Course Number and Title:
CS 5323, Design and Implementation of Operating Systems II

Time: 2:30-3:45 MW  Place: MSCS 310 and T-NCB 211

Instructor: M. Samadzadeh  Office: MSCS 215  Phone: 744-5674
Office Hours: 11:30-12:15 Monday, Tuesday, Wednesday, Thursday, Friday,
or by appointment if necessary

TA: Sukanya Suwisuthikasem  Office: MSCS 225  Phone: 744-9552
E-mail Address: suwisut@cs.okstate.edu
Office Hours: 1:00-2:30 Monday, 10:30-11:30 Tuesday, 1:00-2:30 Wednesday,
or by appointment if necessary

Prerequisite: CS 4323, Design and Implementation of Operating Systems I

(For course material, you need to rely primarily on the notes taken in class which will not be available on the Web or anywhere else. The above text may be out of print, however it is readily available from sources other than the original publisher. This text is generally closest to what I would like to cover. A number of the homework sets will be based on it.)

Optional/Recommended Texts, etc.:


Course Description: Task systems and concurrent programming. Synchronization and inter-process communication. Theoretical investigation of resource sharing and deadlock. Memory management strategies. Deterministic scheduling algorithms and queueing theory. Distributed operating systems.

Grading:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Project</td>
<td>35%</td>
</tr>
<tr>
<td>Assignments</td>
<td>10%</td>
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<tr>
<td>Tests (3)</td>
<td>10% each (February 1, February 29, April 4)</td>
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<tr>
<td>Final Exam</td>
<td>25% comprehensive (April 30, 2:00-3:50 PM)</td>
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Notes:

(1) OS-II is a core course. It is not unusual for a core course to be the main academic focus of a semester for a graduate student, the reason being that typically core courses place a larger demand on a student's time than non-core courses. Your thesis/dissertation work or what you get paid to do for your research assistantship are certainly important, but not to the detriment of your performance in your courses and especially in your core courses.

(2) Announcements about assignments, project due dates, etc. will be made in class and/or by CSX email. Students are to check their CSX email regularly using their class account, i.e., userid@cs.okstate.edu. All course-related email communication is to be done using CSX email. Please note that your CSX email is not the same as your okstate email.

Passwords for new accounts on CSX are the PR&SM passwords (PR&SM = Password Reset and System Management) that students can get via their O-Key accounts. If you have a new CSX account, you should use your PR&SM password.

Students are responsible for all announcements made in class and/or by email. Students are to either check their class account email on CSX regularly or to put an appropriate forwarding mechanism in place to make sure to read their class-related email.

For CSX accounts, CSX email, and 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, the extended due dates for the assignments, etc. 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 justify your answers, show all your work, and state your assumptions on all problems and exercises in the assignments and examinations. A correct answer with no justification and no work shown may be worth less than a wrong answer with full justification and having shown all the work.

(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, etc., is not allowed in class unless a clear and convincing case is made for the use of one.

(6) For OSU-Tulsa students, North Hall 103 is the student submission and pick-up office.

Attendance Policy:

(1) Attendance is strongly encouraged, but not required or monitored. Students are responsible for all material covered in class. Some of the material covered in class will not be in the textbook.
Taking a course as a remote student is not the same as taking a correspondence course or taking an on-line course. For this course, the lectures are broadcast to the remote site(s) but the recordings are not going to be available. This course is not asynchronous, it has a pace and progress rate that must be followed by all students. The deadlines and due dates apply to all students.

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

**Collaboration Policy for CS 5323**

**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.

**Project:** Discussion of techniques in a natural language (such as English) is allowed, but a discussion in a computer or algorithmic language is not allowed. Computer language discussions and questions are to be limited to the language and should not concern the assignment. Stealing, 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.

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:**

- General Use and Misuse Policy - Computer Science Department
  http://cs.okstate.edu/cspolicy.html

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

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

- Academic Integrity Policy
  http://cs.okstate.edu/cspolicy.html

- Oklahoma State University, Syllabus Attachment, Spring 2012

- Oklahoma State University - Tulsa, Addendum to Syllabus Attachment, Spring 2012
  http://cs.okstate.edu/~samad/5323/Spr12-Tulsa-Syl-Att.pdf

- Spring 2012 Final Examination Schedule