ECE 568 – System-on-Chip Engineering for Signal Processing
Term – Summer 2019 (201905)

Instructor	**Office Hours**
Dr. Daler N. Rakhmatov	Days: T
Phone: 250-472-5214	Time: 11:30 am – 1:00 pm
E-mail: daler@ece.uvic.ca	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 hours)

- SOC technology roadmap and key issues (3);
- Model-based SOC design with SystemC (18);
- SOC self-test and power management (12);
- SOC architectures and applications (3).

A-Section(s): A01 / CRN 30325
Days: TWF
Time: 10:30 am - 11:20 am
Location: David Strong Building C122

Required Text		**Optional Text**	
Title:	N/A	Title:	N/A
Author:	N/A	Author:	N/A
Publisher:	N/A	Publisher:	N/A
Year:	N/A	Year:	N/A

References: Couse website **https://www.ece.uvic.ca/~daler/courses/ece466**

Assessment:

Assignments:	15%	Due Dates: TBA
Presentation:	5%	
Project	20%	
Mid-term	20%	Date: June 28 (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. https://web.uvic.ca/calendar2019-05/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 Assistant to set up an appointment.

Accommodation of Religious Observance:
https://web.uvic.ca/calendar2019-05/grad/registration/Registration.1.17.html#

Policy on Inclusivity and Diversity:
https://web.uvic.ca/calendar2019-05/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

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.
https://web.uvic.ca/calendar2019-05/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 Centre for Accessible Learning 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 Materials
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.

Sexualized Violence Prevention and Response at UVic
UVic takes sexualized violence seriously, and has raised the bar for what is considered acceptable behaviour. We encourage students to learn more about how the university defines

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sexualized violence and its overall approach by visiting www.uvic.ca/svp. If you or someone you know has been impacted by sexualized violence and needs information, advice, and/or support please contact the sexualized violence resource office in Equity and Human Rights (EQHR). Whether or not you have been directly impacted, if you want to take part in the important prevention work taking place on campus, you can also reach out:

    Where: Sexualized violence resource office in EQHR; Sedgewick C119
    Phone: 250.721.8021
    Email: svpcoordinator@uvic.ca
    Web: www.uvic.ca/svp