CECS 343 - SWE: Intro to Software Engineering

343 Section 03 #4429 Sem MoWe 7:30-8:20 PM VEC-419 **343** Section 04 #4430 Lab MoWe 8:30-9:45 PM ECS-412

Table of Contents

Prerequisites Projects Administrative Drops

Course Content Beachboard Emergencies

Course Goals Studying Instructional Continuity

Course Texts Attendance Important Dates

Instructor – Office Class Decorum ADA Accommodations

Grading Basis Changes

Exams/Quizzes/Break Academic Honesty

Prerequisites: CECS 277 OOAD-Java or CECS 282 OOAD-C++ or CECS 275 Data-Structs, "C" or better. Working knowledge of (AKA ability to easily program using) OO programming (classes, inheritance, virtual methods, overrides, public/private data), proper S/W design/development methods, testing, simple data structures (e.g., references or pointers, arrays, linked lists, stacks, queues, trees), simple algorithm techniques (e.g., recursion. sorting, binary search). Ability to plan, design, write, compile, test, and run very tiny (<= 100 source lines/ 2 pages) programs successfully.

Course Content: Principles of software engineering, UML, modeling large software systems, requirements elicitation, object oriented analysis and design using UML, introduction to design patterns, implementation of large systems, software testing, project management, the software lifecycle. Semester long programming project.

Course Goals: Understanding the fundamental principles of software engineering both at the programmer level (tactics and strategies for successful unit development and maintenance; including UML, Design Patterns, and SOLID) and at the project/product level (teams, management, development methodologies, project phases, estimation, planning, tracking, metrics, configuration control, and course correction).

Course Texts: Optional: Software Engineering: A Practitioner's Approach, by Roger Pressman and Bruce Maxim, 2005, McGraw-Hill, ISBNs: 0078022126 or 9780078022128, 971 pages.

Instructor – Office

Charles Siska, E-mail: charles.siska@csulb.edu

Office Loc: VEC-404, Hrs: MoWe 6:45-7:15pm in VEC-404

For faster email response, include "343", in your subject line, and "Help" if you have questions.

Grading Basis

No plus and minus grading is used when determining final grades. All scores are normalized to a scale of 0 to 100% before being combined. The normalized score for each category is then used to compute the weighted combined score according to the weights in the table below.

20% Exam #1 33% Final Exam 7% Quizzes, Participation

20% Exam #2 20% Projects

The instructor reserves the right to increase a grade (e.g., based on class participation).

Exams/Quizzes/Break

→ I provide all paper. You must bring two pens or pencils (one as backup), & maybe an eraser. Quizzes (no make-ups) are unannounced & short, – used to verify you are keeping up. Exams are cumulative and used to verify your comprehension of the course material.

Jan 21 Tue First Day of Classes

Feb 26 Wed (6th wk) ====== Exam #1

Mar 30-Apr 5 Mon-Sun NO CLASSES Spring Break

Apr 8 Wed (11th wk) ====== Exam #2

May 8 Fri Last Day of classes

Final, TBD // May 9-15 Sat-Fri Finals Week // To be set by the department **Makeup Exam Policy** is nominally the same as for the Final, which is "No make-up final examination will be given except for reason of illness or other verified emergencies." (NB, a makeup exam is usually harder than the original.)

Projects

The semester-long programming project will be built in multiple deliveries. Each delivery description will be discussed in class and posted to Beachboard in advance of its due date. Each delivery description will include its grading plan. Each delivery will be done by a team of from two to four.

Comments: At a minimum, code must be commented, have descriptive names for identifiers, and contain a comment at the top of each file with pertinent information such as the delivery name, the team's name, member names & email addresses, and the course and section number (e.g., "343-03").

Readme.txt: A plain text readme.txt must be included with each submission summarizing and documenting the work submitted.

Coding style: Coding style must conform to professional norms. Google's style guides are an excellent starting point, https://github.com/google/styleguide.

Submitting: Each *coding project* will be **submitted via emailed zip file(s)**. You should be able to explain each part of your program source code. Status reports are required; the format will be described in lab.

Beachboard: We will be using Beachboard for notifications, class materials, the syllabus, etc.

Studying

For best results, **join or start a study group** in order to get the benefits of other viewpoints on understanding class material.

Attendance

Recall, above, **no makeup for missed quizzes**. You may miss up to 3 (**three**) class sessions (excepting Admin Drop policy and exam dates), but best **be extra well informed** if you do. **Warning:** There is a strong correlation between missing classes and getting lower grades. Also, find missed class details from your **study group** members, not the instructor.

Class Decorum

Causing distractions from the student learning environment in class may adversely affect your final grade. (Best be polite.) **Portable computer** use is **not allowed** in lecture **except** for taking notes.

Changes

Each student is responsible to be aware of any course announcements and changes, including changes to due dates and requirements. Changes will usually be announced via Beachboard, but may be announced first during lecture.

Academic Honesty

If you submit work purporting to be your own, it ought to be so. Otherwise, you will get bad results. You should be aware of and follow the spirit of CSU Long Beach's academic honesty policy. The University Catalog and the Class Schedule provide a detailed description of Academic Dishonesty under University Regulations. If you quote or borrow and paraphrase pieces from others (including, e.g., your work in earlier classes) it must be properly cited.

Behavior:

The following behaviors are **not allowed** during an exam without permission:

- Looking toward another student's test
- Helping another student with answers
- Talking or texting

- Leaving the classroom w/out permission
- Using any electronic devices or calculators
- Using any form of notes w/out permission

Penalty for violation ranges from getting zero for the exam up to an 'F' for the course (We don't want that. Best be respectful of the rules.)

Administrative Drops

There are people waiting to get a seat in the class. If you really want to keep your seat, best be in it. Per department policy, any student who misses the first class meeting, and does not notify the Department office to hold their seat, may be dropped from the class.

Emergencies

Campus Emergency Information number is (562) 985-4111. Please learn the emergency exits near the classroom. In an evacuation emergency, use the nearest safe exit to exit the building. For your own safety and the safety of others, each student is expected to read and understand the guidelines published at http://emergency.csulb.edu. Should an emergency occur, follow the instructions given to you by faculty, staff, and public safety officials.

Instructional Continuity

Due to an event such as an epidemic or a natural disaster that disrupts normal campus operations, students must monitor the course Beachboard site and their campus email address for any instructions and assignments that the instructor announces.

Important Dates

CSULB's Academic Calendar is at http://web.csulb.edu/divisions/aa/calendars for school closures and holidays. CSULB's Key Registration Dates and Deadlines Calendar (for adding, dropping, and withdrawing) is at http://web.csulb.edu/depts/enrollment/dates/registration spring.html.

ADA Accommodations

Any student who, because of a disability, may require special arrangements in order to meet course requirements must register with the Office of Disabled Student Services within the first week of classes. They can be reached by phone at (562) 985-5401. Their email address is http://www.csulb.edu/divisions/students/dss. Their office is located Brotman Hall 270. The instructor may request verification of need from the Dean of Students. Students requesting accommodations shall inform their instructors during the first week of classes about any disability or special needs that may require specific arrangements/accommodations related to attending class sessions, completing course assignments, writing papers or quizzes, tests or examinations.

Accommodations for Students Registered with Bob Murphy Access Center

Students with a disability or medical restriction who are requesting a classroom accommodation should contact the Bob Murphy Access Center (BMAC) at 562-985-5401 or visit SSC, room 110 during 8AM-5PM weekday hours. BMAC will work with the student to identify a reasonable accommodation in partnership with appropriate academic offices and medical providers. We encourage students to reach out to BMAC as soon as possible.