ELEC 466 – System-on-Chip Engineering

Term – SUMMER 2015 (201505)

Instructor

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Office Hours

Days: Tue
Time: 13:00-14:30
Location: EOW 327

Course Objectives

Students will learn basic concepts and techniques related to modeling, design, testing, and power management of SOC.

Learning Outcomes

Students will be able to: (1) discuss key challenges and solutions associated with SOC design and test, (2) discuss key challenges and solutions associated with SOC energy consumption, (3) use the specify-explore-refine methodology and SystemC modeling language for hardware-software SOC design, (4) analyze the behavior of discrete-event simulation models, (5) apply energy management techniques to improve SOC efficiency.

Syllabus (tentative)

- SOC technology roadmap and key issues (3);

- Model-based SOC design with SystemC (18);

- SOC self-test and power management (9);

- SOC architectures and applications (6).

A-Section(s): A01 / CRN 30347
Days: TWF
Time: 10:30-11:20
Location: Clearihue A202

Required Text

Title: N/A
Author: N/A
Publisher: N/A
Year: N/A

Optional Text

Title: N/A
Author: N/A
Publisher: N/A
Year: N/A

References: Couse website **http://www.ece.uvic.ca/~daler/courses/elec466**

Assessment:

Assignments:	15%	Due Dates: TBA
Project:	25%	
Mid-term	20%	Date: June 26 (tentative)
Final Exam	40%	

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.

Assignment of E grade and supplemental examination for this course will be at the discretion of the Course Instructor. The rules for supplemental examinations can be found in the current Undergraduate Calendar.

http://web.uvic.ca/calendar/FACS/UnIn/UARe/Grad.html

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/calendar/GI/GUPo.html

Policy on Inclusivity and Diversity

http://web.uvic.ca/calendar/GI/GUPo.html

Standards of Professional Behaviour

You are advised to read the Faculty of Engineering document Standards for Professional Behaviour in current Undergraduate Calendar, 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 entry in current Undergraduate Calendar for the UVic policy on academic integrity.

http://www.uvic.ca/engineering/assets/docs/professional-behaviour.pdf

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.