CSCI 5573: Advanced Operating Systems
Fall 2018

Instructor

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Course Assistants

- Grader
  - *Details coming soon*

Short Description

This is a graduate course in operating systems intended to create a foundation for operating systems research or advanced professional practice. Topics include thread and process management, virtual memory management, synchronization and communication, file systems, protection and security, operating system structure and extension techniques, virtualization, fault tolerance, and history and experience of systems programming. The course consists of reading papers and class discussions led by students and instructor, home works including programming assignments, one or two exams, and a semester-long team project.

Prerequisite

- CSCI 3753 and CSCI 4593 or equivalent undergraduate course work in operating systems and computer architecture. These are reasonably firm prerequisites. If you have not taken these courses, you should discuss your situation with me before you enroll in CSCI 5573.

Reading Material

Selected papers from literature.

Class webpage

CSCI 5573–Advanced Operating Systems at *http://moodle.cs.colorado.edu*

Zoom meeting ID for synchronous distance students:

Distance students can virtually join a lecture synchronously using the following meeting ID

530-402-672

Connection options:
  - Join via web browser: https://cuboulder.zoom.us/j/530402672
  - Join via Zoom app (using meeting ID)
  - Join via iPhone one-tap: US: +16699006833,,530402672# or +16465588656,,530402672#
  - Join via telephone: US: +1-669-900-6833 or +1-646-558-8656
    (Note: for higher quality, dial a number based on your current location)

Note: The above information is ONLY for synchronous distance students to use. If you need help with getting Zoom up and running, please visit the following link:

http://www.colorado.edu/oit/services/conferencing-services/web-conferencing-zoom

This course requires the use of the Zoom conferencing tool, which is currently not accessible to users using assistive technology. If you use assistive technology to access the course material, please contact your faculty member immediately to discuss.

Grading (*Weights assigned are tentative*)

- Paper presentation, discussions and reviews: 25%
- Homework and programming assignments: 30%
- Course project: 30%
- Exams: 15%

ACCOMMODATION FOR DISABILITIES

If you qualify for accommodations because of a disability, please submit your accommodation letter from Disability Services to your faculty member in a timely manner so that your needs can be addressed. Disability Services determines accommodations based on documented disabilities in the academic environment. Information on requesting accommodations is located on the Disability Services website. Contact Disability Services at 303-492-8671 or dsinfo@colorado.edu for further assistance. If you have a temporary medical condition or injury, see Temporary Medical Conditions under the Students tab on the Disability Services website.

RELIGIOUS HOLIDAYS

Campus policy regarding religious observances requires that faculty make every effort to deal reasonably and fairly with all students who, because of religious obligations, have conflicts with scheduled exams, assignments or required attendance. In this class, please notify me of any anticipated conflicts due to religious obligations as early in the semester as possible (at least two weeks before) so that there is adequate time to make necessary arrangements.

See the campus policy regarding religious observances for full details.

CLASSROOM BEHAVIOR

Students and faculty each have responsibility for maintaining an appropriate learning environment. Those who fail to adhere to such behavioral standards may be subject to discipline. Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with race, color, national origin, sex, pregnancy, age, disability, creed, religion, sexual orientation, gender identity, gender expression, veteran status, political affiliation or political philosophy. Class rosters are provided to the instructor with the student's legal name. I will gladly honor your request to address you by an alternate name or gender pronoun. Please advise me of this preference early in the semester so that I may make appropriate changes to my records. For more information, see the policies on classroom behavior and the Student Code of Conduct.

SEXUAL MISCONDUCT, DISCRIMINATION, HARASSMENT AND/OR RELATED RETALIATION

The University of Colorado Boulder (CU Boulder) is committed to fostering a positive and welcoming learning, working, and living environment. CU Boulder will not tolerate acts of sexual misconduct (including sexual assault, exploitation, harassment, dating or domestic violence, and stalking), discrimination, and harassment by members of our community. Individuals who believe they have been subject to misconduct or retaliatory actions for reporting a concern should contact the Office of Institutional Equity and Compliance (OIEC) at 303-492-2127 or cureport@colorado.edu. Information about the OIEC, university policies, anonymous reporting, and the campus resources can be found on the OIEC website.

Please know that faculty and instructors have a responsibility to inform OIEC when made aware of incidents of sexual misconduct, discrimination, harassment and/or related retaliation, to ensure that individuals impacted receive information about options for reporting and support resources.

HONOR CODE

All students enrolled in a University of Colorado Boulder course are responsible for knowing and adhering to the Honor Code. Violations of the policy may include: plagiarism, cheating, fabrication, lying, bribery, threat, unauthorized access to academic materials, clicker fraud, submitting the same or similar work in more than one course without permission from all course instructors involved, and aiding academic dishonesty. All incidents of academic misconduct will be reported to the Honor Code (honor@colorado.edu); 303-492-5550). Students who are found responsible for violating the academic integrity policy will be subject to nonacademic sanctions from the Honor Code as well as academic sanctions from the faculty member. Additional information regarding the Honor Code academic integrity policy can be found at the [Honor Code Office website](#).

CLASS ATTENDANCE

You are expected to attend all lectures and stay up-to-date with the material posted on the class webpage. If you miss a lecture, you are responsible for finding out the material covered in that lecture. If you miss an exam or a quiz, a grade of zero will be assigned, unless the you explicitly receive a permission from the instructor. The instructor will grant permissions for only valid reasons.

CURRICULAR AND EXTRACURRICULAR UNIVERSITY-RELATED ACTIVITIES

Students formally affiliated with curricular and extracurricular University-related activities are required to communicate in writing with the instructor about potential conflicts within the first week of class or as soon as the student learns of a conflicting event. This deadline is established in order to provide students with time to change their course schedule if necessary. Instructors are not obligated to accommodate any potential conflicts, but may, at their own discretion, allow reasonable accommodations for these absences.