

CTC 492 – Senior Design

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Classroom	Zoom	Class Time	4:00 PM– 5:15:00 PM TR
Office	NSM A – 132/Zoom	Office Hours	Tu/Th 01:00 – 03:00 PM by Appointments
Phone	(310) 243-3398	URL	http://csc.csudh.edu

CATALOG DESCRIPTION: Selected Topics (3) – Advanced topics in computer science not covered by current course offerings.

This is a senior design course for computer science majors. Students will do the following: computer system design; conceptual design methodology, design evaluation, total project planning and management techniques, design optimization, and system manufacturing cost considerations; Students will also work in group project; emphasis is placed upon students’ activities as design professionals.

This course introduces students to proposal writing, and literature searches and must complete an individual design project in this course, give a formal presentation and submit a bound research paper.

PRE-REQUISITE: Senior Standing and/or Consent of Instructor

PREREQUISITES BY TOPIC:

TEXTBOOK: none

REFERENCE: Articles

Required Materials: Laptop/Desktop Computer:
A laptop/desktop computer is required.

Webcam- Built-in or Standalone:
A built-in or standalone webcam is required.

COURSE GOALS How to research, write a proposal, set milestones, present the work, deliver written report for the project, and learn to meet the deadlines.

STUDENT LEARNING OBJECTIVE:

Upon completion of this course, students should be able to do:

- Conduct research in an areas of computer science
- Create summaries of articles,
- Present their research,
- Write a complete report of their project

COURSE POLICIES:

There will be many mini (10 minutes) presentations for the proposal, progress report, etc., and a final presentation given by students reflecting his/her work during the semester. The student needs to ask a faculty to become his/her advisor and two other faculty members as the committee members for his/her senior project. The student will meet with the advisor each week to update the advisor regarding his/her progress and to get feed backs from the advisor or the committee members. There will be a 25 to 30 page written report due by the end of the semester. The report will include the cover page, table of contents, introduction, background, the work, future work/conclusion, references, and glossaries as needed **make sure the final report is not in loose sheets**. The project should include an implementation part to support the project done by the student. The final presentation (30 minutes) will include the work and a demo of the program implemented by the student. **(All assignment are submitted electronically through blackboard)**

Attendance: is expected and required. The student is responsible for materials missed during an absence, whether excused or not. Classes will start at the prescribed time and will end at the prescribed time. Excessive absences or tardiness will result in lowered grades. I will be available during the posted office hours and you may make an appointment for times not posted. The class roll will be called 2 minutes after the hour **OR** a sign-in sheet will be passed around at the beginning of class and once the sheet is returned no late additions will be made. **YOU MUST BE ON TIME.** **(this will be done during zoom sessions)**

Presentations:

There will be a series of presentations given by students to show their progress during the semester and a final presentation during the last week of the semester. Students need to schedule their final presentation day and time of day by verifying the date with their advisor, the committee members, and the Computer Science Department prior to the last week of the semester.

Grading Breakdown:

Project (proposal, progress and written reports, Implementation, and presentations)	85%
Attendance, class participation, Visiting lectures reports, Student Club project	15%

Grading Scale

Score Range	Grade	Score Range	Grade	Score Range	Grade
96-100	A	90-95	A-	87-89	B+
83-86	B	80-82	B-	77-79	C+
73-76	C	0-72	C-	67-69	D+
60-66	D	Below 60	F	NA	

Required Computer Software/Hardware Capabilities

A computer with various software installed, such as Java environment, Eclipse or other Java IDEs, PowerPoint reader, Word reader and PDF reader, with be required. Students could use the computers in the lecture room or other computer labs on campus, and all required software are installed successfully. Students could also choose to

use their own computers and install required software. If students have any problem with installing software, please contact university IT department (<https://www.csudh.edu/it/>).

Academic Integrity

Academic integrity is of central importance in this and every other course at CSUDH. You are obliged to consult the appropriate sections of the University Catalog and obey all rules and regulations imposed by the University relevant to its lawful missions, processes, and functions. **All work turned in by a student for a grade must be the students' own work.** Plagiarism and cheating (e.g. stealing or copying the work of others and turning it in as your own) is not tolerated and will be dealt with according to University policy. **The consequences for being caught plagiarizing or cheating range from a minimum of a zero grade for the work you plagiarized or cheated on to being dropped from the course.**

Americans with Disabilities Act

CSUDH adheres to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations for students with temporary and permanent disabilities. If you have a disability that may adversely affect your work in this class, I encourage you to register with Disabled Student Services (DSS) and to talk with me about how I can best help you. All disclosures of disabilities will be kept strictly confidential. NOTE: no accommodation can be made until you register with the DSS. For information call (310) 243-3660 or to use the Telecommunications Device for the Deaf, call (310) 243-2028 or go to: <http://www4.csudh.edu/dss/>

Behavioral Standards

Behavior that persistently or grossly interferes with classroom activities is considered disruptive behavior and may be subject to disciplinary action. Such behavior inhibits other students' ability to learn and an instructor's ability to teach. The instructor may require a student responsible for disruptive behavior to leave class pending discussion and resolution of the problem and may also report a disruptive student to the Student Affairs Office (WH A-410, 310-243-3784) for disciplinary action.

