University of Victoria Engineering

Faculty of Engineering

COURSE OUTLINE

ELEC 417/517 Software Defined Radio

Term – FALL 2015 (201609)

Instructor

Dr. Peter Driessen
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Office Hours

Days: Tuesday
Time: 11:30
Location: ELW 435

Course Objectives

- To analyze and design software defined radio systems

Learning Outcomes

- Analyze the performance of software radio systems
- Select software radio architecture to meet performance goals
- Design, develop and evaluate a software defined radio system

Syllabus

Software defined radio architectures. Receiver design: radio frequency, digital signal processing, software. Application to analog and digital communications, cognitive radio, dynamic spectrum access. Implementation of software radio algorithms using GNU Radio, Simulink or other platforms.

Section(s): ELEC 417 A01 / CRN 11286
ELEC 417 A02 / CRN 11287
ELEC 517 A01 / CRN 11294
Days: TWF
Time: 9:30-120:20
Location: ELW 309A

Required Text

Online notes and online lab manual

Optional Text

Assessment:

Assignments:	30	%
Labs Project	70	%

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 Academic Calendar.

Grad: http://web.uvic.ca/calendar/GRAD/FARe/Grad.html
Undergrad: http://web.uvic.ca/calendar2016-09/undergrad/info/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/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, 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 Academic Calendar for the UVic policy on academic integrity.

Grad: http://web.uvic.ca/calendar2016-09/grad/academic-regulations/academic-integrity.html#
Undergrad: http://web.uvic.ca/calendar/FACS/UnIn/UARe/PoAcI.html

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.