## 5-Year Plan for Assessment of Program Learning Outcomes

## AA/AS Degree

## **I. Program Information**

Division:

Division of Business and Information Technology

Name of Program:

Computer Science - Computer Science Software Development Transferring to OU - AS

Computer Science - Computer Science Option Transferring to UCO and colleges with Similar

Patterns - AS

Computer Science - Management Information Systems - AS

Certificates Embedded in Program:

None

Assessment Plan for Following Five Years:

FY 2020 – FY 2024 (July 1, 2019 – June 30, 2024)

Faculty Who Prepared Plan:

Program Chair: Sara Mathew Faculty: Dr. Haining Chen

Dr. John Goulden

Haifeng Ji

Jon McHenry

Date Submitted by Faculty:

November 16, 2018 – first version submitted for Academic Outcomes Assessment Committee April 19, 2019 – revised version submitted to division dean for review

**Division Dean:** 

John Claybon

Date Submitted by Dean:

May 3, 2019

## **II. Institutional Mission or End Statement Reference:**

#### **Institutional Mission:**

OCCC provides broad access to learning that empowers students to complete a certificate or degree and that enriches the lives of everyone in our community.

#### **ENDS**

- Access: Our community has broad access to valuable certificate and degree programs, and non-credit educational opportunities and events.
- Student Success: Our students successfully complete their academic courses, persist in college and earn certificates or degrees at OCCC or another institution.
- Workforce Development: Our graduates earn higher-level degrees or are successful in technical and professional careers.
- Community Development: Our community's quality of life is enriched through our educational, artistic and recreational programs and events.

# **III. Program Learning Outcomes:**

List all program learning outcomes for the program designated above. There should be 5-10 program learning outcomes total.

Under each outcome, list the measures. There should be at least 1 measure per outcome, but there can be up to 3 measures per outcome.

Indicate which outcome(s) will be assessed in each year of this plan. Only 1-3 outcome(s) should be assessed in a particular year.

All learning outcomes for this program will be assessed over the five-year cycle of this plan. Annual reports will evaluate only the outcome(s) designated for that year. The program review (or accreditation process for programs with external accreditation) will report on all program learning outcomes.

### **Outcome 1 (required):**

Students will be able to use the decision control structure	

Measure 1 (required):	⊠Direct	Anticipated Target (required):
A supergraph Onits	□Indirect	All students in CS2162 and CS2452
Assessment Quiz	(required)	All students in CS2163 and CS2453
Measure 2:	□Direct	Anticipated Target:
Wicasure 2.	☐Indirect	Anticipated Target.
	Indirect	
Measure 3:	□Direct	Anticipated Target:
	□Indirect	
Year Outcome 1 will be assessed (requ	ired):	
2019		
2017		
Outcome 2 (required):		
Students will be able to demonstrate	e parameter	passing
Measure 1 (required):	⊠Direct	Anticipated Target (required):
	☐Indirect	
Assessment Quiz	(required)	All students in CS2163 and CS2453

Measure 2:	□ Direct □ Indirect	Anticipated Target:
Measure 3:	□ Direct □ Indirect	Anticipated Target:
Year Outcome 2 will be assessed (required):  Outcome 3 (required):	uired):	
Students will be able to show the u	ise of input an	nd output
Measure 1 (required): Assessment Quiz	⊠Direct □Indirect (required)	Anticipated Target (required): All students in CS2163 and CS2453
Measure 2:	□ Direct □ Indirect	Anticipated Target:

Measure 3:	□ Direct □ Indirect	Anticipated Target:
Year Outcome 3 will be assessed (req	uired):	
2021		
Outcome 4 (required):		
Students will be able to manipulate	e arrays	
Measure 1 (required): Assessment Quiz	☑Direct ☐Indirect (required)	Anticipated Target (required): All students in CS2163 and CS2453
Measure 2:	□ Direct □ Indirect	Anticipated Target:
Measure 3:	□Direct □Indirect	Anticipated Target:

Year Outcome 4 will be assessed 2022	d (required):	
Outcome 5 (required):  Students will be able to apply	OOP principles	
Measure 1 (required): Assessment Quiz	⊠Direct □Indirect (required)	Anticipated Target (required): All students in CS2163 and CS2453
Measure 2:	□ Direct □ Indirect	Anticipated Target:
Measure 3:	□ Direct □ Indirect	Anticipated Target:

Year Outcome 5 will be assessed (required):

2023

Outcome 6:		
Measure 1 (required):	□Direct □Indirect (required)	Anticipated Target (required):
Measure 2:	□ Direct □ Indirect	Anticipated Target:
Measure 3:	□ Direct □ Indirect	Anticipated Target:

Outcome 7:		
Measure 1 (required):	□Direct □Indirect (required)	Anticipated Target (required):
Measure 2:	□Direct □Indirect	Anticipated Target:
Measure 3:	□Direct □Indirect	Anticipated Target:
Year Outcome 7 will be assessed Outcome 8:	l (required):	

Measure 1 (required):	□ Direct □ Indirect (required)					
Measure 2:	□ Direct □ Indirect	Anticipated Target:				
Measure 3:	□ Direct □ Indirect	Anticipated Target:				
Year Outcome 8 will be assessed (required)  Outcome 9:	uired):					
Measure 1 (required):	□Direct □Indirect (required)	Anticipated Target (required):				

Measure 2:	□Direct □Indirect	Anticipated Target:
Measure 3:	□ Direct □ Indirect	Anticipated Target:
Year Outcome 9 will be assessed (required)  Outcome 10:	uired):	
Measure 1 (required):	□Direct □Indirect (required)	
Measure 2:	□Direct □Indirect	Anticipated Target:

Measure 3:	□ Direct □ Indirect	Anticipated Target:
Year Outcome 10 will be assessed (requ	uired):	

# **IV. Program Learning Outcomes and Courses**

Please check the program learning outcome associated with the courses in the program.

All core courses must address at least 1 program learning outcome.

Support courses should address outcomes. Some support courses are required by a university for transfer. Please list and check any support courses applicable to the outcome.

Program Learning	O 1	O 2	O 3	O 4	O 5	06	Ο7	O 8	09	O 10
Outcomes:										
Core Courses:										
CS1103 - Introduction to Computers and Applications ( MIS)			X							
CS1143 - Beginning Programming (MIS, C_UCO, C_OU)	X	X	X	X						
CS 2113 - Computer-based Information Systems (MIS)	X	X								
CS2163 - Java (MIS, C_UCO, C_OU)	X	X	X	X	X					
CS2363 - C++ (C_UCO)	X	X	X	X	X					
CS2453 - Visual Basic (MIS, C_UCO)	X	X	X	X	X					
CS2463 - Advanced Java (C_UCO, C_OU)	X	X	X	X	X					
CS2553 - Advanced Visual Basic (C_UCO)	X	X	X	X	X					
CS2563 - C# (C_UCO, C_OU)	X	X	X	X	X					
Support Courses:										

Any CS course can be taken as a CS elective, and all CS courses will address at least one of the listed outcomes.

Legends used:

Program Curriculum: Computer Science: Associate in Science Options :

Computer Science - Management Information System (MIS)

Computer Science - Computer Science Transferring to UCO(C\_UCO)
Computer Science - Software Development Transferring to OU (C\_OU)