CENG/ELEC299 – Introduction to Electrical and Computer Engineering Design

Term – Summer 2017 (201701)

Instructor
Dr. T. Ilamparithi
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Office Hours
Days: Thursdays
Time: 10:30 – 11:30
Location: EOW 407

Course Objectives
- Introduce the objectives of engineering design
- Explain the steps of engineering design
- Inculcate the habit of prioritizing
- Incorporate team work
- Familiarize typical testing procedures
- Focus on technical documentation

Learning Outcomes
Students will be able to
- Identify best practices of engineering design
- Custom design based on requirements
- Understand the significance of component selection
- Prepare design document and user manual

Syllabus
- Basics of project planning
- Introduction to basic electronics, circuits and testing
- Technical drawings using Visual Communications
- Embedded programming and debugging

A-Section(s): CENG/ELEC 299 A01
CRN: 30069/30316
Day: Tuesdays
Time: 14:00 - 15:50
Location: ECS 123

Optional Text
Title: Practical Electronics for inventors, 4th edition
Author: P. Scherz, S. Monk
Publisher: McGraw-Hill Education
Year: 2016
Assessment:
Labs 30%
Project 60%
Lab Quiz 10%

Project Grade Breakdown:

<table>
<thead>
<tr>
<th>Project Planning &amp; Milestone 1</th>
<th>25%</th>
<th>Week of May 29</th>
</tr>
</thead>
<tbody>
<tr>
<td>Milestone 2</td>
<td>25%</td>
<td>Week of June 26</td>
</tr>
<tr>
<td>Final Presentation</td>
<td>10%</td>
<td></td>
</tr>
<tr>
<td>Final Report</td>
<td>40%</td>
<td>July 28</td>
</tr>
</tbody>
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Note:
Failure to complete all laboratory requirements will result in a grade of N being awarded for the course.

The final grade obtained from the above marking scheme for the purpose of GPA calculation will be based on the percentage-to-grade point conversion table as listed in the current Undergraduate Calendar.

There will be no supplemental examination for this course.

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 Chair of the Department by email or the Chair's Secretary to set up an appointment.

Accommodation of Religious Observance: [http://web.uvic.ca/calendar2017-05/general/policies.html](http://web.uvic.ca/calendar2017-05/general/policies.html)

Policy on Inclusivity and Diversity: [http://web.uvic.ca/calendar2017-05/general/policies.html](http://web.uvic.ca/calendar2017-05/general/policies.html)

Standards of Professional Behaviour: You are advised to read the Faculty of Engineering document Standards for Professional Behaviour, which contains important information regarding conduct in courses, labs, and in the general use of facilities. [https://www.uvic.ca/engineering/assets/docs/professional-behaviour.pdf](https://www.uvic.ca/engineering/assets/docs/professional-behaviour.pdf)

Cheating, plagiarism and other forms of academic fraud are taken very seriously by both the University and the Department. You should consult the entry in the current Undergraduate Calendar for the UVic policy on academic integrity. [http://web.uvic.ca/calendar2017-05/undergrad/info/regulations/academic-integrity.html](http://web.uvic.ca/calendar2017-05/undergrad/info/regulations/academic-integrity.html)

Equality: This course aims to provide equal opportunities and access for all students to enjoy the benefits and privileges of the class and its curriculum and to meet the syllabus requirements. Reasonable and appropriate accommodation will be made available to students with documented disabilities (physical, mental, learning) in order to give them the opportunity to successfully meet the essential requirements of the course. The accommodation will not alter academic standards or learning outcomes, although the student may be allowed to demonstrate knowledge and skills in a different way. It is not necessary for you to reveal your disability and/or confidential medical information to the course instructor. If you believe that you may require accommodation, the course instructor can provide you with information about confidential resources on campus that can assist you in arranging for appropriate accommodation. Alternatively, you may want to contact the Resource Centre for Students with a Disability located in the Campus Services Building.
The University of Victoria is committed to promoting, providing, and protecting a positive, and supportive and safe learning and working environment for all its members.
Course Lecture Notes: Unless otherwise noted, all course materials supplied to students in this course have been prepared by the instructor and are intended for use in this course only. These materials are NOT to be re-circulated digitally, whether by email or by uploading or copying to websites, or to others not enrolled in this course. Violation of this policy may in some cases constitute a breach of academic integrity as defined in the UVic Calendar.