CSCI 4260 Senior Design I
Fall 2021

Dr. Christopher Ivancic
Department of Computer Science
ivanciccp@sfasu.edu
312F Cole STEM
468-2508

PREREQUISITE: CSCI 3323; CSCI 3321 or CSCI 3331; department chair approval.

CLASS INFO: Meeting time: 10:00 am – 12:00 pm F
Location: Zoom and in person as needed

OFFICE HOURS: All office hours will be held by ZOOM. I will be in my office during the normal office hours times (not my post 5 pm ones) and if you need to meet in person CONTACT ME THROUGH EMAIL first.
M, W 10:00 am – 12:00 pm, 1:00 – 2:00 pm
F 1:00 – 3:00 pm
I will gladly make appointments for other times.

COURSE DESCRIPTION: Design and fully realized software system for a customer. Requirements elicitation, project management, software design, and professional development.

COURSE INTENT: The purpose of this course is to familiarize the students with the experience of building full software systems. The students will start with a need from a customer and begin the process to build the system. Students will become familiar with gathering requirements for a system, planning the project from beginning to end, and documenting the design of the system. The students will learn professional skills through interacting directly with a customer.

REQUIRED TEXTS: Reading material will be provided by the instructor for the class.

ASSIGNMENTS: 1000 points out of the 1000 points.

Students will be creating documents from requirements to design. At the end of the semester the groups must present their current plans for the software to be built.

ATTENDANCE: Attendance and constructive class participation - expected

COURSE CALENDAR: This course meets for a minimum of 30 contact hours during the semester. Students have significant weekly assignments. Students are expected to conduct customer meetings, complete design assignments, and make a presentation of the completed design. Successful completion of these activities requires at a minimum four additional hours of outside of classroom work each week.

ASYNCHRONOUS MINUTES: There will be outside milestones for the project that must be met outside of class.

EDUCATIONAL OBJECTIVES: Upon successful completion of the course, students should be able to:
1. Interact with a real customer working on a real project.
2. Write an SRS describing the requirements of the system.
3. Write a project outline for the entire process.
4. Write a Design document detailing the design of the system.
The following topics with estimated hours spent on each is listed below:

<table>
<thead>
<tr>
<th>Interaction with the customer(s)</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project timeline and schedule</td>
<td>5</td>
</tr>
<tr>
<td>System Requirements Specification (SRS)</td>
<td>10</td>
</tr>
<tr>
<td>Requirements elicitation and refinement</td>
<td></td>
</tr>
<tr>
<td>System Design</td>
<td>10</td>
</tr>
<tr>
<td>Architectural Design</td>
<td></td>
</tr>
<tr>
<td>Interface Design</td>
<td></td>
</tr>
<tr>
<td>Backend Design</td>
<td></td>
</tr>
<tr>
<td>TOTAL 30</td>
<td></td>
</tr>
</tbody>
</table>

### PROGRAM LEARNING OUTCOMES:
Program learning outcomes define the knowledge, skills, and abilities students are expected to demonstrate upon completion of an academic program. These learning outcomes are regularly assessed to determine student learning and to evaluate overall program effectiveness.

- Students majoring in the Department of Computer Science may access program learning outcomes at [http://cs.sfasu.edu/cs/plo/](http://cs.sfasu.edu/cs/plo/)
- Students majoring in the College of Business may access program learning outcomes at [http://www.sfasu.edu/cob/ug-plo.asp](http://www.sfasu.edu/cob/ug-plo.asp)

### CLASS INFORMATION AND POLICIES
Department of Computer Science, Cole STEM 312, 468-2508

**Attendance:** Seating Assignments will be made and roll will be taken regularly. Attendance may be taken into consideration for your final grade. If you are absent from class please make sure to get notes from a classmate. Please remember there is no smoking, no chewing of tobacco, no eating or drinking, no bare feet, and no cell phone use during class. Cell phones and other electronic communication devices must be turned off during class. Possession of a cell phone or other electronic communication device during an exam will result in an examination grade of zero. Please keep your feet off of the seat backs and seats. Inappropriate student behavior and offensive language in class, computer science facility or other related activity will not be tolerated. Do not sleep in class, I will wake you up. Only students officially registered for the course and approved assistants may attend class.

**Mental Health and Wellness:** SFASU values students’ mental health and the role it plays in academic and overall student success. SFA provides a variety of resources to support students’ mental health and wellness. Many of these resources are free, and all of them are confidential.

**On-campus Resources:**
- SFASU Counseling Services
  - [www.sfasu.edu/counselingservices](http://www.sfasu.edu/counselingservices)
  - 3rd Floor Rusk Building
  - 936-468-2401

- SFASU Human Services Counseling Clinic
  - [www.sfasu.edu/humanservices/139.asp](http://www.sfasu.edu/humanservices/139.asp)
  - Human Services Room 202
  - 936-468-1041

**Crisis Resources:**
- Burke 24-hour crisis line 1(800) 392-8343
- Suicide Prevention Lifeline  1(800) 273-TALK (8255)
- Crisis Text Line: Text HELLO to 741-741

**Examination Policy:** All class examinations are considered to be a major part of the course work upon which a large part of the course grade depends. There are NO make-up exams! Class examinations will be announced at least two classes prior to the examination. If you have a conflict with another university event, you must contact me in advance. In case of an extreme emergency, contact me before the scheduled examination. Failure to do so will result in an examination grade of zero. There are no exemptions for the final examination and no changes in taking the final examination. All students must take the final exam. A zero on the final exam will result in an F in the course. Check the final examination time. If the final examination time is a problem, you need to drop this course. Once the first person has left the room on the day of an examination, no one else will be permitted to begin the exam. Please note that being in possession of a cell phone or other electronic communication device during an exam will result in an examination grade of zero.

