

Weber State University
Biennial Report on Assessment of Student Learning

Cover Page

Department/Program: School of Computing / Web and User Experience
Academic Year of Report: 2018/19
Date Submitted: 11/15/2019
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A. Brief Introductory Statement:

Please review the Introductory Statement and contact information for your department or academic program displayed on the assessment site: <http://www.weber.edu/portfolio/departments.html> - if this information is current, please place an 'X' below. No further information is needed.

__ Information is current; no changes required.

Update if not current:

The Web and User Experience program is located within the School of Computing Department at Weber State University (WSU). Students have the following degree options:

- Bachelor of Science in Web and User Experience
- Associate of Applied Science in Web and User Experience
- Minor in Web Technology
- Minor in User Experience Design
- Emphasis in Bachelor of Integrated Studies

Students completing a major in Web and User Experience are prepared for independent or as part of a team in an organization. Graduates have found employment as web designers, front-end and back-end (full-stack) developers. Students learn a variety of web development and design skills, including programming, database, multimedia technologies, and user experience principles. Elective coursework covers various multimedia programs and technologies relating to graphics, illustration, video and audio editing, animation, and user experience. Students also gain competence in business communication and marketing, which are crucial elements for a successful business career. Students are also introduced to new management procedures for both people and technology to help meet the challenges of the ever-changing business environment.

B. Mission Statement

Please review the Mission Statement for your department or academic program displayed on the assessment site:

<http://www.weber.edu/portfolio/departments.html> - if the mission statement is current, please place an 'X' below.; If the information is not current, please provide an update:

Information is current; no changes required.

Update if not current:

The primary goal of the Web and User Experience program is to deliver students the highest quality undergraduate experience that will prepare students for employment in the areas of web development and user experience design, and to assume roles in decision making, leadership, research, and service to community and business.

These programs assist students in developing, communicating, and applying knowledge for the technical and professional world as well as gaining a desire for lifelong learning.

The primary goal of the College of Engineering, Applied Science and Technology is to implement the mission of Weber State University and to prepare students for employment upon graduation by ensuring that they are productive, accountable, and responsible individuals able to function effectively in today's workplace. This goal is achieved by developing in students a cohesive, solid theoretical foundation bolstered by practical, hands-on experiences. The learning environment is further enhanced by extensive contact between faculty and students both in and out of the classroom. In addition, the liberal education component present in all programs equips students for lifelong learning in a changing world.

The mission of the College is to serve the citizens of Northern Utah and the State of Utah by:

- Preparing students for employment upon graduation and ensuring that they are productive, accountable, and responsible individuals able to function effectively in today's workplace.
- Engaging in scholarly activities which expand the technological education our students receive and provide a service to business and industry.
- Utilizing the College's resources and faculty expertise to benefit students, business, industry, education, government and society in general.

C. Student Learning Outcomes

Please review the [Student Learning Outcomes](#) for your academic program displayed on the assessment site:

<http://www.weber.edu/portfolio/departments.html>. In particular, review in light of recent strategic reporting and indicate any needed updates. If the outcomes are current, mark below.

X Information is current; no changes required.

Update if not current:

D-1. Curriculum

“A collection of courses is not a program. A curriculum has coherence, depth, and synthesis.”

(Linda Suskie; presentation at NWCCU Assessment Fellowship, June 19, 2019)

Please review the [Curriculum Grid](http://www.weber.edu/portfolio/departments.html) for your department or academic program displayed on the assessment site:
<http://www.weber.edu/portfolio/departments.html>.

Indicate in the curriculum grid where graduating student performance is assessed for each program outcome. In the ‘additional information’ section, please provide information about these assessments (e.g., portfolios, presentations, projects, etc.) This information will be summarized at the college and institutional level for inclusion in our NWCCU reporting on student achievement.

