Syllabus for CPSC 471 Computer Communications

Department of Computer Science
California State University, Fullerton

Course: CPSC-471

Section 01:
Time: MoWe 10:00AM - 11:15AM
Place: CS 110B

Section 02:
Time MoWe 1:00PM - 2:15PM
Place: EC 109

Course Website: Titanium

Credit Hours: 3
Instructor: Dr. Yun Tian

Email: ytian@fullerton.edu
Attention: Only the emails indicating your class and section # in the

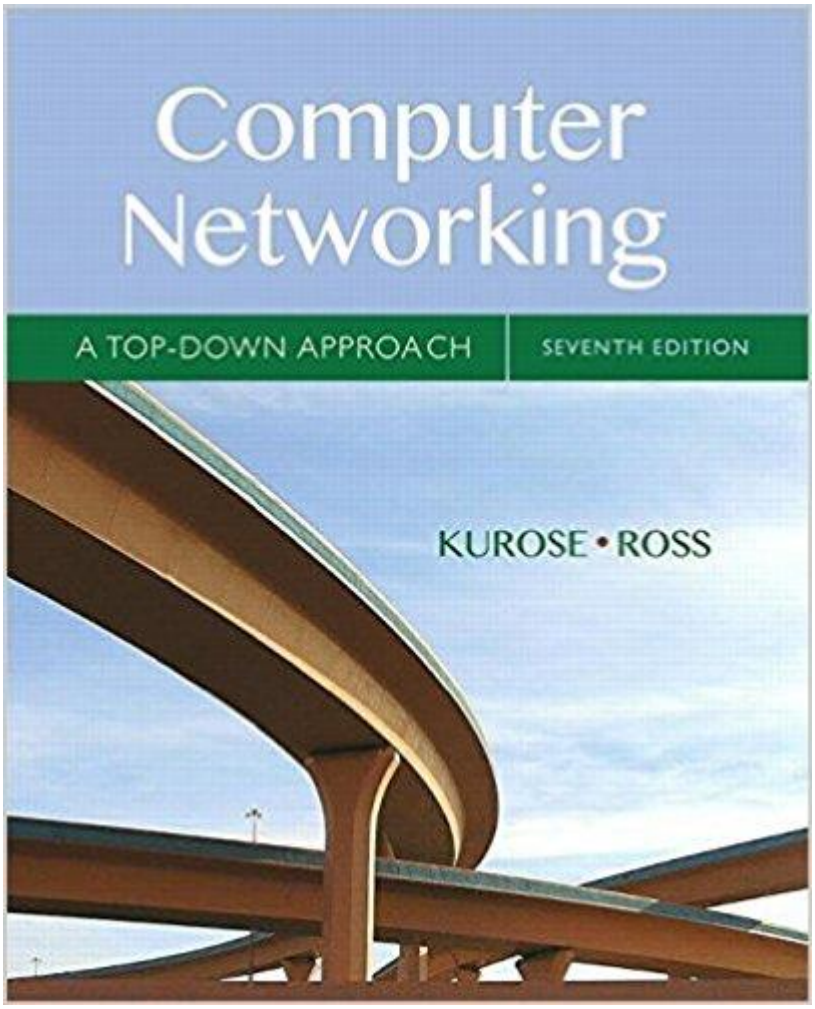
Format **CPSC 471-01/02** in the email subject will be replied.

Phone: (657) 278-2041 (office)
Office CS-544
Office Hours: Wen. & Thurs: 11:20 AM to 12:50 PM
Or by appointment

Course Objectives:
Understand the fundamentals of network architectures and protocols, be able to apply them to analyze and design networks. Topics covered by this course may include (but not limited to):

- Understand the layered network architecture
- Understand application layer protocols
- Understand the TCP/IP protocol suite for the Internet
- Understand the principles of media access, switching, routing and flow control
- Understand the fundamentals of data communications
- Understand the basics of network protocol design and analysis
- Understand the fundamentals of wireless and mobile networks

Book: Kurose, James F.; Ross, Keith W., *Computer Networking (7th ed.)*, Pearson Education,
ISBN-13: 978-0133594140
ISBN-10: 0133594149



Additional reading materials shall be posted on Titanium.

Prerequisite: CPSC 351.

