CEN206 Object-Oriented Programming

Week-16 (Final Exam)

Spring Semester, 2025-2026

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Week-16 Overview

Final Exam

Module	Topic
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B	Exam Topics Overview
C	Good Luck & Contact Information

Module A: Final Exam Information

Exam Details and Guidelines

Exam Date and Location

- **Exam Date:** To be announced by the registrar's office

- **Exam Time:** To be announced by the registrar's office

- **Exam Location:** To be announced by the registrar's office

- **Duration:** 90 minutes

Please check the official exam schedule published by the registrar's office for the exact date, time, and location.

Exam Format

- **Type:** Written exam (pen and paper)
- **Question Types:**
  - Multiple choice questions
  - Short answer questions
  - Code reading and analysis
  - Code writing (design patterns, OOP principles)
  - UML diagram drawing

Materials Allowed / Not Allowed

Allowed:

- Pen, pencil, eraser
- Student ID card (required)

NOT Allowed:

- Electronic devices (phones, tablets, laptops, smartwatches)
- Books, notes, or printed materials
- Calculators (unless explicitly stated)
- Any form of communication device

Exam Scope

- The final exam covers **all topics from Week 1 through Week 15**

- Emphasis will be placed on topics covered after the midterm exam

- The exam is **cumulative** -- earlier topics may appear in the context of later topics

Module B: Exam Topics Overview

Key Topics and Their Weights

Topics Covered in the Course

Week	Topic	Weight
1-2	OOP Fundamentals (Encapsulation, Inheritance, Polymorphism, Abstraction)	High
3	Interfaces, Type System, Lambda Expressions	Medium
4	UML and Modeling (Class Diagrams, Sequence Diagrams)	Medium
5	PlantUML	Medium
6-7	UMPLE (Model-Driven Development, State Machines)	Medium
9	Design Patterns -- Creational (Factory Method, Abstract Factory, Builder, Prototype, Singleton)	High
10	Design Patterns -- Structural (Adapter, Bridge, Composite, Decorator, Facade, Flyweight, Proxy)	High

Key Concepts to Review

- **OOP Pillars:** Encapsulation, Inheritance, Polymorphism, Abstraction

- **SOLID Principles:** Single Responsibility, Open/Closed, Liskov Substitution, Interface Segregation, Dependency Inversion

- **Design Patterns:** Know the intent, structure, and when to apply each pattern

- **UML Diagrams:** Be able to read and draw class diagrams and sequence diagrams

- **Code Smells:** Identify common code smells and suggest appropriate refactoring

- **Clean Code:** Naming conventions, function design, comment practices

Study Tips

- Review lecture slides and code examples from each week
- Practice writing code by hand (no IDE auto-complete in the exam)
- Focus on understanding **when** and **why** to use each pattern, not just memorizing structure
- Review the relationships between patterns (e.g., Abstract Factory uses Factory Method)
- Practice drawing UML diagrams on paper

Module C: Good Luck & Contact Information

Final Reminders

Contact Information

- **Instructor:** Asst. Prof. Dr. Ugur CORUH

- **Email:** ugur.coruh@erdogan.edu.tr

- **Office Hours:** Please check the course syllabus or contact via email to schedule an appointment

- **Course Website:** Check your university LMS for announcements

If you have any questions about the exam content or format, please do not hesitate to reach out before the exam date.

Good Luck!

- Get a good night's sleep before the exam

- Arrive at the exam location at least 15 minutes early

- Read each question carefully before answering

- Manage your time wisely -- do not spend too much time on a single question

- Review your answers if you have time remaining

We wish you the best of luck on your final exam!

$$End - Of - Week - 16 - Module$$