

Object Oriented Application Development CECS277

COURSE SYLLABUS SPRING 2018

Department of computer Engineering & Computer Science

California State University, Long Beach

Instructor: Malik Luti

Office Hours

- Tue. Wed: (TuTh 2:00PM - 2:50PM)
- Office Hours: By appointment.
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Textbook



- Big Java. Early Objects 6/e, Cay Horstmann. Wiley.
Big Java: Early Objects Ebook Accesscode (Digital) Horstmann ISBN 978-1-1191-4158-7 Copyright 16 Publisher Wiley Edition 6

Reference book



- Data Structures and Algorithms in Java, 6th Edition, 2014

Course Description

Disciplined methods of design, coding and testing using the Java programming language. Topics include data abstraction, encapsulation, object-oriented design, Java classes, inheritance, interfaces, composition, delegation, polymorphism and design patterns. Letter grade only (A-F). (Lecture 2 hours, laboratory/problem session 3 hours.)

Prerequisites/Corequisite:

CECS 274 (or equivalent)

Course Topics:

- Data abstraction
- Encapsulation (3) (8) (12)
- Object-oriented design (3) (8) (12)
- Java classes (3)
- Inheritance (9)
- Interfaces (10)
- Composition (3) (8) (12)
- Polymorphism (9) (10)

- Generics (18)
- Multithreading (21)
- Exception handling (11)
- Disk I/O libraries (20)
- Search algorithms (14)
- Sorting algorithms (14)
- Java Collection Framework (15)
- Graphical User Interface (19)

Specific Goals for the Course

The student will be able to:

- Design an abstract class and an appropriate set of instantiable child classes to solve a software requirement.
- Effectively use inheritance, interfaces, composition and delegation.
- Effectively use Java Collections library
- Effectively use Design Patterns to create software.
- Effectively use try/catch/throw along with the Java Error Exception class hierarchy.
- Design a class hierarchy of medium complexity (6-12 classes) to create a software solution for a non-trivial application.
- Implement their class hierarchy to produce the software solution.
- Provide Unit Tests

Attendance:

Attendance is strongly urged for **all lectures**, although attendance will neither be taken nor will apply toward a letter grade for the course but there will be some unannounced graded activities during the lecture- no make ups for those activities, and there grade will be added to the lab-.

You are responsible for ALL information and material presented, whether you were present or not.

Attendance is **mandatory for the lab if we have a quiz, or if a project is due**. Any material missed is entirely the student's responsibility and will **not be repeated**.

Course Evaluation

The course will not only be taught to these objectives, but will also measure the students' attainment of the objectives. Exams, written projects, and oral presentations are the assessment tools to be used in this course.

Semester Score %		Grading Scale	
Item	Weight	Grading Scale	Letter Grade
Midterm(s)	25 %	90-100	A
Final	25 %	80-89	B
Quizzes	10 %	70-79	C
Projects & lab assignments	25 %	60-69	D
Group Project	15 %		
TOTAL	100%		

There will be no make-ups for missed quizzes.

Exam make-ups are “**not**” allowed (early or late). However, some consideration will be given to students who miss an exam due to a personal or family emergency, as long as a “**valid**” proof is provided. Students who have to miss an exam for a valid reason should notify the instructor **before** exam time if at all possible, and, if a make-up exam is appropriate, should arrange to take a make-up exam as soon as possible after the scheduled time of the exam. Since students taking a make-up exam have the advantage of additional time to prepare, the make-up exam may be somewhat more difficult than the original exam.

Lab Assignments (Projects) & Homework:

Points will be based on two standardizations: 40% for conforming to Coding Standards and the remaining 60% is for the correctness and implementation of the assignment. The due dates for each lab assignment will be posted when assigned.

