5-Year Plan for Assessment of Program Learning Outcomes

AAS Degree

I. Program Information

Division:

Division of Business and Information Technology

Name of Program:

Computer Science - Computer Programming - AAS Computer Science - Computer Systems Support- AAS Computer Science - Cyber/Information Security- AAS Computer Science - Web Design and Development- AAS

Certificates Embedded in Program:

Computer Networking Support Computer Systems Support Cyber/Information Security Web Design Web Development

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 demonstrate understanding of installation procedures

Measure 1 (required): **Assessment Quiz**	☒Direct ☐Indirect (required)	Anticipated Target (required): **All students in CS2183**
Measure 2:	☐Direct ☐Indirect	Anticipated Target:
Measure 3:	☐Direct ☐Indirect	Anticipated Target:

Year Outcome 1 will be assessed (required):

2019

Outcome 2 (required):

Students will be able to solve common system issues

Measure 1 (required): **Assessment Quiz**	☒Direct ☐Indirect (required)	Anticipated Target (required): **All students in CS2183**
Measure 2:	☐Direct ☐Indirect	Anticipated Target:
Measure 3:	☐Direct ☐Indirect	Anticipated Target:

Year Outcome 2 will be assessed (required):

2020

Outcome 3 (required):

Students will be able to apply security measures to systems and networks

Measure 1 (required): **Assessment Quiz**	☒Direct ☐Indirect (required)	Anticipated Target (required): **All students in CS2183**

Measure 2:	☐Direct ☐Indirect	Anticipated Target:
Measure 3:	☐Direct ☐Indirect	Anticipated Target:

Year Outcome 3 will be assessed (required):

| 2021 |

Outcome 4 (required):

Students will be able to employ scripts for purposes of automation

Measure 1 (required): **Assessment Quiz**	☒Direct ☐Indirect (required)	Anticipated Target (required): **All students in CS2183**
Measure 2:	☐Direct ☐Indirect	Anticipated Target:

Measure 3:	☐ Direct ☐ Indirect	Anticipated Target:

Year Outcome 4 will be assessed (required):

2022

Outcome 5 (required):

Students will be able to manipulate stored data

Measure 1 (required): **Assessment Quiz**	☒ Direct ☐ Indirect (required)	Anticipated Target (required): **All students in CS2183**
Measure 2:	☐ Direct ☐ Indirect	Anticipated Target:

Measure 3:	☐Direct ☐Indirect	Anticipated Target:

Year Outcome 5 will be assessed (required):

2023

(Only 5 outcomes are required. Additional outcomes from 6 through 10 are available if needed.)

Outcome 6:

Measure 1 (required):	☐Direct ☐Indirect (required)	Anticipated Target (required):

Measure 2:	☐Direct ☐Indirect	Anticipated Target:
Measure 3:	☐Direct ☐Indirect	Anticipated Target:

Year Outcome 6 will be assessed (required):

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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 (required):

Outcome 8:

Measure 1 (required):	☐Direct ☐Indirect (required)	Anticipated Target (required):
Measure 2:	☐Direct ☐Indirect	Anticipated Target:
Measure 3:	☐Direct ☐Indirect	Anticipated Target:

Year Outcome 8 will be assessed (required):

[   ]

Outcome 9:

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:

Measure 1 (required):	☐Direct ☐Indirect (required)	Anticipated Target (required):
Measure 2:	☐Direct ☐Indirect	Anticipated Target:
Measure 3:	☐Direct ☐Indirect	Anticipated Target:

Year Outcome 10 will be assessed (required):

[   ]

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 Outcomes:	O1	O 2	O 3	O 4	O 5	O 6	O 7	O 8	O 9	O 10
Core Courses:										
CS 1143 - Beginning Programming (CP, CIS, WDD)	X				X					

Course										
CS 1153 - Introduction to Computing Technologies (CSS, CIS)		X	X							
CS 1333 - Database Management Applications (CSS, CIS, WDD)	X		X	X	X					
CS 1353 - Computer Operating Systems (CSS, CIS)	X	X	X	X						
CS 1363 - Digital Media Development (WDD)	X			X						
CS 1413 - Computer Hardware (CSS)	X	X	X	X						
CS 2113 - Computer-based Information Systems (CP)	X			X	X					
CS 2153 - Supporting Operating Systems (CSS)	X	X		X	X					
CS 2163 - Java (CP, WDD)	X									
CS 2173 - Oracle (CP, CIS, WDD)	X	X	X	X	X					
CS 2183 - Linux (CSS, CIS, WDD)	X	X	X	X	X					
CS 2283 - Introduction to Virtualization(CSS)	X		X	X	X					
CS 2303 - Networking Technologies (CSS, CIS)	X	X	X	X	X					
CS 2363 - C++ (CP)	X				X					
CS 2403 - Computer Support Services (CSS)		X		X						
CS 2413 -Web Site Development (CP, WDD)	X		X	X						
CS2433 - Digital Media Scripting(WDD)	X			X						
CS 2443 - SQL Server (CP, CIS, WDD)	X	X		X	X					
CS 2453 - Visual Basic (CP, WDD)	X			X	X					
CS 2463 - Advanced Java (CP)	X			X	X					
CS 2503 -Network Administration (CSS, CIS)	X	X	X	X	X					
CS 2513 - Client-side Programming (CP, WDD)	X			X						
CS 2563 - C# (CP)	X			X	X					
CS 2623 - Server-side Programming (CP, WDD)	X		X	X	X					
CS 2713 - Principles of Information Security (CP, CSS, CIS)		X	X	X						
CS 2723 - Secure Electronic Commerce (CIS, WDD)		X	X	X						
CS 2743 - Enterprise Security Management (CIS)		X	X	X						
CS 2763 - Network Security (CSS, CIS)		X	X	X						
CS 2783 - Cyber Forensics (CIS)		X	X	X	X					
CAT 1513 - Digital Imaging (WDD)	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.

Note : Legends used :

Program Curriculum: **Computer Science: Associate in Applied Science**

      Options :

            Computer Science - Computer Programming(CP)

            Computer Science - Cyber/Information Security(CIS)

            Computer Science - Computer System Support(CSS)

            Computer Science - Web Design and Development(WDD)