

## CS 335 Computer Networks (Winter 2015)

**Catalogue Description** Introduction to net-centric computing using a top-down approach. Topics include network architectures and protocols; network standards and layers; network applications; transport services including TCP/UDP; routers, routing and IP; data link protocols, medium access control and error-detection/correction techniques; local area, wide area and wireless networks.

### Prerequisites:

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

**Credit Hours:** 3.

**Class Time and Location:** Mondays, Wednesdays, and Fridays: 9:30 am - 10:20 am, CL 431

**Final Exam:** 9:00 am - 12:00 pm, Wednesday, Apr 15, 2015

**Instructor:** Dr. JingTao Yao,

Office: CW308.18, Email: [jtyao@cs.uregina.ca](mailto:jtyao@cs.uregina.ca)

Office hours: Mondays, Wednesdays, and Fridays: 10:30 am - 11:30 am or by appointment

### Textbook:

James F. Kurose and Keith W. Ross, *Computer Networking: A Top-Down Approach*, 6th Edition, Addison-Wesley, 2013, ISBN-10: 0132856204 • ISBN-13: 9780132856201

Companion Website: [http://wps.pearsoned.com/ecs\\_kurose\\_compnetw\\_6/](http://wps.pearsoned.com/ecs_kurose_compnetw_6/)

**Other references:** There are several other good textbooks available, and you may also find them useful for reference.

- William A. Shay, *Understanding Data Communications and Networks*, 3rd Edition, Brooks/Cole, 2004, ISBN: 0-534-38317-3
- Larry L. Peterson and Bruce S. Davie, *Computer Networks: A Systems Approach*, 5th Edition, Morgan Kaufmann, 2011, ISBN-10: 0123850592, ISBN-13: 978-0123850591
- Andrew S. Tanenbaum, David J. Wetherall, *Computer Networks*, 5th Edition, Prentice Hall, 2010, ISBN-10: 0132126958, ISBN-13: 978-0132126953

### Course Website

URL: <http://www2.cs.uregina.ca/~jtyao/Teaching/CS335>

### Grading System:

- Assignment            4 x 5% = 20%
- Quiz                    2 x 5% = 10%
- Midterm test            20%
- Exam                    50%
- Instructor's Discretion    +/- 5%

**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 final. 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 UR Courses (<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 accepted. All uploaded files will be automatically submitted after cu-off time. 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.

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

**Topics may be covered:**

1. Introduction
2. Application layer
3. Transportation layer
4. Network layer
5. Link Layer

**Important dates:**

- January 7, 2015 (First lecture, Wednesday)
- January 19, 2015 (The add deadline)
- January 19, 2015 (The drop deadline, No record)
- January 30, 2015 (Assignment 1 due, Friday)
- February 13, 2015 (Assignment 2 due, Friday)
- February 15-20, 2015 (Winter break, no classes)
- February 27, 2015 (Mid-term test, Friday)
- March 16, 2015 (Withdrawing deadline, Grade of W)
- March 13, 2015 (Assignment 3 due, Friday)
- March 27, 2015 (Assignment 4 due, Friday)
- April 10, 2015 (Last lecture, Friday)
- April 13, 2015 (Final Exam, Wednesday)

**Important Notes:**

1. The dates, schedule, requirements etc. are tentative. The online version should be the latest one. Please check for changes.
2. Email communications with the instructor should be sent from URCourses. In addition, you may use your CS account. Class announcements will be sent to your CS 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.
3. Please read the sections of the 2014-2015 University of Regina General Calendar dealing with Academic Regulations, especially those regulations regarding academic integrity and plagiarism.