Curriculum Map

Core Courses in Department/Program	Department/Program Learning Outcomes				
	Effective Business Communication Skills	Technology Knowledge and Skills	Implementation of Effective Decision-Making and Problem-solving skills	Knowledge of Ethics and Professionalism	Produce industry-standard projects
WEB 1400 – Web Design and Usability		Artifact	E	I	E
WEB 1430 – Client Side Scripting	I	I	A	I	I
WEB 2200 – Image Editing		I	U	I	E
WEB 2210 – Computer Illustrations	U	E	U	U	E
WEB 2300 – Video Editing	U	E	U	I	E
WEB 2410 – Web Animation I		E			E
WEB 2500 – User Experience Design	E	U	U	E	A
WEB 2620 – Advanced CSS	I	U	U	I	A
WEB 2630 – Client Side Frameworks		U	E		E

WEB 2800 – Independent Projects / Research	U	E	E	E	A
WEB 2860 – Work Study	U	E	E	E	A
WEB 2890 – Client Side Portfolio	U	Artifact	E	E	A
CS 1030 – Foundations of Computing	I	U	U	I	I
CS 1400 – Fundamentals of Programming		U	U	I	I
CS 2550 - Introduction to Database Design and SQL		A	A		
WEB 3200 – Dynamic Languages for Web Development		I	E	E	I
WEB 3300 – Motion Graphics		E			U
WEB 3400 – LAMP Stack Web Development	I	U	U	I	A
WEB 3410 – Web Animation II		E			U
WEB 3430 – MEAN Stack Web Development	E	A	A	U	A
WEB 3500 – User Interface Prototyping & Design	U	E	U	E	E
WEB 3700 – Web Development with .NET	E	A	A	E	U
WEB 4350 – Web Development Capstone	A	Artifact	A	U	A
WEB 4800 – Independent Research	U	E	E	E	A
WEB 4860 – Internship	U	E	E	A	A
WEB 4890 – Server Side Portfolio	U	E	E	E	A
CS 3550 – Advanced Database Programming		A	A		
CS 3620 – Server Side Web Architecture	E	U	E	E	A
CS 3650 – Human-Computer Interaction	E	A	E	E	A

Note^a: Define words, letters or symbols used and their interpretation; i.e. 1= introduced, 2 = emphasized, 3 = mastered or I = Introduced, E = Emphasized, U = Utilized, A = Assessed comprehensively; these are examples, departmental choice of letters/numbers may differ

Note^b: Rows and columns should be transposed as required to meet the needs of each individual department

Additional Information (details about graduating student assessment):

Students create websites in the Web 1400 course which is a prerequisite for most of the other courses. As students continue through the curriculum, they will be encouraged to save projects they have worked on for inclusion in the capstone projects – the portfolio for the Associates Degree (WEB 2890) and the web dev course (WEB 4350). The portfolio course will offer students a chance to reflect on their work and improve upon their previously completed projects with their more advanced skill set. Students in the web dev course will work with a client to create a fully functioning website, also allowing students to apply their skills.

As suggested by the goals of the College, many courses are project based. The capstone courses include presentation to faculty. Students are evaluated by faculty as well as industry professionals. This evaluation provides meaningful feedback for students and encourages them to include their best work.

D-2. High Impact Educational Experiences in the Curriculum

In response to the recent USHE requirement that all students have at least 1 HIEE in the first 30 credit hours and 1 HIEE in the major or minor we are asking programs to map HIEEs to curriculum using a traditional curriculum grid. This helps demonstrate how and where these goals are accomplished.

