

Mathematics 4970: Principles of Operating Systems Spring 2012

Prerequisite

Mathematics 3670 or permission of instructor.

Instructor

Dr. Bill Slough

Old Main 3212

581-7529

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Office hours: MW: 1:00–3:00, F 1:00–2:00; other times by appointment.

Texts

Silberschatz, Galvin, and Gagne, *Operating System Concepts, 8th Edition*.

Glass and Ables, *UNIX for Programmers and Users, Third Edition*.

Overview

This course covers the concepts and principles on which modern operating systems are based. Topics include a historical development of operating systems, processes and concurrency, memory management, file systems, and I/O. Case studies will be chosen from UNIX, Linux, and Windows. Conceptual topics will be supplemented with “hands-on” experience.

Programming Exercises

In addition to the assigned reading, a number of exercises will be assigned. As with all programming, it is wise to start early and plan your work carefully. It is very easy to make a small programming mistake which can be difficult and time-consuming to track down.

Evaluation

Your course grade is based on the following components:

Exam 1	Monday, February 13	20%
Exam 2	Friday, April 6	20%
Final	Tuesday, May 1 (10:15–12:15)	30%
Programming Exercises	—as announced—	30%

Exam dates are tentative, but will not be sooner than the dates given here.

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, collusion, and conduct which disrupts the academic environment. All work turned in, including homework submissions, is to be your own work.

Miscellaneous

- The web site for this course can be found at

<http://www.eiu.edu/~mathcs/mat4970>

This site will evolve over the course of the semester, so check back regularly to stay informed.

- Homework exercises are to be done on your own; unless explicitly stated otherwise, 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 wish to send me.

¹See page 12 of <http://castle.eiu.edu/acaffair/catalog/2010-11/2010Catalog.pdf> for full details.

²See <http://www.eiu.edu/~judicial/studentconductcode.php> for more details.