Tentative Course Calendar		
WEEK	DATE	DESCRIPTION
1	1/23/2018	Class Introduction
2	1/30/2018	Chapter 7 - ArrayList Review Inheritance & Interfaces Quizzes Start this week
3	2/6/2018	Interface
4	2/13/2018	Exception Handling
5	2/20/2018	Generic Programming MidtermI (tentative date)
6	2/27/2018	Sorting & Searching
7	3/6/2018	Sorting & Searching
8	3/13/2018	Java Collections Framework
9	3/20/2018	Java Collections Framework MidtermII (tentative date)
10	3/27/2018	Spring Break
11	4/3/2018	GUI
12	4/10/18	GUI
13	4/17/18	MultiThreading
14	4/24/18	Streams and Binary
15	5/1/18	Internet Networking Data base programming (if time permits)

16	5/8/18	Review for Final 5/12 Last day of classes
17	5/15 –5/20 2018	(Section5) Wednesday, May 17, 2017 2:45PM - 4:45PM (Section1) Thursday, May 18, 2017 8AM - 10AM

Final Exam Spring 2018 Schedule Charts (it is your responsibility to check the exact date/time)
http://web.csulb.edu/depts/enrollment/registration/final_exam/spring_chart.html

Lab work will NOT be accepted late. No make up for missed lab work.

Late assignments will be deducted 20% for every late class period, and not accepted after a week.

Homework (and all other work of more than one page) should be stapled.

I will NOT accept homework assignments/Labs submitted via email.

Grade Disputes: Keep exams and lab assignments for grading verification – grades cannot be disputed without them. No corrections on grading will be made on quizzes, exams and lab assignments beyond one week after they are returned.

Disabilities

DISABLED STUDENT SERVICES is a student support program within the Student Services Division. Our mission is to assist students with disabilities as they secure their university degrees at California State University, Long Beach. We provide services to over 13,000 students each semester. Over 3,000 students with disabilities have graduated from C S U Long Beach with support from our program.

The Disabled Student Services office is located on the 2nd floor in the Administration Building, room SS/AD 270.

It is your responsibility to notify the instructor in advance of any need for special accommodation due to a university verified disability.

Withdrawal Policy

You are responsible for completing the course unless you withdraw from it officially. It is your responsibility to withdraw from any course that you do not intend to attend and complete. If you fail to withdraw by the deadline date, you will be assigned a U as your final grade.

Withdrawal after the first two weeks of classes requires the signatures of the instructor and the department chair, and is allowed only if there are compelling circumstances.

During the final three weeks of classes, withdrawals are not permitted except in cases in which the circumstances necessitating withdrawal are clearly beyond the student's control (e.g. serious illness), and the assignment of an I (incomplete) as the final grade is not practical. Ordinarily, such withdrawals involve total withdrawal from the University.

See the Schedule of Classes for further details about the University's withdrawal policy.

I will normally honor drop requests where permitted by University policy.

Academic Dishonesty

Includes cheating, inventing false information or citations, plagiarism and helping someone else commit an act of academic dishonesty. Serious consequences including forced withdrawal from the course and removal from the university follow upon academic dishonesty. See student handbook for details.

One or more of the following academic actions are available to the faculty member who finds a student has been cheating or plagiarizing. These options may be taken by the faculty member to the extent that the faculty member considers the cheating or plagiarism to manifest the student's lack of scholarship or to reflect on the student's lack of academic performance in the course. These actions may be taken without a request for or before the receipt of a Report from the Academic Integrity Committee.

- A. Review – no action.
- B. An oral reprimand with emphasis on counseling toward prevention of further occurrences;
- C. A requirement that the work be repeated;
- D. Assignment of a score of zero (0) for the specific demonstration of competence, resulting in the proportional reduction of final course grade;
- E. Assignment of a failing final grade;
- F. Referral to the Office of Judicial Affairs for possible probation, suspension, or expulsion.

Note There might be some changes in the schedule and/or requirements that will be announced in the classroom and/or on BeachBoard (Desire2Learn). It is the student's responsibility to keep up with the class and all of its possible changes and subsequent announcements.