Course Number and Title: CS 4323, Design and Implementation of Operating Systems I

Time: 2:00-3:15 TR   Place: LSW 202

Instructor: M. Samadzadeh   Office: 215 MSCS   Phone: 744-5674
Office Hours: 2:00-3:00 Mon./Wed./Fri., 11:30-12:15 Tues./Thurs., or by appointment if necessary

TA: Goutam Mylavarapu   Office: 230 MSCS
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Office Hours: 11:00-12:00 Mon., 12:30-2:00 Tues./Thurs., or by appointment if necessary

Prerequisites: 2133 (Computer Science II), CS 3653 (Discrete Mathematics for Computer Science), CS 4343 (Data Structures and Algorithm Analysis I), and CS 3443 (Computer Systems) or ENSC 3213 (Microcomputer Principles and Applications)


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

Grading:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Programming Assignments</td>
<td>30%</td>
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<tr>
<td>Homeworks</td>
<td>10%</td>
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<tr>
<td>Tests (3)</td>
<td>10% each (Sept. 12, Oct. 10, Nov. 7)</td>
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<tr>
<td>Final Exam</td>
<td>30% (Dec. 12, 2:00-3:50 PM) comprehensive</td>
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50% Rule: For any student to be eligible to receive a passing grade, that student must have earned at least 50% of the total points in each of two areas: (1) programs and other assignments, and (2) tests including final. Any student whose grades do not satisfy the 50% Rule, will automatically receive a grade of F in the course regardless of the total points earned.

Notes:

(1) OS-I is a required course. Required courses are typically the main academic focus of a semester for a student. The reason is that required courses typically place a larger demand on a student's time than elective courses. OS-I is a time-consuming course in that it is not only a concept-heavy course requiring reading/memorization/recall, but it also involves non-trivial programming projects as well as problem sets.

(2) Announcements about assignments, project due dates, etc. will be made in class and/or by okstate email. Students are to check their okstate email regularly. Students are responsible for all announcements made in class and/or by okstate email. All course-related email communication is to be done using okstate email.

Students are assigned a class account on the Computer Science Department’s main computer system called CSX.
New students (that is, students who have new CSX accounts, or students who don’t know their password for any other reason) will need to go to http://cs.okstate.edu/pwreset to set an initial password (they’ll use their OKEY short name and password to identify themselves there); and then, when they first log into CSX, they can change their password to something they choose. For detailed instructions see: http://cs.okstate.edu/loggingon.html

For CSX accounts, email, or other Computer Science Department general computer problems, report the problem using the form available at the URL http://sysmgr.cs.okstate.edu/ or send email to: systems.group@cs.okstate.edu

(3) Assignments are due at the beginning of class on the date they are due, unless announced in class otherwise. Homework assignments are to be submitted in hard copies, i.e., on paper. The "word processing and formatting" of the assignments is preferred and recommended but not required. Assignment legibility is a requirement. Late assignments will not be accepted. Only when verifiable extenuating circumstances can be demonstrated will make-up exams or extended assignment due dates be considered. Verifiable extenuating circumstances must be reasons beyond control of the students, such as illness or accidental injury. Poor performance in class is not an extenuating circumstance. Advise your instructor of the verifiable extenuating circumstances in advance or as soon as possible. In such situations, the date and nature of the make-up exams and the extended due dates for the assignments will be decided by the instructor.

(4) A general point about assignments and tests: It is understood and it is always the case that you must state all assumptions, show all work, and justify all answers and derivation steps for all problems and exercises in the homework assignments and examinations.

(5) Cell phones must be turned off during class and in examination sessions. Computer use, i.e., the use of a laptop, tablet, smart phone, wearable devices, etc., is not allowed in class unless a clear and convincing case is made for their use through Office of Student Disability Services.

"If you have something more important, or more interesting, to do than attend class and pay attention, then by all means you are advised to skip class and duly attend to your higher priority affair. If you expect an emergency call or if you are monitoring an emergency situation real-time, then you need to leave the class in order to attend to your emergency situation. Just sitting in class and doing what appears as surfing or browsing on a cell phone is not acceptable and will not be tolerated.

Attendance Policy:

(1) Students are responsible for all material covered in class. Some of the material covered in class will not be in the textbook. Thus, attendance is strongly encouraged and duly rewarded. However, attendance will not be monitored.

(2) Attending this class requires registration or formal audit, no informal "sitting in" is allowed.

Collaboration Policy for CS 4323

Assignments: Discussion of any kind is allowed. After discussion, each student must write up her/his own solution. Copying another student's work is not allowed. Giving another student your work is considered cheating as well.

Programs: Discussion of techniques in a natural language (e.g., English) is allowed, but a discussion in a computer or algorithmic language is not allowed. Computer language discussions should not concern the assignment. Giving or receiving any code, drawings, diagrams, texts, or designs is not allowed. Every line of work that you turn in must be your own.
Examinations: No discussion of any kind (except with the instructor) is allowed. No access to any type of written material is allowed. Examination will be based on the material covered in class. The best source for study/preparation is the notes that you take in class, the objective being to encourage/reward class attendance.

Students who do not comply with the described collaboration policy will receive a grade of F in the course. Furthermore, the case will be reported to the University Officials.

Attachments:

- Computer Science Department General Computer Use and Misuse Policy
  http://cs.okstate.edu/CSUsePolicy.html
  [ Also see: Appropriate Computer Use http://it.okstate.edu/policies/pol_app.php ]

- Academic Dishonesty Policy
  http://cs.okstate.edu/CSUsePolicy.html

- Disabilities Act
  http://cs.okstate.edu/CSUsePolicy.html

- Academic Integrity Policy
  http://cs.okstate.edu/CSUsePolicy.html
  [ A more in depth statement of OSU’s policy can be found here: Honesty/Fairness/Trust/Respect/Responsibility http://academicintegrity.okstate.edu/ ]

- Oklahoma State University, Syllabus Attachment, Fall 2017
  http://cs.okstate.edu/~samad/4323/17flSyAt.pdf

- Fall 2017 Final Examination Schedule
  http://cs.okstate.edu/~samad/4323/17flFinExams.pdf

- Fall 2017 - Academic Calendar