CENG/ELEC/SENG 399 – Design Project I

Term - FALL 2014 (201409)

Instructor
Drs. K.F. Li / M. McGuire / M. Sima
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Office Hours
Days & Time: By Appointment via email

Lectures
A-Section(s): CENG 399 A01 / CRN 10406
              ELEC 399 A01 / CRN 11245
              SENG 399 A01 /CRN 12832

Days:  Tuesdays
Time:  13:30-14:20
Location: ECS-125

Required Text
Title: Design for Electrical and Computer Engineers
Author: Salt and Rothery
Publisher: John Wiley & Sons
Year: 2001

Course Web: www.ece.uvic.ca/~elec399

Assessment:
Progress Report      25%  October 21, 2014
Class Presentation   15%  November 4, 18, and 25, 2014
Final Report         60%  December 2, 2014
+ Work Log (4) + Milestones (4)  October 21, November 4/18, December 2

Note: Failure to complete all laboratory requirements will result in a grade of N being awarded for the course.

Fall 2014 Deadlines:
September 23       Team Selection
October 7           Project Selection
October 21          Progress Report; Work Log; Milestones
November 4          Work Log; Milestones
November 18         Work Log; Milestones
November 4,18,25    Class Presentation
December 2          Final Report; Work Log; Milestones
The final grade obtained from the above marking scheme will be based on the following percentage-to-grade point conversion:

<table>
<thead>
<tr>
<th>Passing Grades</th>
<th>Grade Point Value</th>
<th>Percentage for Instructor Use Only</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>9</td>
<td>90 – 100</td>
</tr>
<tr>
<td>A</td>
<td>8</td>
<td>85 – 89</td>
</tr>
<tr>
<td>A-</td>
<td>7</td>
<td>80 – 84</td>
</tr>
<tr>
<td>B+</td>
<td>6</td>
<td>77 – 79</td>
</tr>
<tr>
<td>B</td>
<td>5</td>
<td>73 – 76</td>
</tr>
<tr>
<td>B-</td>
<td>4</td>
<td>70 – 72</td>
</tr>
<tr>
<td>C+</td>
<td>3</td>
<td>65 – 69</td>
</tr>
<tr>
<td>C</td>
<td>2</td>
<td>60 – 64</td>
</tr>
<tr>
<td>D</td>
<td>1</td>
<td>50 – 59</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Failing Grades</th>
<th>Grade Point Value</th>
<th>Percentage for Instructor Use Only</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>E</td>
<td>0</td>
<td>0 - 49</td>
<td>Fail, *Conditional supplemental exam. (For undergraduate courses only)</td>
</tr>
<tr>
<td>F</td>
<td>0</td>
<td>0 – 49</td>
<td>Fail, no supplemental.</td>
</tr>
<tr>
<td>N</td>
<td>0</td>
<td>0 – 49</td>
<td>Did not write examination, Lab or otherwise complete course requirements by the end of term or session; no supplemental exam.</td>
</tr>
</tbody>
</table>

*Assignment of E grade will be at the discretion of the Course Instructor.

The rules for supplemental examinations are found on page 80 of the current 2014/15 Undergraduate Calendar.

<table>
<thead>
<tr>
<th>Term in which E Grade Was Obtained</th>
<th>Application Deadline for Supplemental Exam</th>
<th>Supplemental Exam Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>First term of Winter Session (Sept – Dec)</td>
<td>February 28 in the following term</td>
<td>First week of following May</td>
</tr>
<tr>
<td>Second term of Winter Session (Jan – Apr)</td>
<td>June 30 in the following term</td>
<td>First week of following September</td>
</tr>
<tr>
<td>Summer Session (May – Aug)</td>
<td>October 31 in the following term</td>
<td>First week of following January</td>
</tr>
</tbody>
</table>

Deferred exams will normally be written at the start of the student's next academic term; i.e., approximately 4 months following the deferral of the exam.

There is no deferred exam for this course.
Course Description

1. Course Objectives: The CENG/ELEC/SENG 399 Design Project I is intended to provide an opportunity for students to carry out a design project working as a team of 3 to 5 persons. Each team will be assigned a suitable project supervised by a faculty member. The projects may originate from faculty members, students, companies, or other external sources. They may have a diverse nature (theoretical investigations, practical designs, measurements, software developments, etc.) and serve diverse needs (research, undergraduate laboratory experiments, open house demonstrations, feasibility studies of interest to local companies, etc.). Multi-disciplinary projects are encouraged. Successful projects may also be extended to 499 Design Project for implementation and prototyping. For multi-disciplinary projects or acceptable projects originating outside the Department, a faculty co-supervisor will be appointed. The students are expected to learn the project design process, including setting up milestones, background preparation, application of previously acquired knowledge to the project development, exploration of alternative approaches and evaluate them.

2. Learning Outcomes: Expected learning experience and outcomes are based on the knowledge and skills acquired by the student in earlier and concurrent course work, and Professional Engineers’ awareness and consideration with respect to the environment, ethics, equity, public and worker safety and health. The students will learn project planning, as well as design process through seminars and projects.

3. Syllabus: Understanding system analysis and design cycle, planning phase, analysis phase, design phase and implementation phase.

4. Milestones: Each team should submit the initial milestones with their progress report, and a revised version every two weeks after, reflecting progress and modification made.

5. Work Log: Each team should submit a Work Log (see attached; Word version posted on course web) every two weeks starting with their progress report. The Work Log should specify the tasks and hours spent performed by each team member over the two-week period. Each member must sign and date the Work Log as an indication that he/she agrees with the information provided in the Work Log.

Note to Students:

Students who have issues with the conduct of the course should discuss them with the instructor first. If these discussions do not resolve the issue, then students should feel free to contact the ECE Chair by email or the ECE Chair's Secretary eceasst@uvic.ca to set up an appointment.

Accommodation of Religious Observance
See [http://web.uvic.ca/calendar2014/GI/GUPo.html](http://web.uvic.ca/calendar2014/GI/GUPo.html)

Policy on Inclusivity and Diversity
See [http://web.uvic.ca/calendar2014/GI/GUPo.html](http://web.uvic.ca/calendar2014/GI/GUPo.html)

Standards of Professional Behaviour
You are advised to read the Faculty of Engineering document Standards for Professional Behaviour at [http://www.uvic.ca/engineering/current/undergrad/index.php#section0-25](http://www.uvic.ca/engineering/current/undergrad/index.php#section0-25) which contains important information regarding conduct in courses, labs, and in the general use of facilities.

Cheating, plagiarism and other forms of academic fraud are taken very seriously by both the University and the Department. You should consult [http://web.uvic.ca/calendar2014/FACS/Unln/UARe/PoAcl.html](http://web.uvic.ca/calendar2014/FACS/Unln/UARe/PoAcl.html) for the UVic policy on academic integrity.