EXECUTIVE SUMMARY
WSU Department School of Computing
Web and User Experience
Self-Study Document, Fall 2018

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The following is a summary of the self-study document, highlighting important points. For complete information, please refer to the full, self-study document itself.

Mission Statement:
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.

Curriculum:
Since the last program review the program has undergone many changes. It has gone from a program in Business Multimedia to Web and User Experience. This was revised to give students more advanced skillset for modern technology.

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 web site, 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.

Core Courses in Department/Program	Department/Program Learning Outcomes				
	Effective Business Communication Skills	Technology Knowledge and Skills	Effective Decision-Making and Problem-solving skills	Knowledge of Ethics and Professionalism	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

Core Courses in Department/Program	Department/Program Learning Outcomes				
	Effective Business Communication Skills	Technology Knowledge and Skills	Effective Decision-Making and Problem-solving skills	Knowledge of Ethics and Professionalism	Produce industry-standard projects
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 3650 – Human-Computer Interaction	E	A	E	E	A
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

Student Learning Outcomes and Assessment:

Measurable Learning Outcomes

At the end of their study at WSU, students in this program will

1. Possess effective business communication skills
2. Possess knowledge and skills of technology
3. Implement effective decision-making and problem-solving skills
4. Possess knowledge of ethics and professionalism
5. Produce industry-standard websites and multimedia projects.

Five-year Assessment Summary

The Web and User Experience program comprehensively assesses student achievement. This assessment has assisted reflection on areas for improvement. Actions have been taken from items in the past five years of findings. We are committed to continue to improve the program for student success. Below is a summary of the past five years:

2012-2015, The faculty remained confident in student's success and seeing them excel in the program learning outcomes. The majority of the ratings from the employers were in the highest category, and no student interns received a poor rating. During this time, the program was looking for additional funding for full-time faculty, building more advanced courses to increase students' knowledge, making artifacts more accessible to students, and finding a balance in lower- and upper-division courses to help student success. Also, they focused on evaluating scheduling to meet student needs better, looking into possible means to increase scholarship and internship opportunities for students, and finding additional ways to increase enrollments.

2015-2016, The faculty started the process of moving the curriculum from a more general multimedia program to a new WEB/UX degree program which would begin in 2017. This new program would start a new assessment process as the curriculum changed. We worked towards assessing students with direct evaluations of portfolios at both AAS and BS levels. All graduating students were required to have an exit interview with a faculty member before being signed off for graduation. All graduates were also be invited back one year after graduation to serve on the program Alumni Advisory Board.

2016-2017, We had more changes in curriculum and wanted to focus on helping the remaining 40 students graduate under the old Business Multimedia program. The transition of assessing the new WEB/UX curriculum and outcomes continued, as the older program assessment was phased out. We anticipated assessing students with a direct evaluation of portfolios and noticed deficiencies in several (current) web technology skills for students who graduated. The assessment again informed our decisions to adjust curriculum and outcomes beginning with the 2017 catalog.

The program has grown in the past five years. During this time we have made significant adjustments to the program to better prepare and assess our students for current technology. Technology in this area has changed dramatically in the past five years. Major curriculum changes reflect those changes. We have adjusted some content in continuing courses from the previous Business Multimedia program and have created new courses which cover more employable/advanced skillsets. We continue to see an increase in enrollments, and we continue to improve the way students are assessed as we prepare them for careers in the Web/UX industry.

Assessment of Graduating Students
During the past five years, a lot has changed with the program. When the program was Business Multimedia, students were assessed both at the AAS and BS level through the Internship. One decision made by faculty was to require all graduating students to create a portfolio. The internship has become an elective. This change explains the decrease in numbers located in Appendix G for learning outcomes. As we move forward with the revised Web and User Experience program student portfolios will be evaluated at both the

AAS and BS level. All graduating students will continue to be required to have an exit interview with a faculty member before being signed off for graduation.

Academic Advising:
With the inclusion of the Web and User Experience program into The School of Computing, we have gained resources to help our advising strategy and process. The School of Computing operates on three separate campuses, and each campus has designated advising personnel as well as assigned advising for each program. The Web and User Experience advising is primarily on the main campus in Ogden. We have three people responsible for advising: Ms. Pat DeJong, Mr. Cody Squadroni, and Dr. Laura MacLeod. Pat is the primary advisor for Computer Science, Web and User Experience, and Networking. Cody is the current Web and User Experience Program Coordinator and, with that role, advises students who are in the Web and User Experience program. Dr. Laura MacLeod is also available to advise new students but focuses on advising students who are finishing the Business and Multimedia program. Both Cody and Laura help students who wish to transition from the old degree to the new.

