



DEPARTMENT OF SCIENCE
COURSE OUTLINE – Winter 2020

CS 2000 - Data Communications and Networking 3 (3-0-0) UT
45 hours 15 weeks

INSTRUCTOR: Libero Ficocelli **PHONE:** 780 539 2825
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OFFICE HOURS: TBA

CALENDAR DESCRIPTION:

This course provides an introduction to computer communications and computer networks. Topics will include communication hardware and software, protocols, local area and wide area networks, and network management.

PREREQUISITE(S)/COREQUISITE:

None

REQUIRED TEXT/RESOURCE MATERIALS:

Computer Networking : A Top-Down Approach . 7th edition by James Kurose & Keith Ross

DELIVERY MODE(S): Classroom

COURSE OBJECTIVES:

This course will introduce students to :

- the internet protocol stack.
- application-layers protocols such as HTTP, SMTP, DNS,FTP.
- the TCP and UDP transport layer protocols.
- the IP network-layer protocol as well as other network-layer protocols such as ICMP.
- the link-layer, LANs and Ethernet

LEARNING OUTCOMES:

As a result of taking this course, students will gain the ability to :

- demonstrate and articulate fundamental knowledge of the various protocols found at the different layers of the internet protocol stack.
- identify the protocols that are work in the different network applications that users interact with.

TRANSFERABILITY:

Athabasca University

University of Lethbridge

King's University College *

Other (transfers in combination with other courses or to other institutions)

*** An asterisk (*) beside any transfer institution indicates important transfer information.** Please consult the Alberta Transfer Guide for more information (www.albertatransfer.com)

**** Grade of D or D+ may not be acceptable for transfer to other post-secondary institutions. Students are cautioned that it is their responsibility to contact the receiving institutions to ensure transferability**

EVALUATIONS:

Assignments	15%
Quizzes	10%
First Term exam	20%
Second Term Exam	20%
Final Exam	35%

There is a 30% penalty for late (less than 2 days) assignment. Assignments which are more than 2 days late will not be accepted.

Exams will be written as scheduled. No rewrites will be given. If there is an excusable absence, the weighting of the missed exam will be added to the final exam weighting. If the absence is not

excusable, a grade of 0% will be given. Absences due to a medical emergency must be supported by a physician's letter.

GRADING CRITERIA: Please note that most universities will not accept your course for transfer credit **IF** your grade is **less than C-**. This means **DO NOT GET LESS THAN “C-” IF YOU ARE PLANNING TO TRANSFER TO A UNIVERSITY.**

Alpha Grade	4-point Equivalent	Percentage Guidelines	Alpha Grade	4-point Equivalent	Percentage Guidelines
A+	4.0	90-100	C+	2.3	67-69
A	4.0	85-89	C	2.0	63-66
A-	3.7	80-84	C-	1.7	60-62
B+	3.3	77-79	D+	1.3	55-59
B	3.0	73-76	D	1.0	50-54
B-	2.7	70-72	F	0.0	00-49

COURSE SCHEDULE/TENTATIVE TIMELINE:

- Computer Networks and the Internet
- Application Layer and protocols - HTTP, FTP, SMTP, DNS
- Transport Layer and protocols - UDP, TCP
- Network Layer and protocol - IP, ICMP, routing
- Link Layer and protocols - Ethernet, ARP
- Wireless and Mobile networks

STUDENT RESPONSIBILITIES:

Students must make an effort to attend ALL classes. If you have more than 5 un-excused absences you may be barred from writing the final exam

STATEMENT ON PLAGIARISM AND CHEATING:

Cheating and plagiarism will not be tolerated and there will be penalties. For a more precise definition of plagiarism and its consequences, refer to the Student Conduct section of the College Admission Guide at <http://www.gprc.ab.ca/programs/calendar/> or the College Policy on Student Misconduct: Plagiarism and Cheating at www.gprc.ab.ca/about/administration/policies/ **

**Note: all Academic and Administrative policies are available on the same page.