

## FACULTY COURSE ASSESSMENT REPORT COMPUTER SCIENCE AND ENGINEERING

<b>CSE 181CW CSE Senior Design Project</b>
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For each program indicator below please indicate how it was assessed. For instance, if a particular program outcome is assessed by a test question, please indicate which test question was used, and provide information on the assessment standards for that question individually. For each assessment method, report the average score and the percent of enrolled CSE students who met the performance standards for that outcome. If the program indicator was not taught or not assessed, please include that information.

It is important that the assessment information provided here should only refer to the assessment of CSE students in the class. Students in other majors (i.e. EECS or CS) should not be included in the assessment information provided here.

**Academic Term: Spring 2010**

**Instructor: J. Foresta, E Bozorgzadeh  
H. Mustafa (T.A.)**

**Final course grade distribution:**

A	B	C	D	F	P	N/P	I	W	NR	Total
22	8	0	0	0	0	0	0	0	0	30

Student Outcomes: This course is mapped to Student Outcomes d, f, and g.

Student Outcome d: **An ability to function effectively on multidisciplinary teams to accomplish a common goal.**

**Indicator 1: An ability to agree on common subgoals.**

<i>Assessment Method</i>	<i>Average Score</i>	<i>Percent Meeting Performance Standards</i>	<i>Performance Standard Used</i>
Collaborative Senior Design Project Report.	3.6	96%	% of students $\geq 3$ (using a scoring rubric with 4-point scale)

**Indicator 2: An ability to clearly define interfaces between multiple system components.**

<i>Assessment Method</i>	<i>Average Score</i>	<i>Percent Meeting Performance Standards</i>	<i>Performance Standard Used</i>
Collaborative Senior Design Project Report.	3.6	96%	% of students $\geq 3$ (using a scoring rubric with 4-point scale)

Student Outcome f: **An understanding of professional, ethical, legal, security, and social issues and responsibilities.**

<b>Indicator 1:</b> An ability to consider social / ethical / legal issues in the system design process.			
<i>Assessment Method</i>	<i>Average Score</i>	<i>Percent Meeting Performance Standards</i>	<i>Performance Standard Used</i>
Quiz 1, 2, and Ethics essay	3.4	89%	% of students $\geq 3$ (using a scoring rubric with 4-point scale)

Student Outcome g: **An ability to communicate effectively with a range of audiences.**

<b>Indicator 1:</b> An ability to perform oral presentations.			
<i>Assessment Method</i>	<i>Average Score</i>	<i>Percent Meeting Performance Standards</i>	<i>Performance Standard Used</i>
<b>Oral Communication:</b> Oral presentation of Senior Design Project Report.	3.6	100%	% of students $\geq 3$ (using a scoring rubric with 4-point scale)

<b>Indicator 2:</b> An ability to write about a design / implementation task.			
<i>Assessment Method</i>	<i>Average Score</i>	<i>Percent Meeting Performance Standards</i>	<i>Performance Standard Used</i>
<b>Written Communication:</b> Senior Design Project Report.	3.6	96%	% of students $\geq 3$ (using a scoring rubric with 4-point scale)

### **Summary of this quarter's assessment results:**

(1) All (100%) of the students in the class demonstrated proficient or exemplary presentation skills, delivering well-paced, informative presentations of their senior design project to an audience of their peers. As seniors, it is believed that the cumulative presentation experience gained from other upper-division courses has helped to augment their level of skill and confidence for this program outcome.

(2) Almost all (96%) of the students in the class demonstrated proficient or exemplary collaboration skills by completing a senior design project report that met the project report content guidelines by the published deadline.

(3) Almost all (96%) of the students in the class demonstrated proficient or exemplary writing skills evidenced by clear, concise and succinctly informative midterm research papers written to an audience of their peers.

### **What changes did you make in this course based on previous assessment results?**

A stronger focus was directed toward describing/explaining the content requirements for the senior design project report early in the course to help ensure compliance with the ABET-driven guidelines for this specific course outcome.

### **What recommendations do you have for improving the course the next time it is taught?**

(1) Describe/explain the content requirements for the senior design project report in CSE 181B to help ensure that students capture the appropriate information/data for inclusion into the final versions of their project reports they compete in CSE 181CW.

(2) Typically, one third of the senior design project teams do not remain intact as they progress from CSE 181B to CSE 181CW, often leaving only one team member to finish the senior design paper in CSE 181CW. In this case, a one-person team loses the advantage of continued cross-disciplinary collaboration to complete the final version of the senior design project report. To avoid this loss of collaboration, the midterm writing assignment should be redesigned to use a 3 or 4-person team for the development and completion of the paper, thereby ensuring that all class members continue to develop effective collaboration skills, regardless of the size of their senior design project team coming into CSE 181CW.

**What recommendations do you have, if any, regarding prerequisite courses or other ways to improve student preparation for this course?**

None at this time.

**Do you have any other recommendations or comments?**

None at this time.