ELEC 568 – System-on-Chip Engineering
Term – Summer 2017 (201705)

Instructor

Dr. Daler N. Rakhmatov
Phone: 250-472-5214
E-mail: daler@ece.uvic.ca

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

- 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 30371
Days: TWF
Time: 10:30-11:20
Location: ECS 108

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:	10%	Due Dates: TBA
Project:	25%	
Presentation:	5%	
Mid-term	20%	Date: June 23 (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 Graduate Calendar.

http://web.uvic.ca/calendar2017-05/grad/academic-regulations/grading.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/calendar2017-05/general/policies.html

Policy on Inclusivity and Diversity: 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.
http://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 Graduate Calendar for the UVic policy on academic integrity.
http://web.uvic.ca/calendar2017-05/grad/academic-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.