

CSC 343 / CSC 443 Introduction to Operating Systems**Course Information:**

Instructor: Udayan Das

Office Hours: W 4:15 PM – 5:45 PM in Lewis 1107, or by appointment

Class meetings: W 5:45 PM in Lewis 1107

Final Exam: R November 16, 6 PM

Course Summary

This is the first course in operating systems, but assumes knowledge of the material covered in the two courses - Computer Systems I and II at DePaul. Those prerequisite courses view the operating system as an API and explore using it to construct programs. This course examines the operating system in more depth and from the point of view of implementing the abstractions that operating systems provide and the functions that make up the operating system API available to system programmers. Design choices for operating system components are presented in the course and the implementation will be explored through projects that implement parts of a simple operating system.

Objectives / Learning Outcomes

At the end of the course, students should be able to:

- Understand design issues for multithreading support, virtual memory, and file systems.
- Implement parts of an operating system (e.g., a user level threads package and/or kernel level threads).
- Understand the mechanism of system calls and how to implement a system call.
- Understand synchronization and related issues in the operating system.

Prerequisites

Systems I and II (CSC373,374 or CSC406,407)

Required Text and Reference

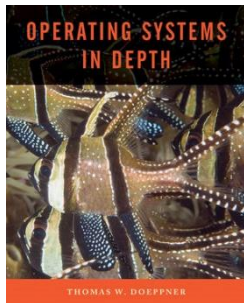
Some web resources may be suggested at times, but the main focus will be on the required text.

Thomas W. Doeppner, Operating Systems in Depth,

Hardcover: ISBN 978-04-471-68723-8

Ebook: ISBN 978-0-470-57131-6

<http://www.wiley.com/WileyCDA/WileyTitle/productCd-EHEP001803.html>

**Grading****Programming Projects**

There will be 3 or 4 programming projects. These projects are challenging and play an important part in understanding the book material.

Exams

The midterm exam will be given in the 6th week.

Online students will have a range of dates during the exam period to take the exam and should register on d2l for the exam.

Percentage of Final Grade

Programming Projects: 50%

Midterm Exam: 20%

Final Exam: 30%

Final grading will be based on a curve. A minimum of 60% is required to pass.

CSC 343 Students will have 3 Programming Projects.

CSC 443 Students will have 4 Programming Projects.

Students with Disabilities

Students who feel they may need an accommodation based on the impact of a disability should contact the instructor privately to discuss their specific needs. All discussions will remain confidential.

To ensure that you receive the most appropriate accommodation based on your needs, contact the instructor as early as possible in the quarter (preferably within the first week of class), and make sure that you have contacted the Center for Students with Disabilities (CSD) at: csd@depaul.edu

Lewis Center 1420, 25 East Jackson Blvd.
Phone number: (312) 362-8002
Fax: (312)362-6544
TTY: (773)325.7296

Incomplete Grades

A grade of IN (incomplete) may be given only in unpredictable and unexpected circumstances. It should be requested two weeks before the final exam, approved by the instructor and also by an associate dean of CDM. If approved you will have one quarter to complete the work. See [CDM's incomplete policy](#) for details.

Academic Integrity and Plagiarism

This course will be subject to the university's academic integrity policy. More information can be found at <http://academicintegrity.depaul.edu/>. If you have any questions be sure to consult with your professor.

Academic Policies

All students are required to manage their class schedules each term in accordance with the deadlines for enrolling and withdrawing as indicated in the University Academic Calendar. Information on enrollment, withdrawal, grading and incompletes can be found at: <http://www.cdm.depaul.edu/Current%20Students/Pages/PoliciesandProcedures.aspx>

Online Course Evaluations

Evaluations are a way for students to provide valuable feedback regarding their instructor and the course. Detailed feedback will enable the instructor to continuously tailor teaching methods and course content to meet the learning goals of the course and the academic needs of the students. They are a requirement of the course and are key to continue to provide you with the highest quality of teaching.

The evaluations are anonymous; the instructor and administration do not track who entered what responses. A program is used to check if the student completed the evaluations, but the evaluation is completely separate from the student's identity. Since 100% participation is our goal, students are sent periodic reminders over three weeks. Students do not receive reminders once they complete the evaluation. Students complete the evaluation online in CampusConnect.

Changes to Syllabus

This syllabus is subject to change as necessary during the quarter. If a change occurs, it will be thoroughly addressed during class, posted under Announcements in D2L and sent via email.

Course Slack Page

Please use the Slack channel for the course to share information and ask questions:
https://join.slack.com/t/depaulos/shared_invite/MjM3Mjc4NTcxNzMyLTE1MDQ3Mjg0MjAtMmEzMjUzODJjMQ