# CECS 491B: Senior Project Course Syllabus - Spring 2018

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Office Hours: Tuesdays 7:15PM - 8:30PM

## **Course Objective**

#### 491A. Software Engineering Project I (3)

Prerequisites: CECS 323, CECS 343 and ENGR 350, all with a grade of "C" or better. First course in a two-course capstone design sequence that fulfills integrative learning. Design of a commercial grade software application including requirements analysis, functional, architectural and detailed design, emphasizing written communication, teamwork and the Object-Oriented Methodology.

Letter grade only (A-F), (Lecture 2 hours, laboratory 3 hours)

#### 491B. Software Engineering Project II (3)

Prerequisite: CECS 491A with a grade "C" or better.

Second course in a two-course capstone design sequence that fulfills integrative learning. Implementation, testing, packaging and deployment of the system designed in CECS 491A emphasizing written communication, teamwork and the Object-Oriented Methodology. Letter grade only (A-F). (Lecture 2 hours, laboratory 3 hours)

#### **Recommended Text**

Design Patterns: Elements of Reusable Object-Oriented Software By Erich Gamma, Richard Helm, Ralph Johnson, & John Vlissides

# Course Requirements\*

Item	Points	Total Points
Code Review x2-3	100	250
Individual Sprint Progress	100	300
Team Sprint Progress	100	300
Final Presentation	100	100
Misc	TBD	TBD

<sup>\*</sup> The instructor reserves the right to alter the course based on class needs in order to promote learning.

# **Grading Metrics**

90%+	Α
80% - 89.99%	В
70% - 79.99%	С
60% - 69.99%	D
59.99% & Below	F

Grades will follow a flat percent rubric. Grades will not be based on a curve. All work must be submitted to the instructor in-person unless otherwise specified. Work submitted by another student on your behalf will not be accepted unless otherwise specified.

# Absent/Make Up Policy

Absences are excused if the student presents a documented reason for being unable to attend (e.g. doctor's note, police report, volunteer activity, etc.), however, it is up to the instructor's discretion whether the student has provided adequate documentation. Only excused absences can make-up missed quizzes, missed exams and late submissions. Stand-ups cannot be made up. It is the responsibility of the student to arrange, with the instructor, for a make-up of a quiz or exam.

#### **Definition of Done**

The instructor's definition of a work item being done is as follows:

- 1. Feature must meet requirement
- 2. All code adheres to coding standard
- 3. All code must be in a readable format
- 4. In-line code comments are accurate, clear and concise
- 5. If applicable, unit tests are complete and code passes when run
- 6. Supporting documentation is accurate, clear and concise

### **Code Reviews**

Students will have 2-3 code review opportunities (depending on work item complexity as determined by instructor) to cumulatively earn 250 points. Each code review will consist of evaluating the student's completed feature/story/epic in terms of adherence to coding standards, feature completeness, student's ability to explain their code & dependent code, performance, extensibility and maintainability. Each review lasts for 20-30 minutes.

# **Complexity Scale**

- High Complexity 125 points (e.g. complete UI + backend, core "aspect" feature)
- Medium Complexity 75 points (e.g. business rule implementation, partial UI & backend)
- Low Complexity 25 points (e.g. UI-only, a single class object, documentation)

### Exams & Quizzes

All exams and quizzes are comprehensive. Students must PRINT responses in BLACK INK PEN on a 11" x 8.5" examination booklet (aka the "blue" book). Responses that are illegible to the instructor or does not follow the aforementioned response requirements will be given an automatic zero grade.

## **Project & Presentation**

There will be a semester long group project where teams will experience developing software for a fictitious client. The project will be graded on a team's ability to accurately analyze a client's needs, develop a project plan, produce detailed technical diagrams and draft high level interfaces. Throughout the semester there will be periodic milestone checks to access team progress. Towards the end of the semester, teams must present their solution to the class. Final drafts for all project artifacts must be printed using a word processor, bounded and submitted to instructor on the first day of presentations.

### Cheating & Plagiarism

<u>Cheating</u> and <u>plagiarism</u> will not be tolerated in this course. Any individual caught cheating on quizzes, homework, lab projects, or the final exam will be punished to the full extent allowed under University regulations. Plagiarism on papers or assignments is not acceptable and work that is plagiarized will not receive credit. Plagiarism is considered cheating. Note: Any time another person's work is used without giving them proper credit, it is considered plagiarism and cheating. <u>At a minimum</u>, any student caught cheating will receive no credit for the work concerned, and will receive a reduction of one letter grade from their final course grade. The official CSULB Policy on Cheating and Plagiarism can be found here: <a href="http://web.csulb.edu/divisions/aa/catalog/current/academic\_information/cheating\_plagiarism.html">http://web.csulb.edu/divisions/aa/catalog/current/academic\_information/cheating\_plagiarism.html</a>

#### ADA Accommodation

Students with a disability or medical restriction who are requesting a classroom accommodation should contact the Disabled Student Services at 562-985-5401 or visit Brotman Hall, Suite 270 during 8AM-5PM weekday hours. Disabled Student Services 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 DSS as soon as possible.

# Food or Housing Assistance

Any student who is facing academic or personal challenges due to difficulty in affording groceries/food and/or lacking a safe and stable living environment is urged to contact the CSULB Student Emergency Intervention & Wellness Program. The website outlining the resources available is <a href="www.csulb.edu/basicneeds">www.csulb.edu/basicneeds</a>. Students can also e-mail <a href="supportingstudents@csulb.edu">supportingstudents@csulb.edu</a> or call 562/985.2038. If comfortable, students may reach out to the professor as they may be able to identify additional resources.

### **Tentative Schedule**

Date	Activity
1/23	First Day of Classes
1/25	
1/30	Sprint Planning 1
2/1	
2/6	
2/8	
2/13	
2/15	
2/20	
2/22	End of Sprint 1
2/27	Sprint Planning 2
3/1	
3/6	
3/8	
3/13	

3/15	
3/20	
3/22	End of Sprint 2
3/27	
3/29	Spring Break
4/3	Sprint Planning 3
4/5	
4/10	
4/12	
4/17	
4/19	
4/24	
4/26	End of Sprint 3
5/1	
5/3	
5/8	
5/10	Last Day of Spring Classes
5/15	
5/17	Finals Week
5/22	
5/24	
5/25	Last Day of Semester