University of Victoria

Faculty of Engineering | Electrical and Computer Engineering
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COURSE OUTLINE

ECE 458 – Communication Networks

Term – SPRING 2021 (202101)

Instructor	**Office Hours**
Dr. Navneet Kaur Popli	Days: Mon, Thur
E-mail: npopli@uvic.ca	Time: 3:00 pm (or by appointment)

Location/Platform/link: https://uvic.zoom.us/my/navneetkaurpopli

Course Objectives

This course will introduce the fundamental concepts in computer communications networks, to help students understand the principles and practices of designing, building, and operating computer networks, particularly the Internet securely and effectively.

Learning Outcomes

1. Understand the Internet protocol stack
2. The main functionalities of each layer
3. The design principles and security considerations
4. Latest networking trends

Syllabus

Network overview, physical layer technologies, link error control, resource management and medium access control, network routing algorithms and protocols, transport layer flow control, error control, and congestion control, Internet applications, latest networking trends-cloud, virtualization, containership etc.

A-Section(s): A01 / CRN 20923   B01/B02/B03/B04/B05: Course meets irregularly. View schedule in FAST.
Days: MR
Time: 13:00-14:20
Location/Platform/link: https://uvic.zoom.us/my/navneetkaurpopli

Required Text	**Optional Text**
Title: Computer Networks	Title: Computer Networking: A Top-Down Approach
Author: A.Tanenbaum and D. Wetherall	Author: J. Kurose and K. Ross
Publisher: Prentice Hall	Publisher: Addison Wesley
Year: 2010	Year: 2012

Online Course Delivery:
As this course will be conducted online during this term, students will need to complete assignments/labs online. The students will require access to a computer which has 'Wireshark' and 'Cisco Packet Tracer' installed.
Links:
https://www.wireshark.org/docs/wsug_html_chunked/ChBuildInstallWinInstall.html
https://linuxhint.com/install_configure_wireshark_ubuntu/
https://ipwithease.com/how-to-install-packet-tracer-on-windows-system/
https://linuxhint.com/install_packet_tracer_ubuntu_1804/

Plagiarism check:

Plagiarism detection software program would be used to detect plagiarism in essays, term papers, and other assignments

Assessment:

Assignments and quizzes:	20%	Due Dates: Jan. 26/ Feb. 13/ Mar. 15/ Mar. 31
Labs:	20%	
Mid-term:	20%	Date: Mar 4
Final Exam:	40%	

<u>Important: All deadlines and schedules for this course will reference Pacific Standard Time until March 14, 2021 and then Pacific Daylight Time.</u>

<u>Note</u>:   Failure to complete all laboratory requirements will result in a grade of N being awarded for the course. Assignment of an E grade and supplemental examination for this course will be at the discretion of the Course Instructor. The rules for supplemental examinations can be found in the current Undergraduate Calendar.

https://www.uvic.ca/calendar/archives/202101/undergrad/index.php#/policy/SJ2Rxoz_N?bc=true&bcCurrent=13%20-%20Examinations&bcGroup=Undergraduate%20Academic%20Regulations&bcItemType=policies

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://www.uvic.ca/calendar/archives/202101/grad/index.php#/policy/B13jeiMdE?bc=true&bcCurrent=07%20-%20Grading&bcItemType=policies

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.

Course Withdrawal Deadlines:
- January 19, 2021: Withdrawal with 100% reduction of tuition fees (under review)
- February 9, 2021: Withdrawal with 50% reduction of tuition fees(under review)
- February 28, 2021: Last day for withdrawal (no fees returned) (under review)

Accommodation of Religious Observance:
https://www.uvic.ca/calendar/archives/202101/grad/index.php#/policy/SkmigiMOV?bc=true&bcCurrent=17%20-%20Accommodation%20of%20Religious%20Observance&bcItemType=policies

Policy on Inclusivity and Diversity:
Engineering: https://www.uvic.ca/engineering/about/equity/index.php
Academic Calendar:
https://www.uvic.ca/calendar/archives/202101/grad/index.php#/policy/HkQ0pzdAN?bc=true&bcCurrent=%20General%20University%20Policies&bcGroup=General%20University%20Policies&bcItemType=policies

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

Academic Integrity:

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://www.uvic.ca/calendar/archives/202101/grad/index.https://www.uvic.ca/calendar/archives/202101/grad/index.php#/policy/BJujesM_E?bc=true&bcCurrent=02%20-%20Policy%20on%20Academic%20Integrity&bcItemType=policiesphp#/policy/BJujesM_E?bc=true&bcCurrent=02%20-%20Policy%20on%20Academic%20Integrity&bcItemType=policies

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: https://www.uvic.ca/services/cal/. 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.

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 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

Office of the Ombudsperson:
The Office of the Ombudsperson is an independent and impartial resource to assist with the fair resolution of student issues. A confidential consultation can help you understand your rights and responsibilities. The Ombudsperson can also clarify information, help navigate procedures, assist with problem-solving, facilitate communication, provide feedback on an appeal, investigate and make recommendations. Phone: 250-721-8357; Email: ombuddy@uvic.ca, Website: https://uvicombudsperson.ca/