

**CECS 491A: Senior Project**  
**Course Syllabus – Fall 2021**

**Instructor:** Vatanak Vong

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**Office:** Virtual

**Seminar:** Virtual (Zoom link provided through email)

MW 05:30 PM-06:45 PM (Section 5)

MW 07:00 PM-08:15 PM (Section 6)

SAT 09:00 AM-11:00 AM (Section 7)

**Office Hours:** Virtual (Zoom link provided through email)

Thursday @ 06:00PM-07:30PM

Saturday @ 12:00PM-01:30PM

Additional office hours maybe provided depending on demand and need of class.

**Course Objective<sup>1</sup>**

**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**

Title	Author
Design Patterns: Elements of Reusable Object-Oriented Software	Erich Gamma Richard Helm Ralph Johnson John Vlissides

**Grading Components\*\***

Course Work	Total Points
Milestone 1 (BRD, Tech Spec, HL Design, Site Map)	250
Milestone 2 (Project Plan, Test Plan, Network Diagram)	300
Milestone 3 (LL Design, UM, Logging)	250
Retrospective 1	100
Retrospective 2	100
Retrospective 3	100
Miscellaneous (Homework, Quizzes, Activities, Participation, etc.)	TBD*

\* Miscellaneous work will not exceed 200 points. Total points vary due to class engagement.

**\*\* All point distribution values and course requirements are subject to change based on instructor discretion**

### **Grading Metrics**

90%+	A
80% - 89.99%	B
70% - 79.99%	C
60% - 69.99%	D
59.99% & Below	F

Grades will follow a flat percent rubric. Grades will not be based on a curve. Bonus points may be given to students for exceeding expectations. It is possible to incur negative points if a student's work is blatantly incorrect, plagiarized and/or well below the assigned minimum requirements.

### **Submission of Work**

By default, all work must be submitted to the instructor's email no later than the designated time and date unless otherwise specified by the instructor. Be aware that all assignment guidelines are considered the minimum requirements, thus completing the minimum requirements equates to only a C grade.

### **Quizzes**

Quizzes can be scheduled in advance as well as on demand (pop quizzes). Quizzes may be given either during lecture or during lab. Quiz duration can range from 5 minutes to an hour. Make up quizzes will be different from the original.

### **Recording Policy**

In compliance with university policies and to protect student privacy any and all recordings (audio, video, pictures, chat logs, etc.) during seminars, labs and office hours meetings are not permitted.

### **Late Work**

Late assignments will not be accepted unless presented with documented excused absence per University policy. In very rare occasions, late work may be accepted, but will be capped at 50% of possible points.

### **Project & Presentation**

Students will work in teams on a project that lasts the duration of both 491A and 491B. The instructor will portray the role of the client and will mandate a set of specifications that each team must fulfill. Each team will be free to decide on the business need that they will be solving as long as it is approved by the instructor. At the end of 491B, each team is required to present their completed solutions to the class with a short Q&A session after a team's presentation. Additional points may be given to students that ask meaningful follow up questions to the presenting team.

### **COVID Requirements (Remote class)**

- Stable internet
- Work area with minimal distractions (background noise, pets, etc.)
- Zoom with Microphone
- Slack

### **Course Structure and Delivery Mode<sup>1</sup>**

This course is conducted entirely online. Course material will be accessible digitally through BeachBoard or as specified by instructor. You are required to participate in synchronous class meetings via Zoom.

If you need technical assistance at any time during the course or need to report a problem with BeachBoard, please contact the Technology Help Desk using their online form, by phone at (562) 985-4959.

Please contact the department if you need support with access to the Internet, electronic devices, or any other issues related to remotely accessing your course.

**Department Office:** ECS-552

**Phone:** 562.985.4285

### **Disclaimer<sup>1</sup>**

In the event of extraordinary circumstances beyond the University's control, the content and/or evaluation scheme in this course is subject to change.

### **Attendance & Participation<sup>1</sup>**

Attendance is crucial as lectures and lab will often contain class discussions and activities. In addition, avid participation is expected from all students and will affect grades if students are not contributing in any class activity or discussion. Students engaging in any behavior that is distracting to the class in any way will forfeit ALL participation points. Such activities consist of, but not limited to discussing unrelated topics, being inattentive to the instructor/peers or doing work for another class. Students that are absent will forfeit their participation points for any day they miss unless it is an excused absence. Review the university policy on excusable absences (<https://www.csulb.edu/academic-senate/policy-statement-17-17-attendance-policy-supersedes-01-01>) Attending lecture, but missing lab or vice versa will count as an absence. It is the responsibility of the student to arrange with the instructor any make up work for excused absences. Repeat tardiness will result in a 25% reduction in the student's total participation points.

