

# Faculty of Engineering COURSE OUTLINE

# ECE 569A – Selected Topics in Computer Engineering: Low Power Design Techniques

Term - Fall 2018 (201809)

Instructor Office Hours

Dr. Amirali Baniasadi Days: By Appointment

Phone: 250 7218613 Time:

E-mail: amiralib@ece.uvic.ca Location: EOW 323

### **Course Objectives**

-Understanding and analyzing low power system optimizations.

# **Learning Outcomes**

--Learning to Analyze and Design low-power circuits and microarchitectures.

## **Syllabus**

-Low-Power Branch Predictors, Low-Power Execution Units, Low-Power Memory Systems, Low-Power Register Files

**A**-Section(s): A03 / CRN 13907

Days: Mondays

Time: 10:00 am- 12:50 Pm

Location: HSD A264

Required Text Optional Text

Title: Power Aware Design Methodologies Title:
Author: M. Pedram and J. M. Rabaey Author:
Publisher: Springer Publisher:
Year:

**References:** 

Assessment:

Assignments (Project or Presentations) 50% Due Dates: TBD

Final Exam 50%

**Note:** (sample notes for instructors)

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

course

Failure to pass the final exam will result in a failing grade 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 Graduate Calendar. <a href="https://web.uvic.ca/calendar2018-09/grad/academic-regulations/grading.html">https://web.uvic.ca/calendar2018-09/grad/academic-regulations/grading.html</a>

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/calendar2018-09/grad/registration/Registration.1.16.html

### **Policy on Inclusivity and Diversity:**

https://web.uvic.ca/calendar2018-09/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.

https://web.uvic.ca/calendar2018-09/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.