Courses	Department/Program use of High Impact Educational Experiences			
	Consistent, timely, and constructive feedback	Public dissemination of learning experience	Opportunities to discover relevance of learning through real-world applications or through real-world/authentic experiences	Performance expectations set at appropriately high levels
WEB 1400 – Web Design and Usability	X			
WEB 1430 – Client Side Scripting	X			
WEB 2200 – Image Editing	X			
WEB 2210 – Computer Illustrations	X			
WEB 2300 – Video Editing	X			
WEB 2410 – Web Animation I	X			
WEB 2500 – User Experience Design	X			
WEB 2620 – Advanced CSS	X			
WEB 2630 – Client Side Frameworks	X			
WEB 2800 – Independent Projects / Research	X	X	X	X
WEB 2860 – Work Study		X	X	
WEB 2890 – Client Side Portfolio	X	X	X	X
WEB 3200 – Dynamic Languages for Web Development	X			
WEB 3300 – Motion Graphics	X			
WEB 3400 – LAMP Stack Web Development	X			
WEB 3410 – Web Animation II	X			
WEB 3430 – MEAN Stack Web Development	X			
WEB 3500 – User Interface Prototyping & Design	X			

WEB 3700 – Web Development with .NET	X			
WEB 4350 – Web Development Capstone	X		X	X
WEB 4800 – Independent Research	X	X	X	X
WEB 4860 – Internship		X	X	
WEB 4890 – Server Side Portfolio	X	X	X	X

HIEEs include capstone courses or experiences, community-engaged learning, evidence-based teaching practices, internships, project-based learning, study abroad/away, supplemental instruction, team-based learning, undergraduate research, pre-professional/career development experiences. Additional information (HIEE planning, assessment, or other information):

E. Assessment Plan

Please update the Assessment Plan for your department displayed on the assessment site:

<http://www.weber.edu/portfolio/departments.html>. Keep in mind that reporting will be done biennially instead of annually; that should be reflected in your assessment plan. Please ensure that Gen Ed courses are assessed/reported at least twice during a standard program review cycle.

A complete plan will include a list of courses from which data will be gathered and the schedule, as well as an overview of the assessment strategy the department is using (for example, portfolios, or a combination of Chi assessment data and student survey information, or industry certification exams, etc.), and plans for continuous improvement.

Assessment plan:

Course	2020	2021	2022	2023	2024
WEB 1400 - Web Design and Usability		X		X	
WEB 1430 - Client Side Scripting		X		X	
WEB 2500 - User Experience Design		X		X	
WEB 2620 - Advanced CSS		X		X	
WEB 2800 - Independent Projects / Research	X		X		X
WEB 2860 - Work Study	X		X		X
WEB 2890 - Client Side Portfolio	X		X		X
WEB 3400 - LAMP Stack Web Development		X		X	
WEB 3430 - MEAN Stack Web Development		X		X	
WEB 3700 - Web Development with .NET		X		X	
WEB 4350 - Web Development Capstone	X		X		X
WEB 4800 - Independent Research	X		X		X
WEB 4860 - Internship	X		X		X
WEB 4890 - Server Side Portfolio	X		X		X

The following three steps outline the Web and User Experience assessment process:

1. Following the above schedule, course assessment subcommittees will convene during the assigned year to review the effectiveness of course delivery in achieving department objectives and to establish a Course Assessment Plan. The Plan includes summary evidence of how the course currently satisfies the department's student learning outcomes, investigating specific assessment instruments, the associated learning outcomes, and resulting class performance. Evidence of learning for a specific student learning outcome is deemed successful if the associated assessment measure is 80% or above.
 - a. In addition, the source assessment subcommittees will list recommendations for course improvement to address any deficiencies in meeting applicable student learning outcomes.
2. Program recommendations will be compiled by Spring semester and submitted for approval by both WEB Faculty and WEB Industry Advisory Council, effectively closing the loop and thus engaging department action toward addressing deficiencies in achieving student learning outcomes.
3. Recommendations for improvement will be implemented during the subsequent year. An evaluation of the implementation of course improvements will indicate if the course should be reassessed immediately or if the regular course assessment cycle may be resumed.

