Central Washington University

Degree Program Student Learning Outcome Assessment Plan

Department: Computer Science

Program: MS-Computational Science

Student Learning Outcome (performance, knowledge, attitudes)	**Related CWU Strategic Outcome(s)** http://www.cwu.edu/strategic-planning/	**Method(s) of Assessment (What is the assessment?)***	**Who Assessed (Students from what courses - population)****	**When Assessed (term, dates)*****	**Standard of Mastery/ Criterion of Achievement (How good does performance have to be?)**
1. Basic knowledge: Graduates will demonstrate an understanding of each of the subject areas that define the discipline as well as the interrelationships that exist among them.	1.1.1 Students will achieve programmatic learning outcomes.	Performance in the core courses	Graduate Students	Spring term on a three-year cycle.	GPA above 3.2 and no grade lower than a B in required core content and elective classes on student's course of study form. Successful completion and presentation of culminating project or thesis. Evidence of improvement in exit survey compared to entry survey.
2. Critical Thinking Skills: Graduates will demonstrate the ability to utilize appropriate theoretical constructs for problem solving: definitions, and axioms, theorems, proofs, and interpretation of results.	1.1.1 Students will achieve programmatic learning outcomes.	Performance in MS Thesis / Capstone Project presentations Entrance/ Exit Survey Class Performance	Graduate Students Graduate Students Graduate Students	Fall term on a three-year cycle. Pre-post program survey Spring term on a three-year cycle.	GPA above 3.2 and no grade lower than a B in required core content and elective classes on student's course of study form Successful completion and presentation of culminating project or thesis. Evidence of improvement in exit survey compared to entry survey

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3. Research Skills: Graduates will have the ability to apply basic research methods in computer science.	1.1.1 Students will achieve programmatic learning outcomes. 3.1.2 Sustain the number of courses that include research, scholarship, and creative expression skills as key outcomes.	Student participation in local and national conferences, including SOURCE Student participation in research projects and groups.	Graduating Students Graduate students involved with conference Students involved in graduate research	Spring term on a three-year cycle.	Number of graduate students producing a published research paper. Range from a constant to an increasing number of graduate students presenting at SOURCE External research presentations or publications annually with student participation.
4. Technical and Theoretical Background: Graduates will demonstrate knowledge of recent technological and theoretical developments, general professional standards, and have an awareness of their own strengths and limitations as well as those of the discipline itself.	1.1.1 Students will achieve programmatic learning outcomes.	Performance in core classes. Performance in MS Thesis / Capstone Project presentations	Graduate students Graduate students	Spring term on a three-year cycle.	Students meet the student learning outcomes of core classes. All student groups will meet professional standards in generating course/project/thesis documents.
5. Communication Skills: Graduates will have the ability to communicate effectively.	1.1.1 Students will achieve programmatic learning outcomes.	Performance in MS Thesis / Project presentations Entrance/ Exit Survey Class Performance	Graduate Students Graduate Students Graduate Students	Spring term on a three-year cycle. Pre-post program survey	GPA above 3.2 and no grade lower than a B in required core content and elective classes on student's course of study form Successful completion and presentation of Thesis / Capstone Project. Evidence of improvement in exit survey compared to entry survey

*Method(s) of assessment should include those that are both direct (tests, essays, presentations, projects) and indirect (surveys, interviews) in nature.
**Data needs to be collected and differentiated by location (Ellensburg campus vs University Centers) and modality (e.g. online, face-to-face, hybrid)
***Timing of assessment should ideally be at different transition points of program (i.e., admission, mid-point, end-of-program, post-program) rev. 12/14

Assessment Cycle

Analysis and Interpretation: December

Improvement Actions: Completed by June

Dissemination: Completed by June

Year SLOs	15-16	16-17	17-18	18-19	19-20	20-21
1	X			X		
2		X			X	
3			X			X
4	X			X		
5		X			X	

Assessment Oversight

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