Computer Literacy Skills Expectations

It is expected that students will

- Have regular access to computers and internet access for the term of this course.
- Be familiar with using email as a communication tool and check your campus email account at least every other day.
- Be able to access online course materials, and open the materials and finish the required problems using applications, such as Eclipse or other Java IDEs, PowerPoint reader, Word reader and PDF reader.
- Do research on their own to solve problems in the class.

Minimum Computer Specifications:

To ensure reasonable speed for Blackboard interactive sessions, all enrolled students must have, at a minimum, the following specifications on their personal computers to be utilized in this course:

Software Requirements:

- Windows 7 or higher
- Microsoft Office 2010 suite or higher
- Up-to-date anti-virus software (Microsoft Security Essentials)
- Adobe Acrobat Reader

Supported Browsers

- Windows
 - Google Chrome
 - Mozilla Firefox
 - Microsoft Internet Explorer
- Macintosh
 - Safari
 - Google Chrome
 - Mozilla Firefox

Hardware Requirements:

- A Pentium 2 GHz processor or faster
- 4-8 GB of RAM
- DSL or faster speed preferred
- Sound card & speakers
- DVD/CD-ROM Drive

For more knowledge on Blackboard, please view information here:

- Blackboard
 - Blackboard is CSUDH's Learning Management System. Courses may use Blackboard to deliver content, host discussion forums, and administer exams.
 - Ensure computer for use in this course is compatible with Blackboard.
 - Windows and Mac, and Blackboard Mobile apps are available for mobile devices.
 - Get an online guide to Blackboard or view training videos
 - View frequently asked questions about Blackboard

Computer Literacy Skill

- Students need to have a basic knowledge of computer and Internet skills in order to be successful in this course. Here are some of the highlights:
 - Knowledge of terminology, such as browser, applications, etc.
 - Understanding of basic computer hardware and software; ability to perform computer operations, such as:
 - Using keyboard and mouse
 - Managing files and folders: save, name, copy, move, backup, rename, delete, check properties
 - Software installation, security and virus protection
 - Using software applications, such as Word, PowerPoint, Excel, email clients
 - Knowledge of copying and pasting, spell-checking, saving files in different formats
 - Sending and downloading attachments

Technical Support

- If students are having technical problems with the Blackboard, Learning Management System, he/she can contact free technical support in one of the following ways:
 - Blackboard Tutorials: <http://www4.csudh.edu/it/services/blackboard/tutorials-students/index>
 - Phone: 310-243-2500, option 2 (M-F 8:00 am – 5:00 pm) –Blackboard

Learning Management System support on Main Campus.

- Helpdesk Ticket: <https://csudh.service-now.com>

Basic Needs Resources for Students

If you are struggling financially, can't afford healthy, nutritious **food**, or need stable **housing**, take advantage of these resources on campus. <https://www.csudh.edu/student-services/food-shelter-resources/food-resources/>

- **DH Eats App** – Look for it in the Apple App Store
- **CalFresh** – Financial aid for food to help stretch your grocery budget. Email calfresh@csudh.edu with your eligibility questions. Or make an appointment: <https://dh-calfresh.appointlet.com>.
- **Housing Referrals** – Contact the Basic Needs Coordinator to go over temporary housing solutions. mkirk@csudh.edu
- **Basic Needs Food Distribution Events** – The basic needs program is providing (4) meals and fresh produce to students every other Thursday. Event registration link will be sent out via toromail and iToros app.
- **Farmers' Market** – **SUSPENDED DUE TO COVID** Turn 10 CalFresh dollars into \$20 worth of fresh produce through the DH Farmers' Market's "Market Match" program: Tues 10-2 in the Sculpture Garden.
- **Toro Food Pantry** – **SUSPENDED DUE TO COVID** Another nutrition assistance program available to any CSUDH student. They also stock toiletries and menstrual products.

COURSE OUTLINE (for more detailed semester schedule refer to blackboard)

Week	Topic	Note
1	Over View of the Course	
2	Topic presentation	Individual Project
3	Proposal Presentation	Individual Project
4	Project Management	Individual Project
5	Progress Report	Group Project
6	Progress Report	Individual Project
7	Progress Report	Individual Project
8	Progress Report	Individual Project
8	Progress Report	Individual Project
9	Progress Report	Individual Project
10	Progress Report	Individual Project
11	ACM Project	Group Project
12	Progress Report	Individual Project
13	Final Project / Demo	Individual Project
14	Final Project / Demo	Individual Project
15	Final Project / Demo	Individual Project
16	Final Written Report Due	