Please note that the Computer Science Department takes prerequisites very **seriously**. If the prerequisites are not met, you may be dropped **administratively**, and with the registration schedule, it may be difficult or impossible to readjust your schedule afterwards. However, please also note that you cannot assume that you will automatically be dropped; if you want to drop a course, you should drop it yourself using Titan Online.

Course Software: WireShark, gcc, g++, Java, and Python were installed on the computers in the computer lab.

Slides: All course materials shall be available on Titanium.

Homework: All homework shall be posted on Titanium. Homework shall include both theoretical questions and programming problems. All assignments shall be done individually, unless specified otherwise. Late assignments shall be penalized 10%. No assignment shall be accepted after 24 hours from the deadline. *All assignments shall be submitted through Titanium.*

Labs: lab exercises are designed to reinforce the concepts covered in class. You can think of lab exercises as take-home quizzes. Lab grades shall be averaged together. Lowest grade might be dropped.

Lab exercises will require critical thinking (and creativity!) in order to solve real world problems. *Late lab exercises shall be penalized 10%. No labs shall be accepted after 24 hours from the deadline.*

Attendance and participation:
Attending the lectures is mandatory. Students are responsible for all course material regardless of whether they are present or absent. If you must be absent on a day when submissions are due, you must make special arrangements to turn in your submission ahead of time. These arrangements must be made at least two business days ahead of the deadline.

Exams: All examinations are *closed book and cumulative* (unless specified otherwise). Missed exams shall be dealt with according to University policies on incompletes and withdrawals. The tentative schedule for the examinations is given below (please also check with the Final Exam Schedule posted on-line):

- Midterm
  In class around the 8th or 9th week
- Final Exam:
  - SEC-01: **Monday, December 17@ 12:00 - 1:50 pm, CS 110B**
  - SEC-02: **Monday, December 17@ 2:30 - 4:20 pm, EC 109**

Course Grades: The course grade shall be curved over an entire class. The course grades shall be assigned according to the following ranges:

A+: $\geq 95\%$	A: $\geq 92\%$	A-: $\geq 90\%$
B+: $\geq 88\%$	B: $\geq 82\%$	B-: $\geq 80\%$
C+: $\geq 78\%$	C: $\geq 72\%$	C-: $\geq 70\%$
D+: $\geq 68\%$	D: $\geq 62\%$	D-: $\geq 60\%$

I reserve the right to decrease these boundaries, but will not increase them. In other words, I have leeway to adjust the boundaries downward, awarding higher letter grades, to compensate for labs that were more difficult than expected. In general I will not adjust grade boundaries unless the unadjusted class average is significantly lower than the departmental GPA average.
The course grade shall comprise:

- Homework (10%)
- Labs (30%)
- Midterm (25%)
- Final (35%)

Same grading scheme shall be used for both graduate and undergraduate students. Graduate students, however, should expect more challenging questions on labs, assignments, and exams.

The grade for each category shall be an average of its constituents. The course grade shall be computed as weighted mean of all categories. For example, suppose that John Doe has earned the following grades:

- Homework/Assignments:
  - Homework 1: 100/100
  - Homework 2: 70/100
  - Homework 3: 80/100
  - Homework 4: 50/100
- Lab Exercises:
  - 50/100
  - 90/100
  - 80/100
  - 100/100
- Midterm1: 70/100
- Midterm2: 70/100
- Final Exam: 80/100

The grade is computed is as follows:

- Homework average: (100+70+80+50)/4 = 75
- Lab average: (90+100+80) / 3 = 90 (lowest grade has been dropped).
- Midterms: 70
- Final Exam: 80

Next, we compute the weighted mean of the above grades:

Item	Category Average	Category Weight	Result
Homework	75/100	1	(75/100) * 10= 7.5
Labs	90/100	3	(90/100) * 30 = 27
Midterms	(70+70)/2*100	2	(70/100) * 25 = 17.5
Final Exam	80/100	3	(80/100) * 35 = 29
Sum: (7.5 + 27 + 17.5 + 29) = 81			

Hence, John's raw score is 81. This grade shall then be curved according to the performance of the entire class. The amount of curving depends on the overall performance of the entire class. The curving cannot cause the raw score to decrease.

If you have questions about the grading of assignments, quizzes, or exams, please contact the instructor.

Class Cancellation Policy: All class cancellations shall be announced by email. If the instructor does not arrive within the first 15 minutes of the class, you may assume the class is canceled.

