## CECS 491A: Senior Project Course Syllabus - Fall 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 (Not Required)

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

## Course Requirements\*

Item	Points	Total Points
Sprint Reviews x3	100	300
Sprint Artifacts x3	100	300
Project Plan	100	100
Presentation	100	100
Misc	TBD	TBD

<sup>\*</sup> The instructor reserves the right to alter the course in any manner 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 percentage 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 approved by the instructor in advance.

## Absent/Make Up Policy

Absences are excused if the student presents valid documentation for being unable to attend (e.g. doctor's note, police report, volunteer activity, etc.), however, it is the instructor's discretion whether the student has provided adequate documentation. Only excused absences can submit late work defined above under course requirements. It is the responsibility of the student to arrange with the instructor how to address making up missed work if the absence was excused. If the absence is "planned", then the instructor must be notified in advance.

#### **Definition of Done**

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

- 1. All requirements are met
- 2. All code/unit tests adheres to the course's coding standard
- 3. All code/unit tests must be in a readable format
- 4. In-line code comments are accurate, clear and concise
- 5. Supporting documentation is accurate, clear and concise
- 6. All submitted hard copies must be bounded together.
- 7. All submitted individual work must contain student name, student ID and date
- 8. All submitted team work must contain team name, team member names, team member student IDs and date

## **Project**

Team-based semester long project consisting of five to six members depending on class size. Project details will be discussed in class.

#### Presentation

Each team will present their work during finals week. Bonus points distributions as follows: 1st place gets 50 points, 2nd place gets 25 points and 3rd place gets 20 points.

## **Sprint Reviews**

Each team will have 3 Sprints to complete their assigned workload. At the end of each Sprint, there will be a review between the instructor and all members of a team. Each Sprint Review will be graded on the following:

- 75% Completion of all work
- 25% Resolution of previous sprint issues
- +10% Efficiency improvements of 15% or higher

## **Complexity Scales**

Certain features are more complex than others. As such, these features will be categorized into four specific complexity scales with each scale determining the total maximum points possible.

- Critical 125 points
- High 100 points
- Medium 75 points
- Low 25 points

## Exams & Quizzes

Any and all exams and quizzes are always 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 "definition of done" an automatic zero grade. Any exam will always be for grade and are always notified in advance. Quizzes can be for grade or "bonus". Quizzes can be scheduled in advance or administered

randomly. Random aka pop quizzes are always "bonus". Responses to pop quizzes should only be submitted if the student has high confidence in the accuracy of their response. Any submitted response that are moderate or severely inaccurate will be given a minus grade.

#### Miscellaneous Work

For grade labs and/or homework may be assigned depending on if the class needs additional exercises to reinforce learning.

## Cheating & Plagiarism

Cheating and plagiarism 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. At a minimum, 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
8/28	First Day of Class
8/30	
9/4	
9/6	
9/11	
9/13	
9/18	Sprint #1 Start
9/20	
9/25	
9/27	
10/2	
10/4	Review #1 Sprint #2 Start
10/9	
10/11	
10/16	
10/18	
10/23	
10/25	
10/30	
11/1	Review #2 Sprint #3 Start
11/6	
11/8	
11/13	Class Canceled (Veterans Day)
11/15	
11/20	Fall Break

11/22	Fall Break
11/27	
11/29	
12/4	
12/6	Review #3
12/11	
12/13 - 12/19	Finals Week