

ELEC 519B Selected Topics in Computer Communication- "Broadband and Wireless Networks

Term - SPRING 2016 (201601)

Instructor Office Hours

Dr. Lin Cai Days: Mon/Thu
Phone: (250) 721- 8691 Time: 13:00-14:20
E-mail: cai@ece.uvic.ca Location: EOW317

Course Objectives

The goal of the course is to introduce the fundamental concepts, tools and methodologies in networking research, and how to apply them to solve practical and emerging problems.

Learning Outcomes

Multimedia traffic modeling, wireless channel modeling, radio resource management, mobility management, and end-to-end flow and congestion control

Syllabus

This course focuses on resource management and protocol design for transporting data and multimedia traffic in broadband and wireless communication networks. Topics include multimedia traffic modeling, wireless channel modeling, radio resource management, mobility management, and end-to-end flow and congestion control. The goal of the course is to introduce the fundamental concepts, tools and methodologies in networking research, and how to apply them to solve practical and emerging problems. Students are encouraged to investigate novel ideas in the area via course projects.

A-Section(s): A01 / CRN 21180, A02/ CRN 21181

Days: Mon/Thu Time: 14:30-15:50 Location: ELL160

Optional Text

Title: Multimedia services in wireless Internet: Modeling and analysis

Authors: Lin Cai, Xuemin Shen and Jon W. Mark

Publisher: Wiley Year: 2009

References:

M. Schwartz, Broadband Integrated Networks, Prentice Hall PTR, New Jersey, 1996, 0-13-519240-4.

Assessment:

Assignments: 20 % Due Dates: Jan. 28, Feb. 18, Mar. 17 and Mar. 31

Presentation: 20 %

Quiz: 15 % Date: April 4, 2016

Project: 45 %

Note:

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/calendar/GRAD/FARe/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 <u>Standards for Professional Behaviour</u>, 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/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.