

Operating Systems

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Semesters	Fall 2007
Class room; Meetings	Reed Hall 250, Mon. & Wed. 15:30-16:45
Office hours	Mon. & Wed. 12:15-14:00, 16:45-17:15, and by appointment

Course Objectives:

The material of this course is focused on general concepts and methods used in the design and implementation of a modern operating system.

Learning Course Outcomes:

Completing this course, the student should be able to:

- understand and be able to contract the features offered by various types of operating systems, such as, process management, memory management, protection, and security.
- understand the inner workings of operating systems and the tradeoffs associated with certain design decisions,
- understand causes and remedies for performance issues.

Textbook:

- Silberschatz, P. Galvin, and G. Gagne, *OPERATING SYSTEMS CONCEPTS*, Seventh Edition, John Wiley (ISBN 0-471-69466-5).

Project:

An individual project is a report on a selected topic from the operating system domain. The topic for the semester-long capstone project is proposed by the student or suggested by the instructor. The project may be implemented in C, C++, or Java according to student's choice. The project complements course materials and is intended to be appropriate to student's research project or interest.

Course Content (tentative):

The material of this course discusses the following topics:

- Operating systems - Intro (chap. 1)
- Computer-System Structures (chap. 2)
- Operating-System Structures (chap. 3)
- Processes (chap. 4)
- Threads (chap. 5)
- CPU Scheduling (chap. 6)
- Process Synchronization (chap. 7)
- Deadlocks (chap. 8)
- Memory Management (chap. 9)
- Virtual Memory (chap. 10)
- File-System Interface (chap. 11)
- Network Structures (chap. 15)
- Protection (chap. 18)
- Security (chap. 19)

Methods of Evaluation and Grading Policy:

The course load includes: project (25%), two milestone project reports (10%), and three exams (65%). You are responsible for material covered in prerequisite courses. Both project milestones report must be submitted as instructed in the handouts to be given.

If there are any questions about the way a particular item is graded these should be brought to the instructor's attention within two days the item was graded. If you feel that an assignment or exam of yours has been graded incorrectly, submit a concise written summary of your concern to the instructor. Indicate specifically why you believe your work was graded incorrectly.

Grading will be based on the following scale: 90+ (A), 80+ (B), 70+ (C), <70 (D or F).

The instructor reserves the right to raise or lower the quantitatively determined student's grade depending on instructor's judgment of mastery of the materials presented to him.

Reference materials:

Course handouts and other course related information will be provided to you as needed, via e-mail at this course CRN number: crn80422@eagle.fgcu.edu.

Attendance Requirement:

Attendance is required in all classes. No makeup will be given for missed classes, quizzes or exams, unless a case is made in advance with Instructor's approval.

Ethics:

Instructor follows general university "Academic Dishonesty/Cheating Policy."