

CSC360: Operating Systems

Course Dates

| | |
|---|--|
| CRN(s): | Section A01 CRN: 10780 Section A02 CRN: 10781 Section A03 CRN: 10782 |
| Term: | Fall 2019 |
| Course Start: | 2019-09-04 |
| Course End: | 2019-12-21 |
| Withdrawal with 100% reduction of tuition fees: | 2019-09-17 |
| Withdrawal with 50% reduction of tuition fees: | 2019-10-08 |
| Last day for withdrawal (no fees returned): | 2019-10-31 |

Scheduled Meeting Times (M=Mon, T=Tue, W=Wed, R=Thu, F=Fri)

| Section: | Location: | Classes Start: | Classes End: | Days of week: | Hours of day: | Instructor: |
|----------|-----------|----------------|--------------|---------------|---------------|--------------|
| A01 | ECS 125 | 2019-09-04 | 2019-12-04 | TWF | 09:30-10:20 | Jianping Pan |
| A02 | ECS 125 | 2019-09-04 | 2019-12-04 | TWF | 09:30-10:20 | Jianping Pan |
| A03 | ECS 125 | 2019-09-04 | 2019-12-04 | TWF | 09:30-10:20 | Jianping Pan |
| T01 | ECS 104 | 2019-09-09 | 2019-12-04 | T | 13:30-14:20 | |
| T02 | COR B129 | 2019-09-09 | 2019-12-04 | F | 12:30-13:20 | |
| T03 | ELL 060 | 2019-09-09 | 2019-12-04 | R | 14:30-15:20 | |

Instructor(s)

Name: **Jianping Pan**
 Office: ECS 566
 Phone: (250) 472-5796
 Email: pan at uvic dot ca

| | |
|---------------------|-------------------|
| Office Hours: | Comments |
| Mon 10:00am-12:00pm | Or by appointment |

Course Overview

To understand how a set of computing resources can be shared safely, efficiently, and effectively among many users, including the major concepts of modern operating systems and the relationship between the OS and the architecture of computer systems.

Topics

- Introduction to Operating Systems
- Operating system structures
- Concurrent processes and programming
- CPU scheduling
- Deadlock
- Memory management and virtual memory
- File systems and storage management

Course Objectives And Learning Outcomes

Students will be able to understand the data structures and algorithms for the main components in a modern operating system through lecture sessions, and through lab sessions and assignments, to implement some of these components, and to reinforce between theory and practice.

Textbooks

| | |
|------------------|--|
| Required: | Operating System Concepts, 7th or newer Editions |
| | Silberschatz, Galvin, and Gagne |
| | John Wiley & Sons, Inc., ISBN: 0-471-69466-5 or 978-0-470-12872-5 or 978-1-118-06333-0 |

Assignments

In this course there will be 4 assignments. See below for the schedule and weight of each assignment.

Exams

There will be three midterms, worth 15% each, on **Oct 2, Oct 30, and Dec 4, 2019, respectively.**

Term Schedule

This schedule is subject to change.

| Assignment/Exam | Weight | Assigned Date | Due Date |
|-----------------|--------|---------------|----------|
| Assignment 1 | 15% | Sept 13 | Oct 4 |
| Assignment 2 | 5% | Sept 16 | Sept 23 |
| Midterm 1 | 15% | Oct 2 | |
| Assignment 3 | 20% | Oct 4 | Nov 1 |
| Midterm 2 | 15% | Oct 30 | |
| Assignment 4 | 15% | Nov 1 | Nov 29 |
| Midterm 3 | 15% | Dec 4 | |

Grading

| Coursework | Weight (out of 100%) |
|---------------|----------------------|
| Assignments | 55% |
| Midterm Exams | 45% |

Grading System

The University of Victoria follows a percentage grading system in which the instructor will submit grades in percentages. The University will use the following Senate approved standardized grading scale to assign letter grades. Both the percentage mark and the letter grade will be recorded on the academic record and transcripts.

| F | D | C | C+ | B- | B | B+ | A- | A | A+ |
|------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| 0-49 | 50-59 | 60-64 | 65-69 | 70-72 | 73-76 | 77-79 | 80-84 | 85-89 | 90-100 |

| Grades | Description |
|-----------|---|
| A+, A, A- | Exceptional, outstanding or excellent performance. Normally achieved by a minority of students. These grades indicate a student who is <i>self-initiating</i> , <i>exceeds expectation</i> and has an <i>insightful</i> grasp of the subject matter. |
| B+, B, B- | Very good, good or solid performance. Normally achieved by the largest number of students. These grades indicate a <i>good</i> grasp of the subject matter or <i>excellent grasp in one area balanced with satisfactory grasp in the other areas</i> . |
| C+, C | Satisfactory, or minimally satisfactory. These grades indicate a <i>satisfactory performance and knowledge</i> of the subject matter. |

| Grades | Description |
|--------|--|
| D | Marginal Performance. A student receiving this grade demonstrated a <i>superficial grasp</i> of the subject matter. |
| F | Unsatisfactory performance. Wrote final examination and completed course requirements; no supplemental. |