Additional Information:

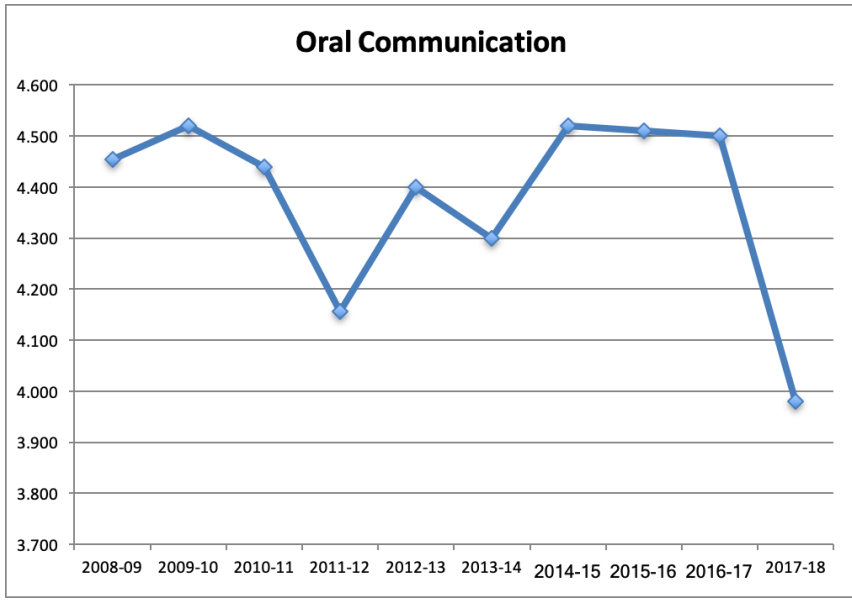
The coursework for the major has changed significantly over the last 2-3 years with more emphasis being placed on web design. We will be changing some classes around in the next few years to focus on user experience which can affect the assessment above.

F. Report of assessment results for the most previous academic year:

There are varieties of ways in which departments can choose to show evidence of learning. This is one example. The critical pieces to include are 1) learning outcome being assessed, 2) method(s) of measurement used, 3) threshold for 'acceptable – that is, the target performance, 4) actual results of the assessment, 5) interpretation/reflection on findings 6) the course of action to be taken based upon the interpretation, and 7) how that action will be evaluated.

A. Evidence of Learning: Courses within the Major

Evidence of Learning: Courses within the Major																											
Program Learning Goal	Measurable Learning Outcome	Method of Measurement Direct and Indirect Measures*	Findings Linked to Learning Outcomes	Interpretation of Findings	Action Plan/Use of Results																						
Goal 1: Students will possess effective business communication skills.	Learning Outcome 1: Students will maintain a score of 3.5 or above on the writing assessment.	Measure 1: Writing Assessment Rubric	Measure 1: Written Communication <table border="1"> <caption>Written Communication Data</caption> <thead> <tr> <th>Year</th> <th>Score</th> </tr> </thead> <tbody> <tr><td>2008-09</td><td>4.1</td></tr> <tr><td>2009-10</td><td>4.5</td></tr> <tr><td>2010-11</td><td>4.1</td></tr> <tr><td>2011-12</td><td>4.2</td></tr> <tr><td>2012-13</td><td>4.1</td></tr> <tr><td>2013-14</td><td>4.2</td></tr> <tr><td>2014-15</td><td>4.4</td></tr> <tr><td>2015-16</td><td>4.2</td></tr> <tr><td>2016-17</td><td>4.2</td></tr> <tr><td>2017-18</td><td>3.7</td></tr> </tbody> </table>	Year	Score	2008-09	4.1	2009-10	4.5	2010-11	4.1	2011-12	4.2	2012-13	4.1	2013-14	4.2	2014-15	4.4	2015-16	4.2	2016-17	4.2	2017-18	3.7	Measure 1: Since Fall 2008 when collection of this data began, students have maintained an average score of 4.18 on the written communication assessment.	Measure 1: To evaluate annually the individual element scores on the writing rubric to improve the sub scores.
	Year	Score																									
2008-09	4.1																										
2009-10	4.5																										
2010-11	4.1																										
2011-12	4.2																										
2012-13	4.1																										
2013-14	4.2																										
2014-15	4.4																										
2015-16	4.2																										
2016-17	4.2																										
2017-18	3.7																										
	Learning Outcome 2: Students will maintain a score of 3.5 or above on the oral communication assessment.	Measure 2: Oral Communication Assessment Rubric	Measure 2: Oral Communication	Measure 2: Since Fall 2008, when collection of this data began, students have maintained an average score of 4.38 on the oral	Measure 2: To evaluate annually the individual element scores on the oral communication rubric to improve the sub scores.																						



