CS631-1 Network Applications Programming

TuTh 9:30–10:45 am (PM 253)

Spring 2015

Instructor

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Web site: http://faculty.cs.niu.edu/~winans/

Office Hours: PM 562 Tuesday 10:45-12:00 & 4:00-4:45, Thursday 10:45-12:00 & 2:00-2:45 and by

appointment.

Course Description

This course provides the required basics that are needed to develop networking software along with numerous case studies of existing network applications. It teaches the principles of sockets programming and discusses the alternative strategies of network programming. Students are required to implement several programming projects on a UNIX-based system.

Textbook

UNIX Network Programming (3rd ed.), vol. 1, W. Richard Stevens, Bill Fenner, and Andrew M. Rudoff, Addison Wesley, 2004.

Attendance

You are responsible for all of the material presented in class. If you miss a lecture, be sure to obtain class notes from a classmate before the next class meeting.

Exams

There will be two midterms and a cumulative final exam. You will be expected to take both exams when they are scheduled unless you are ill or an emergency arises. If you are unable to take any exam you must notify the CSCI office <u>prior to</u> the exam time. Note that it is the department's policy *not* to allow students to take their final exam at a time other than the scheduled time. Please make any travel arrangements (flights home after finals) accordingly.

Course Web Page and E-mail

Assignments will be posted as PDF files on the course web page. Any additional information for an assignment may be posted on the course web page(s) or sent to you by an e-mail. You are responsible

for checking the course web page and your e-mails on a daily basis.

Assignments

There will be several computer assignments in the C programming language. These assignments must be coded, tested, run, and debugged on the Computer Science Department's tiger.cs.niu.edu machine. You must include the following information (in the form of a "Doc-Box") at the top of each computer assignment that you turn in for grading:

- Your name
- The assignment number
- The date the assignment is due

The maximum grade that you can receive for a late assignment will be reduced by 10% of the maximum possible points for each day – includes weekends and university holidays – that the assignment is late. Computer assignments will be graded using the following criteria:

- 60%: Program output and compliance with the stated objectives and specification of the assignment.
- 20%: Structure and efficiency.
- 20%: Documentation.
- Any computer assignment that is submitted for grading that contains any compile-time errors receives zero points.
- 10% of the total grade will be deducted for each compiler warning emitted during building when grading.
- No assignments will be accepted more than three calendar days late.

Grading

The letter grade assigned for this course at the end of the semester will be based on a scale of 75% for in-class tests and 25% for computer assignments.

• Exams: 450 pts

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Midterm Exam 1 2015-02-17 (Tuesday) - 150 pts
Midterm Exam 2 2015-03-31 (Tuesday) - 150 pts
Final Exam 2015-05-07 (Thursday) - 150 pts
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• Computer Assignments: 150 pts

Final Grade

Final letter grades will be assigned according to the following scale:

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Points	Percent	Grade
540+	(90+ %)	A
520+		A-
500+		B+
480+	(80+ %)	В
460+		В-
440+		C+
420+	(70+%)	\mathbf{C}
400+		C-
360+	(60+ %)	D
360-		F

Independent Work

Everything that you do in this course must reflect your own work. If you copy all or part of another student's work, no matter where or how you get it, it will be considered as an act of cheating. This is not to discourage discussions among classmates. However, discussions should not be as extensive and detailed as to border on collaboration. Cheating of any form cannot be tolerated. Any student caught on cheating will receive a grade of an F for the course with possible disciplinary action from the university.

Persons with Disabilities

If you need an accommodation for this class, please contact the Disability Resource Center (DRC) as soon as possible. The DRC coordinates accommodations for students with disabilities. It is located on the 4th floor of the Health Services Building, and can be reached at 815-753-1303 (V) or drc@niu.edu. Also, please contact us privately as soon as possible so we can discuss your accommodations. The sooner you let us know your needs, the sooner we can assist you in achieving your learning goals in this course.

Department of Computer Science Policy for Academic Integrity During Examinations

Examination Rules of Conduct

- 1. Students must exercise complete silence until they exit the examination room. If a student has a question then the student will raise his/her hand until the instructor comes to them to address their question.
- 2. Students may not look in the direction of other students' examinations. If a student feels the need to rest his/her eyes then s/he may look at the ceiling.
- 3. No electronic devices (e.g., cell phones, calculators, or tablets). If such a device is even <u>visible</u>, at anytime during the examination period, this will constitute violation of this rule.
- 4. No hats, headphones, or ear buds may be worn.
- 5. Two minutes before the end of the examination students will be informed of that fact. When the examination time is up students must **immediately** stop writing and **turn his/her test over**. Any delay will constitute a violation of this rule. If a student attempts to complete an answer or write their name at this point then that will constitute a violation of this rule.
- 6. Students who finish their examination before the time expires may turn in their examination in a manner that is permitted by the instructor (e.g., bring it to the instructor or raise your hand until the instructor comes to collect it). Once a student submits his/her examination the student must silently and immediately leave the room. Staying or communicating in any way with students in the room will constitute a violation of this rule.

Sanction

Any violation of Examination Rules of Conduct will result in a student's examination being confiscated immediately, the student will be instructed to leave the examination room, the student will receive a grade of zero for the examination, and an Academic Misconduct report will be filed.