



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

Program Name(s)	EETF Faculty Rep	Department Chair
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[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 Networks from CSU East Bay will be able to:

1. Exhibit mastery of advanced computer science theory as applied to the field of computer networks
2. Employ current techniques, skills, tools, and coding practices necessary for application and system development
3. Apply critical thinking and problem solving skills by analyzing problems, designing solutions, and evaluating results
4. Demonstrate communication skills in both written and oral form, and work in a team environment
5. Independently acquire new computer related skills through analysis of current computer science literature and industrial practices

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 five courses:

- CS 6560 Mastering PLO1, Practicing PLO3, PLO4
- CS 6526 Practicing PLO 1, PLO 4, and PLO 5
- CS 6591 Practicing PLO1 and PLO2, Mastering PLO 4
- CS 6715 Mastering PLO 1, Practicing PLO 3 and PLO 4 (Breadth requirement)
- CS 6899 (Capstone Project), Mastering PLO 3, PLO 4, PLO 5 (Capstone requirement)

C. Summary of Assessment Process

We created PLOs and SLOs for the Master in Computer Networks 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 mapped to PLOs for each program and the ILOs of the university). We have these in place for seven courses in the M.S. Computer Networks program at this time (an increase of four from last year). 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, which is suboptimal. To evaluate by PLO, hand calculations are needed. For the Capstone project, we went to a rubric for evaluating written projects. We are planning an alternative means for evaluation when we move to semesters.

We are considering other options such as creating individual assessments for each PLO, thus allowing automatic calculation through Blackboard. Another challenge is addressing PLOs for both the Computer Science Master degree and the Computer Network Master degree in courses that serve both programs. We are evaluating merging the two separate programs into one degree with two options for semester conversion. In addition, we are looking at alternative ways to assess PLOs that do not depend solely on Blackboard. We will be looking at methods suggested by ABET, as we may be looking for ABET accreditation of our undergraduate Computer Science program.

In evaluating our PLOs and SLOs and their correspondence to the ILOs, we note that diversity, social responsibility, and sustainability are not adequately addressed in our curriculum. We will be sure to include these areas in our new classes that are tailored towards the semester calendar – specifically in the required courses CS 6591 Network Design and CS 6899 Capstone.

For PLO #2 this year, the assessment score for CS 6591 was well beyond the acceptable score of 70%, indicating that at this juncture we are adequately addressing this outcome in our curriculum.

D. Summary of Assessment Results

CS 6525	average 78%
CS 6526	average 80%
CS 6560	average 69%
CS 6591	average 82%
CS 6596	average 77%

CS 6715	average 80%
CS 6899	average 82%

Two student projects from CS 6899 were chosen to be published in the Proceedings of the 2015 International Conference on Security & Management SAM'15.

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

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