



Course title and number	CSCE 483 sections 501, 502
Term (e.g., Fall 200X)	Spring 2015
Meeting times and location	Common Class: MWF 3:00-3:50PM HRBB 113; 501 Labs MW 4:10-6:40 HRBB 218; 502 Labs TR 5:30-8:00

Course Description and Prerequisites

This is a project-based course focusing on skills for system integration in order to solve real-world problems in computer science. It involves a significant team software project that integrates advanced concepts across computer science specializations, requiring the whole process from design, implementation, documentation and demonstration, as well as establishing a design methodology, management process and team management. Emphasis is placed upon student's activities as design professionals.

Learning Outcomes or Course Objectives

It is expected that successful participation in the course will allow the student to demonstrate:

- an ability to apply knowledge of mathematics, science, and engineering (3.a)
- an ability to design and conduct experiments, as well as to analyze and interpret data (3.b)
- an ability to design a system, component, or process to meet desired needs (3.c)
- an ability to function on multi-disciplinary teams (3.d)
- an ability to identify, formulate, and solve engineering problems (3.e)
- an understanding of professional and ethical responsibility (3.f)
- an ability to communicate effectively (3.g)
- an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice (3.k)

Instructor Information

Name	Dr. Robin R. Murphy
Telephone number	979-845-8737
Email address	murphy@cse.tamu.edu
Office hours	Wednesdays 11-1:30, Fridays 9:30-12, and by appointment
Office location	HRBB 333A

TA Name	Ben Fine
Email address	fineb@tamu.edu
Office Hours	During Labs

Textbook and/or Resource Material

- Handouts plus additional readings.

- Standard “lab notebook”, NOT spiral bound, from bookstore or office supply.
- Will use NI LabVIEW and myRIO (this can be downloaded for free from campus software but may require Mac users to purchase a Windows emulator. LabVIEW is loaded in HRBB 218, myRIOs are in EIC)
- Will use Piazza to communicate with students

Grading Policies

Grades will be: A: 90-100%, B: 80-89%, C: 70-79%, D: 60-69%, F: 0-59% *Sadly, 1 to 2 students fail this course each semester. There is no way to meet the objectives of this class with an individual extra assignment or two.*

Grades will not be turned into the registrar's office until all project deliverables have been turned in (see below), all borrowed items (e.g., keys, books, equipment) have been returned to their proper location or their owner, and the workstations in HRRB 218 have been thoroughly cleaned up. All team members are required to be present at the time of the final delivery. Time and date will be determined 1 month in advance.

As per Student Rule 7, make-up work will be allowed for university-excused absence. Students will be permitted 5 unexcused absences from attendance *EXCEPT for presentations, as the entire team must be present.*

Participation		25
attendance	10	
notebook (checked at each lab)	10	
peer review	5	
Project proposal		18
requirements	10	
schedule	2.5	
user acceptance testing	3	
oral presentation	2.5	
Critical Design Review		23
design	10	
resource allocation	3	
internal test plan	5	
oral presentation	5	
Weekly Progress		5
weekly internal meeting agenda and minutes	2.5	
meeting internal milestones	2.5	
Final Project		29
live demonstration: acceptance testing	8	
effective video demonstration	2	
product and interface design	2	
oral presentation	10	
written documentation	7	
		100

Course Topics, Calendar of Activities, Major Assignment Dates (Tentative)

Week	Topic	Major Assignments
1,2	Introduction, Teams	
3	Projects, project planning methods	Requirements document
4	Creativity, presentations	Preliminary schedule
5	Project proposals presentations	Preliminary test plan, resources
6	No class	Structured design document
7-9	Critical design review presentations, implementation	Revised CDR
10-12	Ethics, intellectual property, product design, testing	
13	Acceptance testing event	Acceptance test
14	Start-ups, polishing product and presentation	Video of product
15	Practice (5/4) and Final Presentation (5/6)	Presentation, written documentation

Labs will not start until week of Feb 2.

Other Pertinent Course Information

Any additional course information will be discussed in class.

Americans with Disabilities Act (ADA)

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, in Cain Hall, Room B118, or call 845-1637. For additional information visit <http://disability.tamu.edu>

Accommodations cannot be made after the fact; therefore if you need accommodations you should inform the instructor on the first day of class and then submit the documentation within the first two weeks of the semester if possible. If I know that the documentation is coming, I can work with you.

Academic Integrity

For additional information please visit: <http://aggiehonor.tamu.edu>

"An Aggie does not lie, cheat, or steal, or tolerate those who do."

Please review Section 20 of the TAMU Student Rules (<http://student-rules.tamu.edu/>) for a list of examples of scholastic dishonesty. In particular, be aware of the issues of plagiarism and fabrication of information. The use of existing software implementations or hardware designs should be discussed with the instructor prior to being incorporated into the project. Proper credit must be given to the original source of concepts, designs, software, technical documents, scientific literature, etc.