communication assessment.

Goal 2: This goal is not assessed for this major.

Goal 3: Student will possess effective knowledge and skills.

Learning Outcome 3: At least 75% of students will work on level comparable to or beyond the level of educational background.

Measure 1: Internship Employer and Student Forms

Measure 1: Knowledge and Skills

Academic Year	Works beyond level of educational background	Works on level comparable to educational background	Works on level below educational background
	Employer	Employer	Employer
2009/2010	11	4	0
2010/2011	4	2	0
2011/2012	4	3	0
2012/2013	3	5	0
2013/2014	2	2	0
2014/2015	11	6	0
2015/2016	14	16	0
2016/2017	16	8	0
2017/2018	4	3	0

Measure 1: Since Fall 2009, when collection of this data began, 100% of the employers rated student's work on a level comparable to or beyond the level of educational background.

Measure 1: Evaluate higher level software tasks and skills.

Goal 4:

Learning Outcome 4a:

Measure 1:

Measure 1: Decision Making

Measure 1:

Measure 1: N/A

Students will possess effective decision-making and problem-solving skills.	At least 75% of students will make appropriate decisions most of the time.	Internship Employer and Student Forms	<table border="1"> <thead> <tr> <th>Academic Year</th> <th>Makes appropriate decisions most of the time Employer</th> <th>Makes appropriate decisions some of the time Employer</th> <th>Unable to make appropriate decisions Employer</th> </tr> </thead> <tbody> <tr><td>2009/2010</td><td>15</td><td>0</td><td>0</td></tr> <tr><td>2010/2011</td><td>6</td><td>0</td><td>0</td></tr> <tr><td>2011/2012</td><td>7</td><td>0</td><td>0</td></tr> <tr><td>2012/2013</td><td>6</td><td>2</td><td>0</td></tr> <tr><td>2013/2014</td><td>3</td><td>1</td><td>0</td></tr> <tr><td>2014/2015</td><td>16</td><td>1</td><td>0</td></tr> <tr><td>2015/2016</td><td>22</td><td>0</td><td>0</td></tr> <tr><td>2016/2017</td><td>21</td><td>3</td><td>0</td></tr> <tr><td>2017/2018</td><td>4</td><td>3</td><td>0</td></tr> </tbody> </table>	Academic Year	Makes appropriate decisions most of the time Employer	Makes appropriate decisions some of the time Employer	Unable to make appropriate decisions Employer	2009/2010	15	0	0	2010/2011	6	0	0	2011/2012	7	0	0	2012/2013	6	2	0	2013/2014	3	1	0	2014/2015	16	1	0	2015/2016	22	0	0	2016/2017	21	3	0	2017/2018	4	3	0	Since Fall 2009, when collection of this data began, 100 out of 110 or 91% of employers rated students in the highest level.					
	Academic Year	Makes appropriate decisions most of the time Employer	Makes appropriate decisions some of the time Employer	Unable to make appropriate decisions Employer																																													
2009/2010	15	0	0																																														
2010/2011	6	0	0																																														
2011/2012	7	0	0																																														
2012/2013	6	2	0																																														
2013/2014	3	1	0																																														
2014/2015	16	1	0																																														
2015/2016	22	0	0																																														
2016/2017	21	3	0																																														
2017/2018	4	3	0																																														
