CSCE 4915 Senior Design II

Instructor: David Keathly
Office: NTDP F202
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Semester: Spring 2015
Time: TTh 1 – 2:20 pm
Place: NTDP F260

Course Catalog Description

This is the second course in the senior capstone design sequence. Focus is on the application of techniques to the design of electronic systems that have digital hardware and software components. Students apply the theory acquired from numerous engineering courses to solve real-world design problems. The design will consider realistic constrains including economic, environmental, sustainability, manufacturability, ethical, social, and safety.

Course Outcomes

Students will be:
1. Create a detailed systems design and implementation plan using standard engineering tools and methodology.
2. Implement the design for a processor-based system.
3. Create a test plan and series of test procedures for a project and execute the procedures against the components created.
4. Create a delivery and maintenance plan for the system.
5. Utilize configuration management, project management and design tools in the course of the project.
6. Create a lifecycle plan for the system developed.

Textbook:

none

Prerequisites

CSCE 4910

Course Requirements:

Attendance: Attendance is required and will be periodically monitored
Exams: None
Project: The majority of the assignments in this course will relate to a large group project that will completed
based on preliminary work in CSCE 4910
Assignments: There will be a few initial individual assignments and a number of group deliverables
throughout the semester

For More information

David Keathly's Webpage: www.cse.unt.edu/~dkeathly
Class Web Page: moodle.cse.unt.edu

Topics

- System Implementation
- Unit, Subsystem and System Testing
- Acceptance and Delivery
- Reliability
- Ethics and Social Responsibility

Course Calendar (subject to change)

Week	Topics	Readings, Materials and Assignments
Week 1	Course Overview Setup Team Room Project Plan Updates	see lecture notes on class web page
Week 2	Detailed Design review and update Bi-weekly status report	see lecture notes on class web page
Week 3	Lecture: System Implementation	see lecture notes on class web page
Week 4	Lecture: Testing Bi- weekly Status report	see lecture notes on class web page
Week 5	Lecture: Test Plans	see lecture notes on class web page

Week 6	Bi-weekly status report	see lecture notes on class web page
Week 7	Lecture: Test Procedures	see lecture notes on class web page
Week 8	Bi-weekly status report	see lecture notes on class web page
Week 9	Lecture: Maintenance Documents	see lecture notes on class web page
Week 10	Bi-weekly status report	see lecture notes on class web page
Week 11	Lecture: User Documentation	see lecture notes on class web page
Week 12	Work Week Bi-weekly status report	see lecture notes on class web page
Week 13	Lecture: Reliability	see lecture notes on class web page
Week 14	Work Week Bi-weekly status report	see lecture notes on class web page
Week 15	Delivery to Customer	
Week 16	Final Presentations	

Grading Policy

The various components of your grade are weighted as follows:

Team Project Deliverables	45%
Individual Reports, Presentations and Editorships	10%
Team Presentations	15%
Peer, Client and Instructor Performance Reviews and attendance	30%

Course Policies:

- ABSOLUTELY, NO LATE project assignments will be graded, unless specific arrangements are made with the instructor in advance.
- All assignments will be turned in by midnight on the date due. Assignments may be submitted in person at class, at person in my office (not at the front desk!) or via email unless otherwise instructed.
- ALL requests for extensions on assignments must be made prior to the due date, in person, and must be for a valid "emergency" reason. In extreme circumstances, contact after the due date may be accepted if there is a COMPELLING reason.

- Attendance is at your option. However, you are responsible for all discussion, lecture and other information disseminated during the lecture period, regardless of whether you attend or not.
- Lectures and Project assignments are included in this syllabus. However, you should regularly check the class website, as well as take note of in-class announcements for changes in the schedule or assignments.

Collaboration and Cheating:

Collaboration among students in class is most certainly encouraged, as it is my belief that it provides a better learning environment, and is required for team assignments. All resources used should be clearly cited in written work of any kind, both individual and team.

For further details and clarifications regarding collaboration and cheating, view the university Student Rights and Responsibilities web page.

Student Evaluation of Teaching Effectiveness (SETE)
The Student Evaluation of Teaching Effectiveness (SETE) is a requirement for all organized classes at UNT. This short survey will be made available to you at the end of the semester, providing you a chance to comment on how this class is taught. I am very interested in the feedback I get from students, as I work to continually improve my teaching. I consider the SETE to be an important part of your participation in this class. SETE will be available April 20 – May 10, 2015

ADA:

UNT complies with all federal and state laws and regulations regarding discrimination including the Americans with Disability Act of 1990 (ADA). If you have a disability and need a reasonable accommodation for equal access to education or services please contact the Office of Disability Accommodation.