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

## 2020-21 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 2020-21 for Major Field Courses in Degree Program

General Education Outcomes	Pre-Test % Correct	Post-Test % Correct	Difference
General Education Outcome 1	35%	63%	30%
General Education Outcome 2	35%	63%	30%
General Education Outcome 3	35%	63%	30%
General Education Outcome 4			
Specific Outcomes for AS Computer Science	Pre-Test % Correct	Post-Test % Correct	Difference
Degree Program Outcome 3	35%	63%	30%
Degree Program Outcome 4			

## Other Data Indicating Quality Relevant to Degree Program Major Field

## **Degree Program Enrollment by Ethnicity**

Academic Year	Ethnicity	Summe	er 2020	Fall	2020	Spring	g 2021
2020-21	Total Students	8	100%	16	100%	13	100%
	Black	0	0%	0	0%	0	0%
	Indian	4	50%	0	0%	0	0%
	Asian	0	0%	0	0%	0	0%
	Hispanic	1	13%	0	0%	0	0%
	Hawaiian/Pacific Islander	0	0%	0	0%	0	0%
	White	3	37%	16	100%	13	100%
	Undeclared	0	0%	0	0%	0	0%

#### **Degree Program Enrollment by Gender**

Academic Year	Gender	Summer 2020	Fall 2020	Spring 2021
2020-21	Male	7	14	11
	Female	1	2	2

#### Student Feedback on Instruction:

The fact that the College's average on the rated-scale questions was 4.6 on a 5.0 scale is taken as an indicator of overall positive feedback from students on classroom instruction. These averages fall close to the midpoint between the answers "usually applies" and "almost always applies" and were offered as positive affirmations to fifteen different statements regarding course effectiveness and classroom instruction. The average for questions pertaining only to online courses was 4.6 an is taken as evidence that student satisfaction in online courses very closely mirrors that in classes overall.

## Graduate Exit Survey:

In the statistics related to the overall satisfaction with SSC, 75% of students indicated satisfaction with the SSC education experience by giving a rating of excellent or above average. The students indicated they would again choose SSC if starting over at 79%. In general, the responses to the survey increased this year with good insight given for areas to improve. Students listed professors consistently as one of

the greatest strength at SSC. Students cited class size, staff, and affordability as other strengths.

ETS Proficiency Profile Test: Mathematics portion of the ETS test was 0.8 points above the national mean for the current year. The Critical Thinking portion of the ETS test was 1.1 points above the national mean for the current year.

The next Faculty Survey on Student Engagement will be conducted in January 2022.

Other Quality Indicators: none

## 3. Minimum Productivity Indicators

#### **Productivity Indicators**

Academic Year	Semester	Declared Majors	Graduates
2020-21	Summer 2020	8	2
	Fall 2020	16	1
	Spring 2021	13	6

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.

## 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	1033	Computer Logic and Flowcharting	1	8	8	24
CS	1303	Ethics in Information Technology	1	11	11	33
CS	1183	Information Security	1	17	17	51
CS	2003	Webpage Design in HTML	1	8	8	24
CS	2013	Programming in C ++ I	2	16	8	48
CS	2023	Programming in C++ II	1	7	7	21
CS	2033	Script Programming	1	14	14	42
CS	2173	Operating Systems	1	7	7	21

## **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	
2020-21	108		

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	Instructional	Costs Shown By
Year	Costs*	Division or Program?
2020-21	\$906,012.00	Science Division

<sup>\*</sup>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

<b>Major Field Course Information</b>				
Prefix	Number	Title	Credit Hours Generated	
		Na		

culty Teaching	 Major Field Courses in Degro	ee Program	
Name	Teaching Area	Highest Degree	Institution
Bryant, Melissa	Mathematics	M.Ed.	East Central University
Streight, Ricky	Mathematics	Ph D.	University of Oklahoma
Tollett, Jarrod	Mathematics / Science/ Engineering	M.Ed.	East Central University
Chun Fu Cheng	Business/Information Systems	EdD.	Northeastern University
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

**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.