

# Introduction to Operating Systems

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## Lecture 1: Introduction

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CSE660: Introduction to Operating Systems

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## Course Objectives

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- Understanding of functions and structures of operating systems
  - Process & Synchronization
  - Memory System
  - File System & I/O System
- Understanding issues in the design of operating systems

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## Course Info (I)

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- Instructor: Gagan Agrawal
  - Office: 781 DL
  - Phone: 688-8450
  - Email: agrawal@cse.ohio-state.edu
  - Office hour: 1:00 – 2:30 W
- Grader: Leonid Glimcher
  - Email: glimcher@cse.ohio-state.edu
  - Office hour: TBA
- Textbook:
  - Operating System Concepts (7<sup>th</sup> Edition), -- "Dragon book", Silberschatz, Galvin, and Gagne
- Prerequisites:
  - CSE360, CSE459.21, and CSE675, or equivalent

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## Grading

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- 2 HWs + 3-4 Labs: 35%
- Midterm: 20%
- Final: 35 %
- Best of Midterm and Final: 10%

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## Submission of HWs and Labs

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- HW: hand in before the class
- Lab: Due at 5pm
  
- Late Policy:
  - 25% penalty for each day
  - You have one chance to be late for one day for one lab without any penalty

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## Re-Grading Policy

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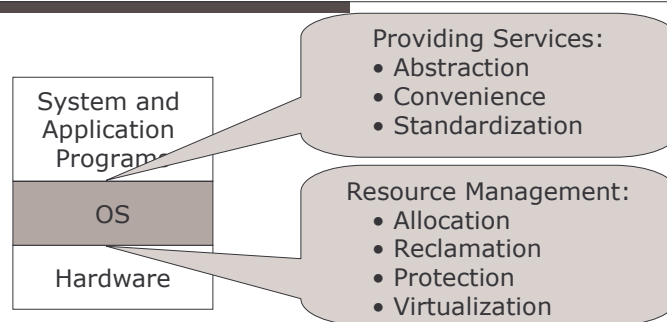
- ❑ You have ONE week (after the grade for a HW/Lab/Exam is released into Carmen) to request for re-grading
- ❑ You are required to email the re-grading requests to the grader
- ❑ After the re-grading period, no re-grading request will be granted for the HW/Lab/Exam

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## What is an OS?

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- ❑ Program that acts as an intermediary between system/app programs and the computer hardware

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# What is an OS?

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## □ Resources

- Allocation
- Reclamation
- Protection
- Virtualization

Examples:

- CPUs
- Memory
- I/O devices

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# What is an OS?

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## □ Resources

- Allocation
- Reclamation
- Protection
- Virtualization

Example:

- Voluntary at runtime
- Implied at termination
- Preemptive

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# What is an OS?

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## □ Resources

- Allocation
- Reclamation
- Protection
- Virtualization

- Protect resources from unauthorized accesses
- Related to reliability & security