	Learning Outcome 4b: At least 75% of students will identify most problems and implement solutions.	Measure 2: Internship Employer and Student Forms	<table border="1"> <thead> <tr> <th colspan="4">Measure 2: Problem-Solving Skills</th> </tr> <tr> <th>Academic Year</th> <th>Identifies most problems and implements solutions Employer</th> <th>Identifies some problems and implements some solutions Employer</th> <th>Unable to identify problems and implement solutions Employer</th> </tr> </thead> <tbody> <tr><td>2009/2010</td><td>14</td><td>1</td><td>0</td></tr> <tr><td>2010/2011</td><td>4</td><td>2</td><td>0</td></tr> <tr><td>2011/2012</td><td>4</td><td>3</td><td>0</td></tr> <tr><td>2012/2013</td><td>7</td><td>1</td><td>0</td></tr> <tr><td>2013/2014</td><td>3</td><td>1</td><td>0</td></tr> <tr><td>2014/2015</td><td>13</td><td>4</td><td>0</td></tr> <tr><td>2015/2016</td><td>20</td><td>2</td><td>0</td></tr> <tr><td>2016/2017</td><td>23</td><td>1</td><td>0</td></tr> <tr><td>2017/2018</td><td>4</td><td>3</td><td>0</td></tr> </tbody> </table>	Measure 2: Problem-Solving Skills				Academic Year	Identifies most problems and implements solutions Employer	Identifies some problems and implements some solutions Employer	Unable to identify problems and implement solutions Employer	2009/2010	14	1	0	2010/2011	4	2	0	2011/2012	4	3	0	2012/2013	7	1	0	2013/2014	3	1	0	2014/2015	13	4	0	2015/2016	20	2	0	2016/2017	23	1	0	2017/2018	4	3	0	Measure 2: Since Fall 2009, when collection of data began, 92 out of 110 or 84% of employers rated student as identifying and implementing solutions for most of the problems.	Measure 2: Follow-up with internship employers to determine types of problems not being identified and solved.
Measure 2: Problem-Solving Skills																																																	
Academic Year	Identifies most problems and implements solutions Employer	Identifies some problems and implements some solutions Employer	Unable to identify problems and implement solutions Employer																																														
2009/2010	14	1	0																																														
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2013/2014	3	1	0																																														
2014/2015	13	4	0																																														
2015/2016	20	2	0																																														
2016/2017	23	1	0																																														
2017/2018	4	3	0																																														
Goal 5: This outcome is not assessed for this major.																																																	
Goal 6: Students will possess knowledge of	Learning Outcome 6: At least 75% of students will	Measure 1: Internship Employer and Student Forms	Measure 1: Ethics	Measure 1: Since Fall 2009, when collection of	Measure 1: N/A																																												

ethics and professionalism.	demonstrate good or excellent work ethics.		Academic Year	Demonstrates excellent work ethics	Demonstrates good work ethics	Demonstrates poor work ethics	this data began, 100% of employers rated students work ethics as good or excellent.	
				Employer	Employer	Employer		
			2009/2010	13	2	0		
			2010/2011	5	1	0		
			2011/2012	7	0	0		
			2012/2013	7	1	0		
			2013/2014	3	1	0		
			2014/2015	15	2	0		
			2015/2016	22	0	0		
			2016/2017	23	1	0		
2017/2018	6	1	0					

*At least one measure per objective must be a direct measure. Indirect measures may be used to supplement evidence provided via the direct measures.

Since 2009, we have used this structure to measure learning outcomes within the program. Since the program has changed significantly, we will be working on a new approach to measuring learning outcomes. You will see from above that the numbers have dipped and this is due to the program changes and making the course that normally assess the outcomes optional. As we move forward, we will be focusing the measurement of learning outcomes in the associate-level portfolio class and the upper division capstone.

