CSE 208L – Object Oriented Programming Lab
University of Engineering & Technology Peshawar
Fall 2017

Instructor:	Sumayyea Salahuddin
Laboratory Hours:	Wed, 08:00–10:45 am (LAB#3, A)
	Thurs, 08:00–10:45 am (LAB#1, C)
	Fri, 08:00–10:45 am (LAB#3, B)
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Course Description

The objective of this lab course is on transforming the students programming approach from structured programming to object oriented programming. Making students think in the object oriented way by strengthening their concepts of classes, objects, inheritance, and abstraction.

Course Learning Objectives

1. Develop and polish professional programming skills by designing object oriented solutions for real life and engineering problems.
2. Practically implement the core concepts of object oriented programming, taught in course theory, such as Data Hiding, Data Encapsulation, Data Abstraction, Inheritance, Lists and Systems based on object identity, using latest programming tools.
3. Design and analyze various algorithmic strategies for given problem scenario, using object oriented paradigm, keeping the system requirements and constraints under consideration.
4. Work both individually and as team on various object oriented paradigm projects using modern programming tools

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Learning Resources for Students

OOP RECOMMENDED BOOKS:

Robert Lafore, *Object-Oriented Programming in C++*, 4th Edition, CourseSams Publishing
Deitel & Deitel, *C++ How to Program*, 9th/10th Edition, Pearson Publishing

Following yahoo webpage will provide the dissemination of course-related announcements, documents (lab course outline, results), lab material, projects, and lists of recommended readings and online learning resources.

https://groups.yahoo.com/neo/groups/ooplab_dcse/info

The mailing address is: **ooplab_dcse@groups.yahoo.com**

Grading Criteria

In-Lab Performance:	10%
Home-Lab Reports:	10%
Lab Project:	15%
Lab Midterm Exam:	20%
Lab Viva:	20%
Lab Final Exam:	25%

Note: Project will be judged according to following parameters – idea, team work, code, presentation, and report.

Tentative Week-Wise Course Outline

Week	Topics
Week 1	Review of Structured Programming.
Week 2	Introductory Concepts of Object Oriented Programming.
Week 3	Using the global scope resolution operator, passing and returning objects to & from member functions.
Week 4	Operator Overloading.
Week 5	Implementing the concepts of Inheritance.
Week 6	Multiple and Multilevel Inheritance.
Week 7	Dynamic Memory Allocation and miscellaneous topics.
Week 8	Midterm Lab Examination Preparatory Week.
Week 9	Midterm Lab Examination.
Week 10	Friend Functions and Classes.
Week 11	Polymorphism and Virtual Functions.
Week 12	Templates & Exceptions.
Week 13	Standard Template Library.
Week 14	OOP Lab Project Preparatory Week.
Week 15	OOP Lab Project Presentations.

Week 16	Finalterm Lab Examination Preparatory Week.
Final term Lab Examination	

Points to Remember

Missing Lab (Excused Absence):

- For maximum of 3 excused absences, viva of in-lab activities will be taken on student request.

Home Lab Submission:

- Due by 8:30 am, before the start of next lab every week.
- To be collected by Class Representative.

Turning in late Home Lab:

- Not accepted.

Phones & Other Distractions:

- During lab time students may not use phones to talk, text or for any other purpose. Laptops or class room machines may only be used for tasks related to the lab in progress. Misuse of phones or computers during lab will result in a 10% penalty on the following exam.
- Non-class activity such as checking email, social media, games, etc. during lab is not allowed.

Attendance:

- You are expected to attend lab. I will take attendance. After 3 unexcused absences your course grade will be lowered by 10 points. After 7 unexcused absences you will be withdrawn from the course.

Academic Integrity:

- Honesty and integrity are characteristics that should describe each one of us as servants of Allah. As your instructor, I pledge that I will strive for honesty and integrity in how I handle the content of this course and in how I interact with each of you. I ask that you join me in pledging to do the same.
- Academic dishonesty will result in penalties up to and including dismissal from the class with a failing grade and will be reported to the Semester Coordinator/Chairman. All instances of dishonesty will be handled according to the procedures delineated in the UET Peshawar prospectus.
- Each student is expected to do his/her own work. Copying of others' assignments is NOT permitted. Working in groups, when not instructed to do so is not permitted.
- Phones and other electronic devices are not permitted during exams and in-lab quizzes. Use of these will at minimum result in a failing grade for the assignment.

Time Management Expectations:

- For every lab, the typical student should expect to spend at least two clock hours a week of problem solving, reading, practicing, preparing for coming exams/quizzes and other activities that enhance learning.