Posting of Grades

Typically marks for assignments, examinations, and provisional final grades, are made available through *conneX*, or CourseSpaces where each student will be able to view only their own grades. Sometimes numerical marks/grades may be posted publicly to the entire class. In that case, full student numbers or names will not be included with the posted information.

Course Experience Survey (CES)

I value your feedback on this course. Towards the end of term you will have the opportunity to complete a confidential course experience survey (CES) regarding your learning experience. The survey is vital to providing feedback to me regarding the course and my teaching, as well as to help the department improve the overall program for students in the future. When it is time for you to complete the survey, you will receive an email inviting you to do so. If you do not receive an email invitation, you can go directly to the [CES site](#)

You will need to use your UVic NetLink ID to access the survey, which can be done on your laptop, tablet or mobile device. I will remind you closer to the time, but please be thinking about this important activity, especially the following three questions, during the course.

- What strengths did your instructor demonstrate that helped you learn in this course?
- Please provide specific suggestions as to how the instructor could have helped you learn more effectively.
- Please provide specific suggestions as to how this course could be improved.

Csc Student Groups

The Computer Science Course Union (<https://onlineacademiccommunity.uvic.ca/cscu/>) serves all students who are either in a computer science program or taking a class in computer science. Please sign yourself up on their mailing list if you would like to be informed about their social events and services.

The Engineering Students' Society (ESS) serves all students registered in an Engineering degree program, including Software Engineering (BSEng). For information on ESS activities, events and services navigate to <http://www.engr.uvic.ca/~ess>.

Course Policies And Guidelines

Late Assignments: No late assignments will be accepted unless prior arrangements have been made with the instructor at least 48 hours before the assignment due date.

Coursework Mark Appeals: All marks must be appealed **within 7 days** of the mark being posted.

Attendance: We expect students attend all lectures and labs. It is entirely the students' responsibility to recover any information or announcements presented in lectures from which they were absent.

Electronic devices in labs and lectures: No unauthorized *audio* or *video* recording of lectures is permitted.

Electronic devices in midterms and exams: Calculators are only permitted for examinations and tests if explicitly authorized and the type of calculator permitted may be restricted. No other electronic devices (e.g. cell phones, pagers, PDA, etc.) may be used during examinations or tests *unless explicitly authorized*.

Plagiarism: Submitted work may be checked using plagiarism detection software. Cheating, plagiarism and other forms of academic fraud are taken very seriously by both the University and the Department. You should consult the link given below for the UVic policy on academic integrity. Note that the university policy includes the statement that "A largely or fully plagiarized assignment should result in a grade of F for the course."

The Faculty of Engineering Standards for Professional Behaviour are at <http://www.uvic.ca/shared/shared%5fengineering/docs/professional-behaviour.pdf>

U.Vic guidelines and policy concerning fraud and academic integrity are at <http://web.uvic.ca/calendar/undergrad/info/regulations/academic-integrity.html>

U. Vic Privacy Policy: If any student has concerns about their private information being stored or accessed outside of Canada, they are required to inform the course instructor about their concerns before the end of second week of classes.

Equality

This course aims to provide equal opportunities and access for all students to enjoy the benefits and privileges of the class and its curriculum and to meet the syllabus requirements. Reasonable and appropriate accommodation will be made available to students with documented disabilities (physical, mental, learning) in order to give them the opportunity to successfully meet the essential requirements of the course. The accommodation will not alter academic standards or learning outcomes, although the student may be allowed to demonstrate knowledge and skills in a different way. It is not necessary for you to reveal your disability and/or confidential medical information to the course instructor. If you believe that you may require accommodation, the course instructor can provide you with information about confidential resources on campus that can assist you in arranging for appropriate accommodation. Alternatively, you may want to contact the Centre for Accessible Learning (formerly the Resource Centre for Students with a Disability) located in the Campus Services Building.

The University of Victoria is committed to promoting, providing, and protecting a positive, and supportive and safe learning and working environment for all its members.

Copyright © 2019, University of Victoria, All rights reserved