

Capstone II AY17 Program Review: Capstone Rubric & 2017 Aggregate Scores
Computer Science

Assessment Type: Academic Program

Year/Term: 2016-2017

Level: Computer Science Capstone

Learning Outcome: Program Learning Outcomes (PLOs)

Assessment Method/Tool: Program Learning Outcomes Capstone Rubric

Measurement Scale: 3-1

Sample Size: 2

	Proficient (# of students)		Competent (# of students)		Developing (# of students)	
Content Knowledge	2	100%	0	0%	0	0%
Integrated Learning & Communication	1	50%	1	50%	0	0%
Problem Solving	2	100%	0	0%	0	0%
Inquiry, Critical Thinking, & Analysis	1	50%	1	50%	0	0%
Teamwork & Civic Engagement	N/A	N/A	N/A	N/A	N/A	N/A
Median %		75%		25%		0%

Benchmark: **100%** Institutional benchmark goal for percent of students to meet “Proficient” or “Adequate” levels
100% Mean and Median meet Threshold

2017 Closing the Loop Statement

It is not surprising that students who have finished a curriculum designed explicitly to teach methodical problem-solving techniques should demonstrate good performance in an

assessment of the same. Nonetheless our program has work ahead of it in administration of the capstone course.

For the last two years, students enrolled in capstone have shown considerable difficulty with timely completion. Only two out of five students who enrolled in Fall 2015 finished their projects by the end of AY 2015-16. Of the remaining three, two have finally begun work in earnest (one of these has two part-time jobs with EOU and is double-majoring in music). The third student has not responded to any e-mail since June, 2016.

Three students enrolled in capstone for the 2016-17 AY. Two of these (included in the above assessment) have completed and performed well; the third intends to finish this summer.

There are several factors that may be affecting student completion of their capstone projects. One is that many of our students find employment before they wrap up their senior year—in some cases, students are hired full-time by EOU's IT department before they begin their third year. Balancing the pressures of school and a full-time job may be challenging, and when the job represents a foot in the door for good professional employment, school obligations may seem less important. This combined with the potential for employment in this field without a finished degree may induce some students to focus more attention on a job search than on wrapping up details for their degrees.

A second factor is short staffing in the CS program from 2015 to 2016. Students have not had any choice of faculty mentor for their capstone projects and consequently may feel less enthusiasm. Furthermore, uncertainty about the future of the program induced several students in the 2015-16 cohort to enroll earlier than they may have otherwise.

A third factor is a change in the scheduling of capstone courses that took place in 2015. Previously, students enrolled in one credit of CS 401 each term they were working on their projects. In a cost-control measure, the course was limited to one term, Fall. Students must enroll in the fall of their senior year, whether they have a clear idea what their projects will be, and once that term is finished, they must continue working without course credit.

A final factor is that the student projects are largely self-directed.

Program faculty will weigh the potential significance of these concerns and work to have all capstone students finish in the same academic year in which they enroll.

Program Learning Outcomes

All program graduates will demonstrate achievement in the following areas:

- **Content Knowledge:** demonstrate factual and conceptual grasp of the field of computing.
- **Integrated Learning and Communication:** demonstrate the ability to incorporate learned skills to design, develop, and evaluate software systems of varying complexity to meet desired user requirements.
- **Problem Solving:** demonstrate proficiency in using one or more industry-standard programming languages and scripting languages to solve problems;
- **Inquiry, Critical Thinking, and Analysis:** demonstrate ability to apply conceptual knowledge for analysis and problem solving.

- **Teamwork and Civic Engagement:** demonstrate teamwork ability to work collaboratively with end users and other developers.