



2014-2015 CSCI EETF Assessment Year End Report, June, 2015

Program Name(s)	EETF Faculty Rep	Department Chair
M.S. Computer Science	Matt Johnson	Matt Johnson

[NOTE: Items A, B, C, and D are identical to your Page 2 on your Annual Report for CAPR. Please simply cut and paste from there. Item E is unique to the CSCI EETF.]

A. Program Student Learning Outcomes

Students graduating with an M.S. in Computer Science from CSU East Bay will be able to:

1. apply advanced computer science theory to computational problems
2. demonstrate advanced understanding of the mechanisms, components and architecture of current computing systems
3. apply emerging technologies and advanced algorithmic design
4. critique, plan and produce complex software applications
5. research and analyze current computer science literature

B. Program Student Learning Outcome(s) Assessed

As according to our assessment plan, we are closing the loop on PLO #2 this year. The department does collect assessment data for all targeted courses each year, however, so as to track trajectories for scores on all PLOs.

Post-assessment quizzes were administered for four courses (addressing PLO #2):

- CS 6320 (Software Engineering and Web-Based Systems), Developing PLO 2 and PLO 4
- CS 6560 (Operating Systems Design – Core requirement) Developing PLO2 and PLO 3
- CS 6660 (Database Systems) Developing PLO2 and PLO 3
- CS 6901 (Graduate Capstone) Mastering PLO 1, PLO 2, and PLO 3

C. Summary of Assessment Process

We created SLOs and PLOs for the Master in Computer Science program in the academic year 2012-2013. The Math and Computer Science Department in which this degree is housed made the decision to use Blackboard as a means to provide students with an assessment exam that addresses the SLOs of each course which are aligned to the PLOs for each program and the ILOs

of the university. We have these in place for several courses in the MS Computer Science program at this time. The results of these exams are being stored in a separate Blackboard shell repository for the department. Evaluating the results of these exams is challenging, as each assessment contains questions for multiple PLOs. We are currently looking at averages over the entire exam. We are considering other options such as creating individual assessments for each PLO. The existing version of Blackboard unfortunately does not support aggregation and comparison of assessments across multiple courses. Another challenge is addressing PLOs for both the Computer Science Master degree and the Computer Network Master degree in courses that serve both programs.

For changes made to close the loop for PLO's, adjustments are still made in an ad hoc manner. For PLO #2 this year, assessment scores were well beyond acceptable for three of the courses. For CS 6660, the course material has been completely revamped to cover more current topics. While the scores were not very good, one positive effect was that participation in the assessment quiz was quite high (85%). The instructor also noted that while the average score for both PLO's was the same, there was a much higher correlation between a student's total score for PLO #3 questions and the student's final grade in the course (.61) than between the total score for PLO #2 and the final grade (.25). The PLO #2 questions did require more understanding of the principles behind the technology. The PLO #3 questions mostly involved the more straightforward use of the technology.

D. Summary of Assessment Results

2014-2015	Assessment Results	1	2	3	4	5
	CS 6320 Software Engineering and Web-Based Systems		8.0		8.5	
	CS 6560 Operating Systems Design		7.9	5.8		
	CS 6660 Database Systems		5.6	5.6		
	CS 6901 Graduate Capstone	6.5	7.8	6.8		

E. Suggestions and Recommendations for the CSCI EETF in the Future

NONE