

CS 335 Computer Networks (Winter 2020)

Catalogue Description Network architectures and protocols, networked applications, reliable data delivery, routing and forwarding, local area networks, resource allocation, mobility, reliability through redundancy. Security: secure design, defensive programming, threats and attacks, network security, cryptography.

Prerequisites:

CS 210 (Data Structure) and STAT160 or 200 (Introductory or Intermediate Statistics).

Credit Hours: 3.

Class Time and Location: Mondays, Wednesdays, and Fridays: 11:30 am – 12:20 am, CL 127

Instructor: Dr. JingTao Yao,

Office: CW308.18, Email: jtyao@cs.uregina.ca

Office hours: Mondays, Wednesdays, and Fridays: 10:20 am - 11:20 pm or by appointment

Textbook:

James F. Kurose and Keith W. Ross, *Computer Networking: A Top-Down Approach*, 7th Edition, Pearson, 2016, ISBN-10: 0133594149 • ISBN-13: 978-0133594140

Companion Website: <https://www.pearsonhighered.com/program/Kurose-Computer-Networking-A-Top-Down-Approach-7th-Edition/PGM1101673.html>

Note: A copy of the 6th edition will be put on the reserved desk in the library.

Grading System:

- Assignments 4 x 5% = 20%
- Quizzes 4 x 5% = 20%
- Midterm test 20%
- Final Examination 40%
- Instructor's Discretion +/- 5%

Attendance: You are expected to attend all scheduled lectures. If you cannot attend a lecture, it is your responsibility to catch up on the contents. Little time is available to assist those who have missed relevant classes. Statistics show that students who attend lectures regularly get high grades on exams. That is a fact that you should remember when making your daily decisions.

Tests and Exam: There are no make-up tests, quizzes and exam. If one cannot sit for midterm tests or quizzes with approved reasons, the grade will be attached to the final. However, arrangements should be made in advance not after. There is no reason for missing the final exam.

Assignments: SAVE THE TREES! All assignment questions are available online at UR Courses and you must submit your assignments electronically to URCourses (<https://urcourses.uregina.ca/>). All assignments are due at 10:00 pm on the due date.

Partially completed assignments are acceptable but LATE assignments are NOT. All uploaded files will be automatically submitted after cut-off time. After, deadline requests will be ignored and deleted. If you are unable to complete an assignment due to health problems, for instance, a medical certificate is required before the assignment will be accepted. This applies to other unusual cases.

Marking will also be done on URCourses. You may see partial marking comments before all assignments are completed. Please do not contact the instructor or marker at that time. If you do not agree with the marking, the instructor must be notified within one week after marking of the assignment is completed. Any request made more than one week after the announcing date will not be considered.

Topics which may be covered:

1. Computer Networks and Internet
2. Application layer
3. Transportation layer
4. Network layer
5. Link Layer
6. Multimedia and wireless
7. Security

Important dates:

- January 6, 2020 (First lecture, Monday)
- January 17, 2020 (The add/drop deadline, No record)
- January 27, 2020 (Assignment 1 due, Monday)
- February 10, 2020 (Assignment 2 due, Monday)
- February 10, 12, and 14 (TBD, away for NSERC review)
- February 17-21, 2020 (Winter break, no classes)
- March 2, 2020 (Mid-term test, Monday)
- March 16, 2020 (Withdrawing deadline, Grade of W)
- March 16, 2020 (Assignment 3 due, Monday)
- March 30, 2020 (Assignment 4 due, Monday)
- April 8, 2020 (Last lecture, Wednesday)
- April 13, 2020 (Final Exam, Monday)

Important Notes:

1. The dates, schedule, requirements etc. are tentative. Please check URCourses for changes.
2. Email communications with the instructor should be sent from URCourses. In addition, you may use your CS/uregina account. There will be no reply to any free Web-based email accounts, Hotmail, Gmail, or Yahoo, for instance, and limited communications to some commercial ISPs (e.g. Access, Sasktel, etc.) or government email accounts. We will mainly use URCourses for class announcements.
3. Please read the sections of the 2019-2020 University of Regina General Calendar dealing with Academic Regulations, especially those regulations regarding academic integrity and plagiarism.