CS 425/ECE 428 Distributed Systems, Spring 2018
University of Illinois at Urbana-Champaign

Prerequisite: CS 241 (System Programming) or ECE 391 (Computer Systems Engineering)

Textbook: G. Coulouris, J. Dollimore, T. Kindberg, and G. Blair *Distributed Systems: Concepts and Design*, Addison-Wesley, 5th edition. We will also use some material from selected papers in journals or conferences, and notes prepared by the instructor. You will be provided information on these at a later time. Some relevant books are on reserve at the Grainger Library.

Course Staff:

- Instructor: Nitin H. Vaidya, Phone: 217-265-5414 E-mail: `nhv@illinois.edu`
  Office Hours: Wednesday 3:00 - 4:00 or by appointment, room 2084 ECE Building (in ECE main office).
- Teaching assistants and their office hours to be announced on the course website.

Lecture: Tuesday and Thursday, 9:30 p.m. - 10:45 p.m., room 1320 Digital Computer Laboratory.

Course Website: `http://courses.engr.illinois.edu/ece428`

Piazza group: https://piazza.com/illinois/spring2018/cs425ece428/home

Please monitor the website and Piazza group above for course-related announcements.

Course Overview:

This course focuses on basic concepts underlying distributed systems. It covers fundamental topics in distributed systems, including but not limited to synchronization, mutual exclusion, leader election, distributed agreement, replication, shared data consistency, concurrency control.

Grading policy for 3-hour version of the class:

- Homework sets 25%
- Mid-term Exams 40% (total for 2 mid-term exams)
- Final Exam 35%

Grading policy for 4-hour version of the class:

- Homework sets 19%
- Mid-term Exams 30% (total for 2 mid-term exams)
- Final Exam 26%
- Programming Assignments 25%

Grades will be assigned on a curve (relative grading). The fraction of students receiving A's is not fixed a priori, and depends on the overall class performance.

Piazza:

We prefer that you use the Piazza group for general questions regarding the course, including homeworks and programming assignments (e.g., questions asking for clarification of an assignment) However, please do NOT post a solution (code or write-up) on Piazza newsgroup.

Course Policies:

- All exams will be **closed-book, closed-notes**.
  Please **bring a photo ID to each exam.**
- Homeworks are individual activity (i.e., not to be performed in groups). All text in your homework submissions is **required to be typed** (you may use any suitable text editor or word processor). Figures or equations in your submission may be drawn by hand.
- Programming assignments are to be performed either individually or in groups consisting of 2 students each, as specified for each assignment.
- **Academic Integrity Policy** We adhere by the honor code and academic integrity policies outlined at the webpage https://cs.illinois.edu/academics/honor-code. It is the course policy that all of the work you submit for grading, or in support of graded material, as an individual or as a group, shall be your own product, from inception to completion. Violations of this academic integrity policy will be treated seriously.
- **Policy on Late Submission:**

  A 48-hour extension beyond the due time for each homework and programming assignment is granted to all students.

  Additional extensions (without penalty) will be granted only under extenuating circumstances, which will require instructor's approval, and in some cases, approval from the Dean's office; you may also be asked to provide appropriate documentation to support your request for late submission.

  Homeworks submitted after the 48-hour extension will not receive credit, except if an additional extension is granted as described above.

  For a programming assignment submitted after the 48-hour extension, 15% penalty will be assessed for each additional day, or part thereof, that the submission is late (except if an additional extension is granted as described above).

Acknowledgements: Instructional materials provided by the authors of the textbook, and previous instructors of this course, will often be used in this course.