

Syllabus

CST 338 – Software Design

California State University, Monterey Bay

Spring 2014

Course Information

Credits: 4.0

Prerequisites: CST 238 or instructor consent

Lectures: TR, 2:00P – 3:50P, Building 18, Room 104

Course Description

This course is designed to provide students with the fundamental concepts to develop large-scale software, focusing on the object-oriented programming techniques. Coverage includes the introduction to Java programming language, object-oriented programming, software life cycle and development processes, requirements analysis, and graphical user interface development with Swing.

Instructor

Name: YoungJoon Byun, Ph.D.

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Phone: 831-582-3602

Office: Bldg. 18/Room 134

Office Hours

Monday 2:00P – 3:00P

Tuesday 4:30P – 5:30P

Thursday 4:30P – 5:30P

Or by appointment

Course Web Site

<http://ilearn.csumb.edu/>

Additional course information and announcements will be available on this site. It is student's responsibility to check this site frequently.

Recommended Textbooks

1. Author: Joel Murach and Andrea Steelman
Title: Murach's Java Programming, 4th Edition
Publisher: Mike Murach & Associates
ISBN: 978-1890774653
2. Author: Walter Savitch
Title: Absolute Java, 5th Edition
Publisher: Addison-Wesley
ISBN: 978-0132830317

Course Outcomes: Upon completion of this course, students should be able to

- Edit, compile, run, and debug a Java program using JDK and Eclipse.
- Demonstrate the usage of predefined classes in Java language.
- Define and use your own classes.
- Identify the basic concepts of object-oriented programming such as inheritance, abstract, interface, and inner classes.
- Handle several data elements using an array and an ArrayList class.
- Describe software life cycle and different software development process models
- Specify user requirements using the use case modeling technique
- Develop a graphical user interface of a software system
- Apply Java programming skills to a real programming project.

Main Topics:

- Java basics
- Console input and output
- Defining classes
- Array and ArrayList
- Inheritance
- Polymorphism and abstract classes
- Interface and inner classes
- Software life cycle and development processes
- User requirements elicitation and specification
- Graphical user interface with Swing
- Introduction to Android programming
- Advanced topics, if time permitted

Exams

- Midterm: March 13, 2014 (Thursday) in class.
- Final: May 13, 2014 (Tuesday) in class. Final exam will be comprehensive.
- All exams are closed book.
- A calculator is not necessary for the exams.
- No re-grading will be accepted one week after the graded assignment is returned to the students.
- No makeup exams will be allowed, except in extreme emergency cases. Students are advised to let the instructor know beforehand, if possible.

Quizzes

- Quizzes will irregularly be held in class.
- Quiz date will be announced in advance a few days before the quiz.
- No re-grading will be accepted one week after the graded assignment is returned to the students.
- No makeup for quizzes.

Projects and Homework

- Programming projects and homework assignments will be given throughout the semester.
- Late submission will be penalized 15% after the due date. Assignments handed in more than 48 hours later will not be accepted.
- No re-grading will be accepted one week after the graded assignment is returned to the students.

Labs

- JDK and Eclipse will be used in the labs.
- A handout of each lab will be given before the lab.

Grading Policy

| | |
|------------|-----|
| Midterm | 15% |
| Final Exam | 20% |
| Homework | 20% |
| Quizzes | 5% |
| Project-I | 10% |
| Project-II | 20% |
| Labs | 10% |

| Grade | | |
|--------------|------|------|
| A | 100 | 93 ≥ |
| A- | 93 < | 90 ≥ |
| B+ | 90 < | 87 ≥ |
| B | 87 < | 83 ≥ |
| B- | 83 < | 80 ≥ |
| C+ | 80 < | 76 ≥ |
| C | 76 < | 70 ≥ |
| F | 70 < | 0 |

Attendance

Students are expected to be regular and punctual in class attendance. Students are responsible for all materials covered in lectures and labs. Lab attendance is mandatory. So, if you miss a lab, you will get zero point for the lab.

Note to Students with Disabilities

Students with disabilities who may need accommodations please see the instructor as soon as possible during office hours or make an appointment by calling 582-3602 or by email ybyun@csumb.edu. Also, contact:

Student_Disability_Resources@csumb.edu
Building 47, Student Services, First Floor
Phone: 831/582-3672 voice, or 582-4024 fax/TTY
<http://sdr.csumb.edu/>

Academic Integrity Policy in This Class

Cheating of any kind will not be tolerated at all in this class. You are responsible for your own original work on all assignments, labs, homework, projects, exams, and all programming code. Two or more students submitting extremely similar code will receive a zero on the assignment and be reported to the academic dishonesty board. There are continual checks of the assignments to be sure that everyone is handing in original code.

<http://csumb.edu/site/x2161.xml>