### **Cheating & Plagiarism<sup>1</sup>**

There is zero tolerance for cheating, plagiarism, or any other act of violation of Academic Integrity policy. Work that you submit is assumed to be original unless your source material is documented appropriately, using proper citation. Using the ideas or words of another person, even a peer, or a web site, as if it were your own, is plagiarism. Any individual or group caught cheating on homework, lab assignments, or any exam/quiz will be subjected to full extent of academic actions allowed under University regulations. At a minimum, any student caught violating Academic Integrity Policy will receive no credit for the work concerned and one grade lower letter grade. To learn more about the University policy on Cheating and Plagiarism, visit: <http://catalog.csulb.edu/content.php?catoid=5&navoid=369#cheating-and-plagiarism>

### **Penalties for Violations**

- Automatic failure of class
- Unable to invoke grade forgiveness ("repeat delete")
- Suspension, probation or expulsion

### **University Withdrawal Policy<sup>1</sup>**

Class withdrawals during the final 3 weeks of instruction are not permitted except for a very serious and compelling reason such as accident or serious injury that is clearly beyond the student's control and the assignment of an Incomplete grade is inappropriate. Application for withdrawal from CSULB or from a class must be filed by the student online whether the student has ever attended the class or not; otherwise, the student

will receive a grade of "WU" (unauthorized withdrawal) in the course. More information regarding the University guidelines on Dropping and Withdrawing at: <https://www.csulb.edu/student-records/dropping-andwithdrawing>

### **Reasonable Accommodation<sup>1</sup>**

Online courses are required to meet ADA accessibility guidelines. Students with a disability or medical restriction who are requesting a classroom accommodation should contact the Bob Murphy Access Center (BMAC) formerly known as Disabled Student Services at <http://web.csulb.edu/divisions/students/dss/> and also notify the instructor. BMAC personnel will work with the student to identify a reasonable accommodation in partnership with appropriate academic offices and medical providers. Only approved BMAC petitions will be accommodated. BMAC will be available online Monday - Friday from 8:00 am to 5:00 pm unless stated otherwise online.

### **Personal Assistance<sup>1</sup>**

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. Additional resources are available via Basic Needs Program. The students can also email [supportingstudents@csulb.edu](mailto:supportingstudents@csulb.edu), call (562)985-2038, or if comfortable, reach out to the instructors as they may be able to identify additional resources

### **Additional Resources<sup>1</sup>**

There are many services on campus to help you achieve success in your courses. Links to the following services are also available in BeachBoard course homepage under "CSULB Student Resources":

- Counseling and Psychological Services <http://web.csulb.edu/divisions/students/caps/>
- Disabled Student Services <http://web.csulb.edu/divisions/students/dss/>
- Enrollment Services <https://www.csulb.edu/enrollment-services>
- Financial Aid <https://www.csulb.edu/financial-aid>
- Learning Assistance Center <https://www.csulb.edu/academic-advising/the-learning-center>
- Student Health Services <http://web.csulb.edu/divisions/students/shs>
- Tutoring at CSULB [http://web.csulb.edu/divisions/students/student\\_resources/tutoring.html](http://web.csulb.edu/divisions/students/student_resources/tutoring.html)
- University Library <https://www.csulb.edu/university-library>
- University Writing Center <https://www.csulb.edu/university-writing-center>

<sup>1</sup>From or partially from content found in the CoE syllabus template and course catalog.

### **Definition of Done**

When submitting final drafts of assignments, the students must meet the following level of quality in order to be eligible for full credit, otherwise, the maximum points possible will be 50% of the assignment grade.

1. All submissions must be legible to the instructor
2. All submissions must meet all assignment guidelines
3. Source Code Submissions
  - a. All submissions must have the entirety of the source code
  - b. All submissions must follow coding standards provided by instructor
  - c. All submissions must have associated automated tests to validate source code

## Tentative Schedule

<b>Week 1</b>	
<b>Week 2</b>	
<b>Week 3</b>	
<b>Week 4</b>	
<b>Week 5</b>	
<b>Week 6</b>	
<b>Week 7</b>	<b>Milestone 1 Retrospective 1</b>
<b>Week 8</b>	
<b>Week 9</b>	
<b>Week 10</b>	<b>Milestone 2 Retrospective 2</b>
<b>Week 11</b>	
<b>Week 12</b>	
<b>Week 13</b>	
<b>Week 14</b>	<b>Fall Break</b>
<b>Week 15</b>	<b>Milestone 3</b>
<b>Week 16</b>	<b>Retrospective 3</b>