

#### COURSE INFORMATION:

Course Number: CS 4348, Section 001 (Tuesday/Thursday 4:00pm)

Course Title: Operating Systems Concepts

Credit Hours: 3

Term: Fall 2022

#### PROFESSOR CONTACT INFORMATION:

Name: Greg Ozbirn

Phone Number: 972-883-4725

Office Location: ECSS 3.608

Office Hours: 2:30 pm – 3:30 pm, MW

Email Address: [ozbirn@utdallas.edu](mailto:ozbirn@utdallas.edu)

Prerequisites: CS/SE 2340 and CS/SE 3377 and CE/CS/SE 3345.

**COURSE DESCRIPTION:** An introduction to fundamental concepts in operating systems: their design, implementation, and usage. Topics include process management, main memory management, virtual memory, I/O and device drivers, file systems, secondary storage management, and an introduction to critical sections and deadlocks

**REQUIRED TEXTBOOKS AND MATERIALS:** Operating Systems, Internals and Design Principles, Ninth Edition, by William Stallings, ISBN-13: 978-0-13-467095-9. © 2018 by Prentice-Hall, Inc.

#### ASSIGNMENTS & ACADEMIC CALENDAR:

Aug 23rd, 25th -> Introduction, Chapter 1 Hardware Overview

Aug 30th, Sep 1st -> Chapter 2 OS Overview

Sep 6th, 8th -> Project 1

Sep 13th, 15th -> Chapter 3 Processes

Sep 20th, 22nd -> Chapter 4, Review Threads

Sep 27th, 29th -> Exam 1 (ch. 1-4), Chapter 5 Concurrency, Synchronization

Oct 4th, 6th -> Chapter 5

Oct 11th, 13th -> Project 2, Chapter 6 Deadlocks

Oct 18th, 20th -> Chapter 7, Chapter 8 Memory Mgmt

Oct 25th, 27th -> Chapter 8, Review Virtual Memory

Nov 1st, 3rd -> Exam 2 (ch. 5-8), Project 3

Nov 8th, 10th -> Chapter 9, 10 Scheduling

Nov 15th, 17th -> Chapter 11, 12 I/O, File Systems Nov 22, 24\* Fall Break, Holiday\*

Nov 29th, Dec 1st -> Chapter 14 Virtualization

Dec 6th, 8th -> Exam 3 (ch. 9-12, 14)

GRADING POLICY: The grade will be determined as described below. The lowest assignment score (assignments only, not projects or exams) is dropped. No other bonus work.

Exam 1 20%

Exam 2 20%

Exam 3 20% Project Average 30%

Assignment Average 10%

COURSE & INSTRUCTOR POLICIES: Assignments and projects must be turned in on time. Due dates will be followed by a 24-hour grace period. After the 24-hour period ends, the score is recorded as a zero. Exceptions require advance approval by the instructor. It is up to the instructor to determine whether an exception will be made, and will depend largely on proof of extraordinary circumstances. Otherwise, a missed exam will either incur a substantial penalty or be recorded as a zero. Exams have time limits. Students who continue to write on the exam after time is called or who start writing before the exam begins are subject to a penalty. Students are expected to attend all class lectures.

Attendance policy: The department policy for attendance is as follows: missing three consecutive classes results in a letter grade reduction, and missing four consecutive classes results in an F in the course. All assignments, projects and exams are to be individual efforts.

You are not to collaborate with other students, give your work to other students, or discuss solutions with other students prior to submission. Copying of assignments, projects and exams, in whole or in part, from other students in this semester or previous semesters will be considered to be an act of scholastic dishonesty. Grades are not based on needs or consequences, but are based only on performance.