Another note is in the next biennial assessment we will be making adjustments to the assessment data including the new capstone information including 2018-2019 and onward.

Appendix A

Most departments or programs receive a number of recommendations from their Five/Seven-Year Program Review processes. This page provides a means of updating progress towards the recommendations the department/program is acting upon.

Date of Program Review: 2018 - 2019	Recommendation	Progress Description
Recommendation 1	Transfer Mr. Cody Squadroni to a tenure-track position with commensurate pay to reduce workload while providing stability to him and to the program.	This is currently being looked at by Dean Ferro.
Recommendation 2	Increase faculty salaries. If faculty must work several jobs to make ends meet, they cannot, will not, dedicate themselves whole-heartedly to educating students.	This is being looked at, at the College and University level.
Recommendation 3	Hire a faculty member with expertise to provide the User Experience curriculum needed or drop "User Experience" from the degree name and create a new minor in conjunction with the Department of Visual Arts & Design. The new minor could integrate applicable courses from the Design for Digital Media and User Experience Design minors to capitalize on the strengths from both programs and better meet the needs of students in the field of User Experience.	We are looking at implementing more UX courses into the base WEB/UX program. We have been meeting with our Industry Advisory Committee on what classes would be best. We have been looking at bringing in an interdisciplinary UX emphasis and finding classes that would fulfill this. We currently have a position posted for hiring a new UX faculty member. We have 6 applicants up to this point and are getting ready to conduct interviews.
Recommendation 4	Elevate the portfolio requirement from the AAS level to the BS level to provide a complete program level assessment tool.	Faculty have been meeting to discuss requirements to make sure everyone is on the same page as what is needed to be covered for us to properly assess our students.

Recommendation 5	Assist students finding and acquiring internships to fulfill the purpose of the program to provide employment-ready graduates.	We have been pushing students to take the internship class as UD elective and making sure we are announcing the internships that come our way. For students that can't get an internship we have been working with Robert Ameling.
Recommendation 6	Provide for teaching assistants / tutors to assist students in upper-division courses. This would also serve to reduce load on faculty.	Working with Spencer Hilton on identifying and securing funding for the Web program tutor center.

Additional narrative: We are working hard towards improving the WEB/UX program by integrating the proper courses to enhance the UX portion, to hiring more faculty to increase our resources, and focusing on internships for our students.

Appendix B

Please provide the following information about the full-time and adjunct faculty contracted by your department during the last academic year (summer through spring). Gathering this information each year will help with the headcount reporting that must be done for the final Five Year Program Review document that is shared with the State Board of Regents.

Faculty Headcount	2017-18	2018-19
With Doctoral Degrees (Including MFA and other terminal degrees, as specified by the institution)		
Full-time Tenured	2	2
Full-time Non-Tenured (includes tenure-track)		1
Part-time and adjunct	1	
With Master's Degrees		
Full-time Tenured		
Full-time Non-Tenured	3	3
Part-time and adjunct	2	4
With Bachelor's Degrees		
Full-time Tenured		
Full-time Non-tenured	1	
Part-time and adjunct	6	4
Other		
Full-time Tenured		
Full-time Non-tenured		
Part-time		
Total Headcount Faculty	15	14
Full-time Tenured	2	2
Full-time Non-tenured	4	4
Part-time	9	8

Please respond to the following questions.

