COSC 3360 COURSE SYLLABUS

Semester and Year Course Offered: Spring 2018
Department: Computer Science
Course Number and Name: 3360—Principles of Operating Systems
Instructor: Jehan-François Pâris
E-mail Address: jfparis AT uh DOT edu
Office: 569 PGH
Telephone: 713-743-3341 during office hours
Class Schedule: MW 2:30 to 4:00 pm in SR 117
Office Hours: MW 4:30 to 6:00 pm in PGH 569 starting January 17
Web Pages: www.cs.uh.edu/~paris/3360/resources.htm
Piazza page: piazza.com/uh/spring2018/cosc33606310/home
Teaching Assistants:

- Carlos Rincon (MW 1-2 pm in PGH 591)
  carincon AT uh DOT edu
- Wenhui Chu (MW 4:15 p-5:15 pm in PGH 591)
  wchu AT uh DOT edu
- Gal Egozi (MW 11 am-1 pm in PGH ???)
  geegozi AT gmail DOT com
- Nilofar Safi (Hours TBA)
  nsafisamghabadi AT uh DOT edu
- Christos Smailis (Hours TBA)
  smallisch AT gmail DOT com

Please refer to Piazza for possible changes

The information contained in this class syllabus is subject to change without notice. Students are expected to be aware of any additional course policies presented by the instructor during the course.

LEARNING OBJECTIVES
Understanding the fundamental aspects of operating system operation; learning how to create and control processes in a UNIX environment; learning how to establish communication channels between processes and how to synchronize processes and threads.

MAJOR ASSIGNMENTS/EXAMINATIONS
Your grades will be based on three quizzes (60 percent of your grade), three programming assignments (39 percent) and class participation (1 percent). People failing the assignments or the examinations will fail the course. The three main quizzes will be closed book. You will be responsible for all materials discussed in class, but not for the readings. You will be allowed a single 8.5"×11" page of notes for each quiz.

All programming assignments will be in C or C++ under Linux and submitted through your Blackboard account. They will be graded for correctness and respect of good programming practices such as modularity and documentation. Be sure to dedicate enough time to them. Late assignments will be assessed a penalty of 5 points per day unless announced otherwise. You will be given a total of three grace days to be used at your discretion. You do not need anyone’s permission to use them.

No cheating will be tolerated on any graded assignment: what you turn in must be your own work. The minimum penalty for any transgression will be an F grade for the course. You have been warned.
REQUIRED READINGS

RECOMMENDED READINGS

VERY TENTATIVE LIST OF DISCUSSION/LECTURE TOPICS

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
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</thead>
<tbody>
<tr>
<td>1-2</td>
<td>Introduction, interrupts, O. S. organization.</td>
</tr>
<tr>
<td>3-4</td>
<td>Processes, process creation and deletion, UNIX pipes, server organization, lightweight processes and threads.</td>
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<tr>
<td>5-6</td>
<td>Scheduling. Inter-process communication. Review Session on February 14 First Quiz on Monday February 19.</td>
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<tr>
<td>7-8</td>
<td>Inter-process synchronization, semaphores, monitors, condition variables.</td>
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<tr>
<td>11-12</td>
<td>Second Quiz on Monday April 2. Memory management. Virtual memory management.</td>
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<tr>
<td>13-15</td>
<td>File systems</td>
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<tr>
<td>Finals’ week</td>
<td>Third Quiz on Friday, May 4 at 2:00 pm</td>
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</tbody>
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PROGRAM ACCOUNTS
Linux accounts on program.cs.uh.edu will be handed out during the second week of classes. Access yours and update its password as soon as you get it.

You may prefer to work on your own computer provided it offers you access to a Linux-like shell (Mac shell, Bash for Ubuntu for Windows or a full-fledged Linux virtual machine)

IMPORTANT
1. Skipping assignments is the safest way to a failing grade.
2. Please contact me if you have any special need. We will work together around them.
3. Please verify that the university has your correct email address: I will use it whenever I have to get in touch with you for things like missing assignments and so on.
4. Please refer to the Piazza course page for course notes, quiz solutions, review session questions and answers, and other announcements.
5. Attendance is expected from all.

Counseling and Psychological Services (CAPS) can help students who are having difficulties managing stress, adjusting to college, or feeling sad and hopeless. You can reach CAPS (www.uh.edu/caps) by calling 713-743-5454 during and after business hours for routine appointments or if you or someone you know is in crisis. No appointment is necessary for the “Let’s Talk” program, a drop-in consultation service at convenient locations and hours around campus: http://www.uh.edu/caps/outreach/lets_talk.html