Faculty / Staff:

Name	Rank	Degree
Al-Gahmi, Abdulmalek	Assistant Professor	D
Anderson, Laura	Instructor	M
Christensen, Angie	Staff / Adjunct	B
Fernandez, Luke	Instructor	D
Fry, Richard	Professor	D
MacLeod, Laura	Associate Professor	D
Satterthwaite, Faith	Instructor	M
Squadroni, Cody	Instructor	B
Tuck, Garth	Instructor	M

Program Support:
Adequacy of Staff
We have an administrator who has taken on added responsibilities, Ms. Angela Christenson. Angie manages student registrations, course offerings, helps program coordinators, and manages the hourly staff for the front desk and those in the Computer Literacy Center (CLC). She also provides guidance to students and staff who call/email for information regarding the program or those who come in person to gather additional information. She also helps coordinate and schedule Industry Advisory Council meetings. With these responsibilities, she supervises two office assistants who assist faculty and staff with office duties. These office assistants also act as receptionists for the School of Computing office located in Elizabeth Hall.

Angie also supervises the seven digital media specialists in the CLC who provide customer service and support to students. They are responsible for the basic operations of the CLC which include administering exams. They assist the CLC director as needed and they have

created online learning modules for some of the introductory courses. They will continue to work on new learning modules as needed.

Adequacy of Administrative Support
The college dean and department chair are very supportive of our program. They have worked closely with us as we have transitioned from the Business Multimedia program to the Web and User Experience program. They have helped provide support in promotion and advertising. The Web and User Experience program was selected as a focus for marketing in the College of Engineering, Applied Science & Technology (EAST) as a spotlight for the University. We continue to work together to make the program more visible and increase student awareness and enrollments by adjusting the program to meet the needs of industry and our students. In addition, the dean is supportive of professional development for faculty and staff.

EAST also provides personnel to manage the technology in the program. Staff and student employees are well-equipped to prevent problems, maintain equipment, install new software and hardware, and are responsive when problems arise.

Adequacy of Facilities and Equipment
The Web and User Experience program has a centralized area in Elizabeth Hall for faculty and staff. Having everyone in a centralized area brings a better sense of community and allows faculty and staff to work closely together.

The Web and User Experience classrooms and labs are also in Elizabeth hall, near the offices which makes it easy for faculty as well as students who have easy access to faculty. EAST has a system in which faculty computers are replaced on a five-year basis. The School of Computing has been able to accommodate faculty requests for new technology and hopes to be able to continue this support. Regarding classroom technology, the School of Computing provides the hardware and software needed for each classroom to run successfully and to give the students the best experience as possible.

Adequacy of Library Resources
The library collection, staff and support services meet the needs of the WebUX program. We have ready access to the electronic technology, periodicals, publications and video sources that we need. The library staff is responsive to any requests that our program might have.

Relations with External Community:
We have cultivated a relationship with local businesses who are interested in hiring our graduates. Many provide internships for graduates, interview students on campus, present to our students about their companies, and help improve the program to stay current with industry trends.

Student, Faculty, Contract/Adjunct Faculty and Staff Statistics:

	2013-14	2014-15	2015-16	2016-17	2017-18
Student Credit Hours Total	14,680	15,882	16,059	10,344	7,399
Student FTE Total	489.33	529.40	535.30	344.80	246.63
Student Majors	88	87	81	85	104
Program Graduates					
Associate Degree	7	4	4	4	6
Bachelor Degree	7	11	13	7	8
Student Demographic Profile					
Female	38	38	41	44	48
Male	50	49	40	41	56
Faculty FTE Total	43.77	42.14	50.08	51.18	N/A
Adjunct FTE	23.41	21.65	24.35	26.64	N/A
Contract FTE	20.36	20.49	25.73	24.54	N/A
Student/Faculty Ratio	22.57	25.78	22.82	22.91	N/A

*During the 2015-2016 school year, the university made the decision to drop Computer Literacy from General Education requirements for all students.

Results of Previous Program Reviews:

Problems identified in site report from 2012		
Problem Identified	Action Taken	Progress
Issue 1 Too small faculty size	Previous 5 Year Program Review:	Hired one additional tenure-track faculty member Fall 2012
	Year 1 Action Taken:	Integrated department into the School of Computing to better utilize faculty in support of Web/UX program. Many faculty teach in both Computer Science and Web/UX.
Issue 2 Reevaluate faculty responsibilities: FBLA-PBL Student advising Faculty preps	Previous 5 Year Program Review:	FBLA-PBL student organization dropped 2015
	Year 1 Action Taken:	Graduation map has been revised to reflect changes in curriculum. The program coordinator advises incoming students and another faculty advises students finishing in the previous Multimedia program.

	Year 2 Action Taken:	Integrated department into the School of Computing to better utilize faculty time. Crossovers in curriculum between WebUX and Computer Science allows multiple sections of one class to be offered. This allows for fewer preps for faculty.

Information Regarding Current Review Team Members:

Name	Position	Affiliation
Jo Ellen Jonsson	Associate Professor	WSU College of EAST
Kim Brown	Associate Professor	UVU Digital Media