- 1) First year student success is critical to WSU's retention and graduation efforts. We are interested in finding out how departments support their first-year students. Do you have mechanisms and processes in place to identify, meet with, and support first-year students? Please provide a brief narrative focusing on your program's support of new students:
 - a. Any first-year students taking courses in your program(s).
 - i. We get notified when a student declares a major in Web and User Experience, and for first-year students, we make sure to reach out and bring them in to have them meet with our WEB advisors. This allows us to introduce ourselves and give them more information about the program and help the students prepare for their upcoming semester. We also can show them the classrooms where the primary courses are held.
 - ii. During this meeting, we also talk about the available resources that the student has access too. We mention that we should schedule a meeting each semester so we can help them plan their courses to make sure they stay on the right path, and we also let them know that we are always available when they have questions.
 - iii. If students don't meet with us regularly as we advise them to, we have a checkbox in CatTracks that won't allow them to apply for their AAS graduation and move onto the upper-division courses until the box is checked. Doing this makes sure they at least meet with us before moving on to the upper-division courses, so we can make sure things are going well and see if they have any questions or concerns moving forward.
 - b. Students declared in your program(s), whether or not they are taking courses in your program(s)
 - i. We follow the same protocol as above, we know which students are declared as Web and User Experience majors, and we reach out to make sure everything is going well, and they are still on track.
- 2) A key component of sound assessment practice is the process of 'closing the loop' – that is, following up on changes implemented as a response to your assessment findings, to determine the impact of those changes/innovations. It is also an aspect of assessment on which we need to improve, as suggested in our NWCCU mid-cycle report. Please describe the processes your program has in place to 'close the loop'.
 - a. The plan moving forward with the Web and User Experience program to close the loop is to assess and plan for our courses in an academic year. During this process, we will discuss our assessment findings with our industry advisory committee and faculty members to see how we want to proceed with our plan. After we have met with our industry advisory committee, which we meet twice a year, we will implement and then evaluate the courses. This cycle will be continuous, but also, the classes are going through the process at different times, which is shown in our assessment plan. This is done, so we aren't making changes to everything at once, but we allow us to stay current with changes in technology regularly.

Glossary

Student Learning Outcomes/Measurable Learning Outcomes

The terms 'learning outcome', 'learning objective', 'learning competency', and 'learning goal' are often used interchangeably. Broadly, these terms reference what we want students to be able to do AFTER they pass a course or graduate from a program. For this document, we will use the word 'outcomes'. Good learning outcomes are specific (but not too specific), are observable, and are clear. Good learning outcomes focus on skills: knowledge and understanding; transferrable skills; habits of mind; career skills; attitudes and values.

- Should be developed using action words (if you can see it, you can assess it).
- Use compound statements judiciously.
- Use complex statements judiciously.

Curriculum Grid

A chart identifying the key learning outcomes addressed in each of the curriculum's key elements or learning experiences (Suskie, 2019). A good curriculum:

- Gives students ample, diverse opportunities to achieve core learning outcomes.
- Has appropriate, progressive rigor.
- Concludes with an integrative, synthesizing capstone experience.
- Is focused and simple.
- Uses research-informed strategies to help students learn and succeed.
- Is consistent across venues and modalities.
- Is greater than the sum of its parts.

Target Performance (previously referred to as 'Threshold')

The level of performance at which students are doing well enough to succeed in later studies (e.g., next course in sequence or next level of course) or career.

Actual Performance

How students performed on the specific assessment. An average score is less meaningful than a distribution of scores (for example, 72% of students met or exceeded the target performance, 5% of students failed the assessment).

Closing the Loop

The process of following up on changes made to curriculum, pedagogy, materials, etc., to determine if the changes had the desired impact.

Continuous Improvement

An idea with roots in manufacturing, that promotes the ongoing effort to improve. Continuous improvement uses data and evidence to improve student learning and drive student success.

Direct evidence

Evidence based upon actual student work; performance on a test, a presentation, or a research paper, for example. Direct evidence is tangible, visible, and measurable.

Indirect evidence

Evidence that serves as a proxy for student learning. May include student opinion/perception of learning, course grades, measures of satisfaction, participation. Works well as a complement to direct evidence.

HIEE – High Impact Educational Experiences

Promote student learning through curricular and co-curricular activities that are intentionally designed to foster active and integrative student engagement by utilizing multiple impact strategies.