CS 4323
Design and Implementation of Operating Systems I
Term Spring 2020
Meetings M 4.30-7.10 pm, NCB 244

Instructor Contact Information

Name: Rekha Bhowmik
Office Phone: **(**918) 594 8441
Office Location: North Hall 324
Email: rekha.bhowmik@okstate.edu
Office Hours: M 3:00-4:00 pm

TA Contact Information

Name:
Office Phone:
Office Location:
Email:
Office Hours:

General Course Information

Pre-requisites, Co-requisites: CS 2133; and CS 3443 or ECEN 3213; and CS 3653 and 4343

Course Description:

Process activation and process context block. Batch, multi-programmed, and timeshared operating system. Process management, memory management, and synchronization primitives. Deadlock prevention, avoidance, and detection.

Outcomes:

- Must include a fairly open-ended requirements-based large-scale development project, and evaluated on system design and appropriateness to requirements.

- A team project engaging in an aspect of operating system development, assessing the teamwork, organization and leadership aspects of the project.

Required Text:

Silberschatz, Galvin, Gagne: *Operating System Concepts*. John Wiley, 9th Edition.
ISBN: 978-1-118-06333-0

Assignments & Tentative Academic Calendar

Week #	Date	Material to be Covered	Reading/ Homework
1	Jan 13	Introduction to Operating Systems, Operating-System Structures	Chap 1 Chap 2
2	Jan 27	Operating-System Structures	Chap 2
3	Feb 3	Processes, **Quiz 1**	Chap 3
4	Feb 10	Processes	Chap 3
5	Feb 17	Processes	
6	Feb 24	Threads, **Test 1**	Chap 4
7	Mar 2	CPU Scheduling	Chap 5
8	Mar 9	CPU Scheduling	Chap 5
9	Mar 16- 20	**Spring Break**	
10	Mar 23	Deadlock	Chap 7
12	Mar 30	**Test 2**	
13	Apr 6	Deadlock	Chap 7
14	Apr 13	Main Memory, **Quiz 2**	Chap 8
15	Apr 20	Main Memory	Chap 8
16	Apr 27	Virtual Memory	Chap 9
	May 4	**Final Exam**	

Exams

There will be <u>two</u> Quizzes, <u>two</u> Tests, as well as a Final Exam.

Quiz #1: Feb 3, 2020
Quiz #2: Apr 13, 2020
Test #1: Feb 24, 2020
Test #2: Mar 30, 2020
Final Exam: May 4, 2020

Grading (credit) Criteria	There will be <u>seven</u> assignments and <u>one</u> term project. The grade will be determined as described below. Quizzes: 10% Test #1: 15% Test #2: 20% Final Exam: 15% Written Assignments: 20% Project: 15% Attendance: 5% Grades are assigned according to the following scale: [> =90%] A [80-90%] B [70-80%] C [60-70%] D [0 -60%] F

Make-up Exams	Make-up exams are only given to those students who coordinate the missing of an exam prior to the originally scheduled exam date and time.
Extra Credit	
Late Work	Assignments are due in class/ online on the dates given. If a student submits an assignment after the due date without having made arrangements with the instructor, a minimum of 15 points (based on an assignment grading scale of 100 points) or 15 percent of the total points will be deducted for each day, or part thereof, that the assignment is late.
Class Attendance	Class attendance will be documented

OSU Academic Integrity Policy:

OSU is committed to maintaining the highest standards of integrity and ethical conduct. This level of ethical behavior and integrity will be maintained in this course. Participating in a behavior that violates academic integrity (e.g., unauthorized collaboration, plagiarism, multiple submissions, cheating on examinations, fabricating information, helping another person cheat, unauthorized advance access to examinations, altering or destroying the work of others, and altering academic records) will result in an official academic sanction. Violations may subject you to disciplinary action including the following: receiving a failing grade on an assignment, examination or course, receiving a notation of a violation of academic integrity on your transcript, and being suspended from the University. You have the right to appeal the charge. Go to http://academicintegrity.okstate.edu/ for a video on OSU's academic integrity policy and additional information.