

ECE 438/CS 438/CSE 425 : Communication Networks : Fall 2008

Prerequisite: CS 241 or ECE 391; one of MATH 461, MATH 463, ECE 313

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Office Hours: Monday 10:30 - 12:00 or by appointment, room 458 Coordinated Science Laboratory (CSL)

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Course web page: <http://www.crhc.uiuc.edu/~nhv/438.fall08/>

Please visit the course web page regularly to see course-related announcements, as well as assignments, project description, and other relevant information.

Class newsgroup: [class.cs438](mailto:news.cs438@uiuc.edu) on news.cs.uiuc.edu

Course Content: Layered architectures; design issues and protocols in the transport, network, and data link layers; architectures and control algorithms of local-area, point-to-point, and satellite networks; standards in networks access protocols.

Grading policy

- Homeworks: 15%
- Mid-term exam: 20%. The mid-term exam will be in the evening on October 22, 2008 (Wednesday).
- Programming projects: 35%. For the programming projects, you will need to have (or quickly acquire) knowledge of ANSI C programming language, including the use of pointers, structures, typedef, and header files.
- Final examination: 30%

Deadlines and Re-grades:

- All homeworks are due by class time on the specified due date. An automatic extension until the first class after the due date is granted to all students. Any further extension will require instructor's approval, which will only be granted under exceptional circumstances. No credit will be granted for homeworks submitted after the extension period.
- Project submissions are due by the time specified on each project handout. A 48-hour automatic extension is granted to all students. Any further extension will require instructor's approval, which will only be granted under exceptional circumstances. For late submissions, 2% penalty will be assessed per hour beyond the extension period.

- Re-grade requests must be submitted in writing on a separate piece of paper within one week after receiving a graded homework, project or exam. Except for the final exam, no other regrade requests will be accepted after the date of the final exam. When submitting a regrade request, do not write on the original homework or exam. We will look at the questions you requested to be regraded, but the remaining homework or exam may also be regraded. If any grading errors are found, the grade will be changed appropriately.

Academic integrity: The course policy for academic integrity is based the UIUC *Student Code* available from <http://www.admin.uiuc.edu/policy/code/> which states that “It is the responsibility of the student to refrain from infractions of academic integrity, from conduct that may lead to suspicion of such infractions, and from conduct that aids others in such infractions”.

You may discuss interpretations of homework problems with each other, however, we expect that you will construct and turn in your own solutions. The exception to this rule are the projects that are explicitly allowed to be performed in teams. The exams you hand in must be entirely based on your own work.

You may discuss, in broad terms, strategies for completing programming projects with other students. However, you may not make use of code or code fragments provided by others (with the exception of code that the project handout allows you to use). Your code may be compared with code submitted by other students to detect similarities. If you have any questions about this policy, please talk to the course staff. Take precautions to prevent your code from being copied without your knowledge (for instance, protect your files, and do not leave a login session active on an attended workstation in the lab).

If students are found to have collaborated excessively or to have cheated (e.g., by copying or sharing answers during an examination), all involved will be penalized, with the possibility of 0 credit for the concerned project, homework or exam. Repeated infractions can result in stronger penalties (possibly including failure in the course and/or recommendation for dismissal from the university).

Required Book: The primary textbook for this course is: Larry L. Peterson and Bruce S. Davie, *Computer Networks: A Systems Approach*, Morgan Kaufmann Publishers, 4th edition (3rd edition should also suffice).

Recommended Books: The following book is recommended (not required) for the Unix network programming portion of the course:

W. Richard Stevens, [2003] *UNIX Network Programming (Subtitled Volume I: The Sockets Networking API) Third Edition*, Prentice Hall.

For C programming language, many books are available (including a book by Kernighan and Ritchie).