

CS 495 - Senior Project Phase I

Spring 2017 - Syllabus

Instructor

Dr. Deborah Hwang

hwang@evansville.edu

Home page: <http://csserver.evansville.edu/~hwang>

Class Home Page

Handouts and assignments will be available only at the class home page

(<http://csserver.evansville.edu/~hwang/s17-courses/cs495.html>). Although announcements regarding handouts and assignments will be made via email, it is your responsibility to consult the course home page on a regular basis.

Catalog Description

Planning the computer science or engineering project and formulating the preliminary design under the guidance of faculty and industrial advisors. Discussion of the relationship of computer science or engineering as a discipline to the humanities and social sciences. Preparation of a written formal proposal and an oral presentation of the proposal. Seminar sessions address ethical, environmental, economic, safety and ergonomic aspects of computer science or engineering. Written reaction to seminar topics.

Objectives and Outcomes

The objectives of this course are to complete a written proposal and oral presentation for the senior design project and provide a capstone experience that focuses on what it means to be a computing professional, particularly on ethics on the job and in the profession, and the relationship of computer science as a discipline to the humanities and social sciences. During the course of the semester, students will have several opportunities to practice oral and written communication skills.

Specific outcomes for this course include:

- Students will complete the preliminary design for the senior project and validate it in some appropriate way.
- Students will submit a satisfactory written proposal.
- Students will give a satisfactory oral presentation.
- Students will be able to identify ethical situations related to computing and apply a professional code of ethics to determine an ethical course of action.
- Students will be able to identify intellectual property categories and apply them to computing products.

Prerequisites: CS 494 and GPA of at least 2.0.

Required Textbook: No textbook required

Requirements

In addition to a complete written senior project design proposal and presentation, to complete the course successfully each student must:

1. Submit a CS 494 mini-proposal with project sponsor and advisor agreement, if the project will be different than the one proposed in CS 494, or if currently in CS 494, by the end of the second week of classes (**Friday, January 20, 2017**).
2. Maintain an **on-line** "engineering notebook" on cserver that will be evaluated periodically. Either use the template given by the instructor or create your own. The project notebook should include at least:
 - A project title, name of project engineer, name of the project advisor
 - Entries documenting work done outside of class on the project proposal with estimates of how much time was spent in hours. Entries should be made at least once a week. Expected final total is a minimum of 50 hours. For example:
 - January 16, 2017 (2 hours): Set up the project notebook webpage. Reviewed HTML syntax. Decided to create a CSS stylesheet.
 - January 21-22, 2017 (4 hours): Researched what goes in the background section. Wrote initial draft of problem statement and background.
 - Total of number of hours logged to date
 - Links to any on-line references usedThe logbook must be installed no later than the end of the first week of classes (**January 13, 2017**) and the URL of the notebook emailed to the instructor.
3. Complete written and oral work as assigned and participate in group discussions and assignments.

Grading

The grade for this course will be determined by the following items and weights.

Item	Weight
Assignments (incl. Drafts, etc.)	15%
Final Oral Presentation	15%
Final Design Proposal	30%
Project Faculty Advisor Grade	40%

The project advisor in the manner he or she chooses will determine the project faculty advisor's grade based on the technical merits of the proposal.

Attendance and Submission of Work

The attendance at regular meetings with the project advisor, as well as the student's promptness in submitting work according to the schedule outlined below, will be factors considered in determining the final grade from the course instructor. In particular, failure to meet the required schedule for submitting drafts, making the oral presentations, and submitting the final copy of the written proposal will be sufficient cause for lowering the grade the student would receive if the same work were completed on time.

All work must be typed and submitted electronically to the course instructor in PDF format. Some work will be submitted to the LiveText system for assessment purposes and this submission is required. Proposal work will be forwarded to the project faculty advisor by the instructor.

General Education

This course meets the General Education requirements for Outcome 11: Capstone and Overlay E: Writing Across the Curriculum.

Credit Hour Policy

This course meets the federal requirements of 45-75 total hours of student work (combined classroom plus other academic activities such as laboratory, clinical, or design work) per credit hour.

Disability Policy

It is the policy and practice of the University of Evansville to make reasonable accommodations for students with properly documented disabilities. Students should contact the Office of Counseling and Health Education at 812-488-2663 to seek services or accommodations for disabilities. Written notification to the instructor from the Office of Counseling and Health Education is required for academic accommodations.

Honor Code

All students at the University of Evansville agree to adhere to the University Honor Code: *I will neither give nor receive unauthorized aid, nor will I tolerate an environment that condones the use of unauthorized aid.*

Course Schedule

Here is a tentative schedule.

<i>Week of</i>	<i>Tuesday</i>	<i>Thursday</i>
01/09	Introduction Project Notebook, LiveText	Proposal, Grading rubrics Resumes
01/16	Resume Critiques Resume due by class time	Problem Statements and Background
01/23	Individual Conferences	Individual Conferences
01/30	Ethics	Ethics Problem statement and background due
02/06	Ethics	Presentations Ethics paper due
02/13	TBA	Elevator pitches
02/20	Requirements and Specifications	Intellectual Property Presentation review due
02/27	Intellectual Property	TBA Intellectual Prop. paper due
03/06	SPRING BREAK - NO CLASSES	
03/13	TBA	TBA Requirements and specifications due

<i>Week of</i>	<i>Tuesday</i>	<i>Thursday</i>
03/20	TBA	Practice Presentations
03/27	Individual Conferences	Individual Conferences
04/03	Posters	Poster Critiques Posters due by class time
04/10	TBA	TBA Complete proposal draft due
04/17	TBA	Final Presentations
04/24	TBA	Reading /Study Day Final proposals due

There is no final exam for this class.