COSC 4740 O	perating Systems Design	Fall 2024
Instructor: Office:	James Ward Engineering 4065	E-mail: seker@uwyo.edu Phone: 766-6231
Office Hours:	TBA And by Appointment	
Grading:	Grades will be based on the p semester's end. There will be Assignments Lab Project Midterm Exam(s) Final Exam	percentage listed below and a curved at the e no extra credit. 20% (programs and written) 10% 30% 20% 20%

Lecture Course Web page: http://www.eecs.uwyo.edu/~seker/

## Texts:

Optional: Silberschatz, Galvin, *Operating System Concepts*, Tenth Edition, Wiley Prerequisites:

- COSC 3020 Algorithms
- C or C++ programming skills

## Workload and Quality of Work:

This is a senior level course. While the textbook is optional, chapter readings are listed and maybe very helpful. There will be 3 programming assignments, 26 written response questions, and a final project. The workload can be heavy, so do not put assignments off until the last minute. I will expect all work submitted to be clear, concise, well organized, relevant, and typed. I reserve the right to deduct points from your score if the submitted assignments do not meet those requirements. Do not turn any homework into the Computer Science Office. If you do, you will receive NO credit (unless otherwise specified). There WILL be homework due for credit during the last week of class.

## Written homework:

Written homework assignments are due AT THE BEGINNING OF CLASS TIME on the date specified for each assignment, 10 minutes into class it will no longer be accepted. It must be typed unless otherwise specified. NO late written homework will be accepted without University Excuse. This includes being late to class! It's due at the beginning of class, remember that.

## Programming homework:

Programming assignments will be due by 5pm. You will turn in code via github.com. Programming assignments will be due by 5pm and considered late if they updated to GitHub after 5pm. Late submissions will be accepted for a period of 24 hours

after it is due, with a 20% late penalty. The deduction will not count with a university excused absence.

Programming assignments <u>MUST</u> work on Computer Science linux machines. They <u>must compile and run</u> on cosc linux machines no matter what (or where) you choose to write them on. If your program does not compile, a penalty of half the points will be deducted from the assignment and then grading will begin. With this penalty and a late penalty, it will be possible to receive zero or even negative points.

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Approximate Lecture Sequence for COSC 4740
Introduction (1 to 2 weeks)
       Introduction and Overview (chapters 1-2)
Process Management (4 weeks)
      Processes (chapter 3)
      Threads (chapter 4)
      CPU Scheduling (chapter 6)
      Midterm Exam
      Process Synchronization (chapter 5)
      Deadlock (chapter 7)
I/O Management (1 week)
       I/O Systems (chapter 12)
Memory Management (2 weeks)
       Memory Management (chapter 8)
       Virtual Memory (chapter 9)
Midterm Exam
File & Storage Management (2 weeks)
      File System Interface (chapter 11)
      File System Implementation (chapter 12)
Protection and Security (2 weeks)
      Protection (chapter 14)
       Security (chapter 15)
Case Study: Unix Operating System (1 week)
       The Linux System (Chapter 15)
Distributed Systems (2 weeks or as time allows)
       Introduction and Communication paradigms
Final Exam
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Please see the Syllabus addendum for additional information.