**Assignment Policy:** All assignments are due at the announced time on the specified due date. Assignments will be accepted up to 12 hours late. (50% off) If you have a conflict, please contact me in advance. Please Note: You will be given assignments and quizzes during the last five class days of the semester. You should turn in your homework assignments done neatly, clearly, and to the best of your ability. Follow all the instructions given. You will lose points for failure to follow instructions. Any work turned in to my box should be dated and timed by the CSC department staff.

### CONTENT:

<table>
<thead>
<tr>
<th>Topic</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>System Design</td>
<td>10</td>
</tr>
<tr>
<td>Architectural Design</td>
<td></td>
</tr>
<tr>
<td>Interface Design</td>
<td></td>
</tr>
<tr>
<td>Backend Design</td>
<td></td>
</tr>
<tr>
<td>Project timeline and schedule</td>
<td>5</td>
</tr>
<tr>
<td>System Requirements Specification (SRS)</td>
<td>10</td>
</tr>
<tr>
<td>Requirements elicitation and refinement</td>
<td></td>
</tr>
<tr>
<td>TOTAL 30</td>
<td></td>
</tr>
</tbody>
</table>
Please ask nicely. Do not slide any work under my door or under the door to the Computer Science Offices.

**Software Policy:** Disciplinary action will be taken against individuals who perform unauthorized duplication of computer software or who are involved in the unauthorized use of duplicated software. This action may make it impossible for you to complete this course.

**Academic Integrity:** Please review the University policy on Academic Integrity. Academic dishonesty includes both cheating and plagiarism. Cheating includes but is not limited to (1) using or attempting to use unauthorized materials to aid in achieving a better grade on a component of a class; (2) the falsification or invention of any information, including citations, on an assigned exercise; and/or (3) helping or attempting to help another in an act of cheating or plagiarism. Plagiarism is presenting the words or ideas of another person as if they were your own. Examples of plagiarism are (1) submitting an assignment as if it were one's own work when, in fact, it is at least partly the work of another; (2) submitting a work that has been purchased or otherwise obtained from an Internet source or another source; and (3) incorporating the words or ideas of an author into one's paper without giving the author due credit. Please read the complete policy at [http://www.sfasu.edu/policies/student-academic-dishonesty-4.1.pdf](http://www.sfasu.edu/policies/student-academic-dishonesty-4.1.pdf)

**Computing Laboratory Usage:** Students who utilize equipment in university computing laboratories are expected to read and abide by all posted policies for the laboratories. Please note that no children are permitted in university computing laboratories.

**Program Learning Outcomes:** Program learning outcomes define the knowledge, skills, and abilities students are expected to demonstrate upon completion of an academic program. These learning outcomes are regularly assessed to determine student learning and to evaluate overall program effectiveness. You may access the program learning outcomes for your major and particular courses at [http://www.sfasu.edu/academics/colleges/sciences-math/computer-science/about/accreditations](http://www.sfasu.edu/academics/colleges/sciences-math/computer-science/about/accreditations)

**Withheld Grades Semester Grades Policy (A-54):** Ordinarily, at the discretion of the instructor of record and with the approval of the academic chair/director, a grade of WH will be assigned only if the student cannot complete the course work because of unavoidable circumstances. Students must complete the work within one calendar year from the end of the semester in which they receive a WH, or the grade automatically becomes an F. If students register for the same course in future terms the WH will automatically become an F and will be counted as a repeated course for the purpose of computing the grade point average.

**Students with Disabilities:** To obtain disability related accommodations, alternate formats and/or auxiliary aids, students with disabilities must contact the Office of Disability Services (ODS), Human Services Building, and Room 325, 468-3004 / 468-1004 (TDD) as early as possible in the semester. Once verified, ODS will notify the course instructor and outline the accommodation and/or auxiliary aids to be provided. Failure to request services in a timely manner may delay your accommodations. For additional information, go to [http://www.sfasu.edu/disabilityservices/](http://www.sfasu.edu/disabilityservices/).

**Acceptable Student Behavior:** Classroom behavior should not interfere with the instructor’s ability to conduct the class or the ability of other students to learn from the instructional program (see the Student Conduct Code, policy D-34.1). Unacceptable or disruptive behavior will not be tolerated. Students who disrupt the learning environment may be asked to leave class and may be subject to judicial, academic, or other penalties. This prohibition applies to all instructional forums, including electronic, classroom, labs, discussion groups, field trips, etc. The instructor shall have full discretion over what behavior is appropriate/ inappropriate in the classroom. Students who do not attend class regularly or who perform poorly on class projects/exams may be referred to the iCare Early Alert Program. This program provides students with recommendations for resources or other assistance that is available to help SFA students succeed.