# Operating Systems

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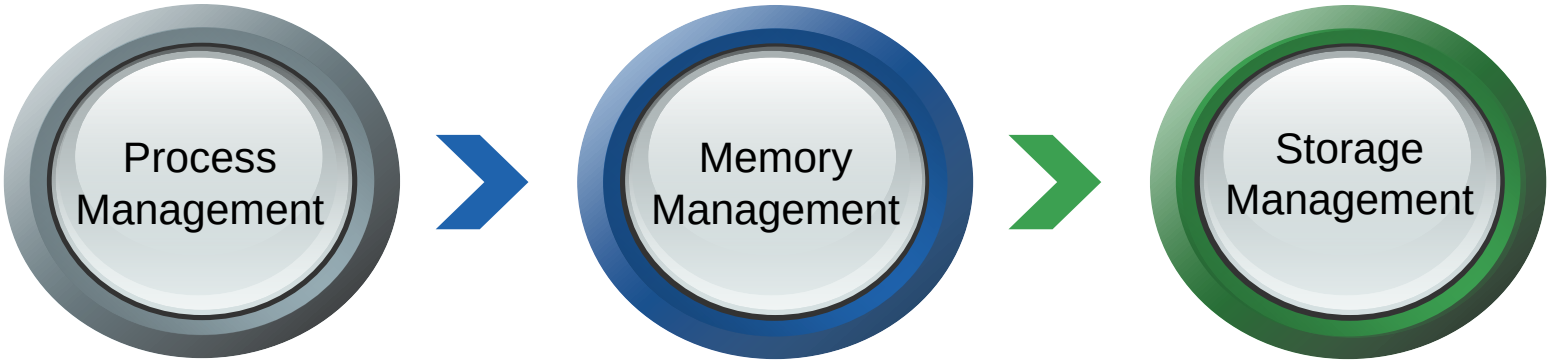
# Contents

# Introduction

- **What is an Operating System?**
  - The concepts of Operating System
  - The techniques, algorithms, and mechanisms of dealing with computer hardware
- **Why is it important?**
  - The foundation and principle of operating computer hardware
- **How does it work?**
  - Process management
  - Memory management
  - Storage management

# Class Structure




Ch3. Processes

Ch4. Threads

Ch5. Process Synchronization

Ch6. CPU Scheduling

Ch7. Deadlocks

Ch8. Main Memory

Ch9. Virtual Memory

Ch 10. Mass-Storage Structure

Ch 11. File-System Interface

Ch 12. File-System Implementation

Ch 13. I/O Systems

# Evaluation

- **Midterm Exam: 35%**
- **Final Exam : 35%**
- **Assignments : 15%**
  - 1 or 2 assignments
- **Quiz : 10%**
- **Attendance : 5%**

# Class Schedule

| Week | Subject | Style | Assignment |
|---|---|---|---|
| 1 | CH0. Course Overview<br>CH1. Introduction to Operating Systems | Lecture | |
| 2 | CH3. Processes PART I | Lecture | |
| 3 | CH3. Processes PART II | Lecture | |
| 4 | CH4. Threads | Lecture | |
| 5 | CH5. Process Synchronization PART I | Lecture | |
| 6 | CH5. Process Synchronization PART II | Lecture | |
| 7 | CH6. CPU Scheduling | Lecture | |
| 8 | **Midterm Exam** | **Exam** | |
| 9 | CH7. Deadlocks | Lecture | **Assignment #1** |
| 10 | CH8. Main Memory | Lecture | |
| 11 | CH9. Virtual Memory | Lecture | |
| 12 | CH10. Mass-Storage Structure | Lecture | |
| 13 | CH11. File-System Interface | Lecture | |
| 14 | CH12. File-System Implementation | Lecture | |
| 15 | CH13. I/O Systems | Lecture | |
| 16 | **Final Exam** | **Exam** | |

# Miscellaneous

- **Textbook**
  - Operating System Concepts, 10th edition
  - Author: Abraham Silberschatz, Peter B. Galvin, Greg Gagne
- **Office Hours**
  - 수업 직후
- **Instructor**
  - Email: khchoi@ajou.ac.kr
  - Phone: 010-6755-2435