Mathematics 4370: Introduction to Systems Programming Spring 2013

Prerequisite

Permission of instructor.

Instructor

Dr. Bill Slough Old Main 3212 581-7529 E-mail: waslough@eiu.edu Office hours: MW: 2:00-3:00, F 2:00-4:00; other times by appointment.

Texts

King, C Programming: A Modern Approach, 2nd Edition, W. W. Norton, 2008
Kernighan and Ritchie, The C Programming Language, 2nd Edition, Prentice-Hall, 1988
Kerrisk, The Linux Programming Interface, No Starch Press, 2010

Overview

This course has the following objectives:

- Obtain a thorough grounding in the C programming language; be able to read and write moderately sophisticated C programs.
- Learn how to interact with the UNIX operating system via system calls.
- Learn about the UNIX philosophy of tools and understand how these tools can be constructed.

Exercises

Learning about C and systems programming is best accomplished by taking an *active* role. To encourage this activity, exercises will be assigned on a regular basis throughout the semester. Plan your schedule accordingly to allow sufficient time for design, implementation, testing, and debugging.

Evaluation

In addition to exercises, there will be two exams and a final, as shown below. Exam dates are tentative, but will not be sooner than the dates given here.

Exam 1	Monday, February 11	20%
Exam 2	Wednesday, March 27	20%
Final	Tuesday, April 30, 10:15–12:15	30%
Exercises	—as assigned—	30%

The following scale will be used as a first approximation to your grade:

90–100: A 80–89: B 70–79: C 55–69: D 0–54: F

In borderline cases, factors such as overall trends and the final exam score will be taken into consideration. It is possible that the "cut-off" scores given above will be lowered, but they will not be raised. As a result, an overall score of 80 is guaranteed to receive at least a B, whereas a score of 78 might result in a B.

To receive a final grade of C or better, you must earn a minimum of a C in each of the graded components of this course.

Attendance, Make-up, and Late Work

The course policy on attendance and make-up work follows the guidelines described in the EIU catalog¹. To briefly summarize:

- You are expected to attend class meetings as scheduled.
- When an absence occurs, you are responsible for material covered in your absence.
- You are expected to notify me in advance of an anticipated absence on an exam day. If you cannot reach me, call the Mathematics and Computer Science Department (581-2028) and leave a message for me.
- You will have the opportunity to make up work for properly verified absences due to illness, emergency, or participation in official University activities. It is your responsibility to initiate plans for make-up work and complete it promptly.
- Late submissions of homework is permissible only for properly verified absences due to illness, emergency, or participation in an official University activity.

Student Conduct

The Office of Student Standards provides guidelines for expectations of all EIU students². You are expected to observe and meet these expectations for this class. Violations of this conduct can have serious consequences, including a failing grade for the course. Violations include cheating on examinations, copying work from others, and conduct which disrupts the academic environment.

Miscellaneous

• By pointing your web browser to

http://www.eiu.edu/~mathcs/mat4370

you can obtain late-breaking news of interest related to this course, class handouts, descriptions of assignments, and code needed to complete assignments. This web site will evolve over time; check back frequently to stay informed.

- Homework exercises are to be done on your own; they are not intended as group projects.
- Regular attendance and class participation are important components of this class.
- If you have a documented disability and wish to receive academic accommodations, please contact the Coordinator of the Office of Disability Services (581–6583) as soon as possible.
- Feel free to seek me out for help. If my office hours don't fit your schedule, I'm available to meet with you at many other times—just let me know in advance. Also, I will respond promptly to any e-mail you send me.

¹See http://catalog.eiu.edu/content.php?catoid=23&navoid=796#clas_atte.

²See http://www.eiu.edu/~judicial/studentconductcode.php.