
Current 1	Full-Time Faculty From Other Div (Instructors with ** beside the		
Brad Schatzel	Business/Information Systems	MBA Management	University of Central Oklahoma
	Current Adjunct Faculty Teach (Instructors with ** beside the		
Michael Schnell	Computer Science	MS Information Technology	Florida Institute of Technology
Dr. Michael Bond	Commutan Spinner	M.S Computer information systems.	St. Mary's, San Antonio
A. MICHAEL BORD	Computer Science	Ph.D. Industrial engineering.	University of Oklahoma

5. Recommendations and Other Relevant Items: Describe recommendations, new developments or initiatives pertaining to degree program.

We are in the process of making some course changes to our Computer Science degree. Some of the changes are adding the following courses: Python script course, computer security, and updating our database course. The Computer Science degree program needs a full-time instructor to provide the attention the program needs to expand. These changes are to help improve quality of our program. Over the next two years, we will update the older computer labs needed for some of the computer courses offered.