Approximate Schedule (subject to change):

Week	Lecture Topic	Reading
Week 1	Class Logistics and Introduction	Course Syllabus, Kurose 1
Week 2	Computer Networks and the Internet	Kurose 1
Week 3	Application Layer	Kurose 2
Week 4	Application Layer	Kurose 2
Week 5	Transport Layer	Kurose 3
Week 6	Transport Layer	Kurose 3
Week 7	Transport Layer	Kurose 3
Week 8	The Network Layer & **Midterm**	Kurose 4
Week 9	The Network Layer	Kurose 4
Week 10	The Network Layer	Kurose 4
Week 11	The Link Layer and LANs	Kurose 5
Week 12	The Link Layer and LANs	Kurose 5
Week 13	The Link Layer and LANs	Kurose 5
Week 14	**Fall Recess**	**NO CLASSES**
Week 15	Wireless and Mobile Networks	Kurose 6
Week 16	Wireless and Mobile Networks	Kurose 6
Week 17	Final Exam	

Policies

Firstly please make sure you read all of the related information as described in Student Information for Course Outlines at http://fdc.fullerton.edu/teaching/syllabus.php .

Academic dishonesty

It is your responsibility to be aware of and follow the spirit of CSU Fullertons academic honesty policy which can be found http://fdc.fullerton.edu/teaching/syllabus.php . Repeated failure to follow the spirit of the academic honesty policy will be reported to the Judicial Affairs office.

ADA accomodations

Any student who, because of a disability, may require special arrangements in order to meet course require- ments must contact the instructor and the Office of Disability Support Services as soon as possible to make the necessary arrangements. The instructor may request verification of need from the Dean of Students Of- fice. Students are encouraged to contact the Office of Disability

Support Services within the first week of the semester to best ensure that the appropriate accommodations are implemented in a timely fashion. The Office of Disability Support Services website is http://www.fullerton.edu/DSS/. They can be reached by phone at 657-278-3117 or TDD at 657-278-2786.

Administrative drops

According to department policy, any student who misses the first class meeting, and does not contact the Department office to hold their seat may be dropped from the class.

Email

You have a CSUF-supplied email account, and that is the only way I have of reaching you outside class**. Check that account frequently for important class announcements and individual messages.**

Emergency procedures

For your own safety and the safety of others, each student is expected to read and understand the guidelines published at http://prepare.fullerton.edu/ . Should an emergency occur, follow the instructions given to you by faculty, staff, and public safety officials. An emergency information recording is available by dialing 657-519-0911.

Exams

All exams are closed-book. You may not access any book, note, electronic device, or any other information conveyance while taking an exam. You may not collaborate on exams. Exams will take place in the usual lecture location.

Extra credit

Online Discussion Forum on TITANium--Up to Extra 2% may be added to your final points if you: ask or answer at least 3 questions during each class week.

Grade Exceptions

Too often I am approached at the end of the term by students telling me how desperate they are to get a passing grade because they're graduating or on academic probation. In these cases, there's nothing that can be done. If this class is important to you and there is a lot riding on your grade, it is your burden to work hard, come get help when necessary, attend class, complete all the projects, and do well on exams. Your obligation begins on day one. Please note that there is one syllabus for the course; all students are graded based on the requirements outlined in the syllabus, and nothing more. There are no special deals, relaxed standards or extra opportunities based on class standing or other factors. Your grade is a function of your graded work, and that alone. That's an essential part of a fair grading system.

If you are surprised by your grade at the end of the semester, you have the right to ask if the grade was given in error. I am happy to check your scores to verify that no clerical error was made; these errors are extremely rare, but possible. In the exceptional circumstance of a clerical error, it will be corrected promptly. Note that final course grades are non-negotiable, and University policy establishes that grades are given at the sole discretion of the faculty member. If your grade was not given in error, that is your final, non-negotiable grade.

Grade Records

I record assignment grades in the TITANium grade book facility. You can view the scores that I've recorded at any time through TITANium. Please check them for accuracy every week or two.

TITANium calculates your grade automatically. These calculations are based only on the grades that are currently available. So, for example, the grade calculation will ignore the project category until I've graded the first project.

Grade Weighting

Every assignment **within a category** will be weighted equally, regardless of the number of points available on particular assignments.

Late Submissions

Late assignments shall be penalized 10%.

No assignment shall be accepted after 24 hours from the deadline.