

CSCE 491: Capstone Computer System Project

1. Course number and name: CSCE 491: Capstone Computer System Project
2. Credit: 3-hrs; Contact: 3 lectures of 50 minutes each or 2 lectures of 75 minutes each per week
3. Instructor: Fall 2010: John B. Bowles
4. Text book: Ralph M. Ford and Chris S. Coulston, *Design for Electrical and Computer Engineers: Theory, Concepts, and Practice*, McGraw-Hill, 2008
5. Specific course information
 - a. Catalog description: Advanced computer systems engineering. Team projects.
 - b. Prerequisites: CSCE 311 and 317
 - c. Required in CE curricula
6. Specific goals for the course
 - a. Specific outcomes of instruction:
 1. Refine a topic, formulate an approach, and solve computer engineering problems to achieve the project goal;
 2. Manage time and efforts as a team to achieve the project goal;
 3. Pursue an independent project under time and design constraints;
 4. Develop effective written and oral skills to communicate among team members as well as with outsiders in a real-world styled environment;
 5. Design a system, consisting of both hardware and software components, using the techniques, skills, and tools of modern computer engineering practice.
 - b. Relation of course outcomes to Student Outcomes: CE: see page 2; CS & CIS: see page 3
7. Topics covered and approximate weight (14 weeks, 3 hours/week, 42 hours total)
 1. Teaming
 2. Project management and scheduling
 3. Requirements specification and optimization
 4. System Design
 5. Functional decomposition
 6. UML models
 7. Finite state machine models
 8. Testing
 9. Oral presentations
 10. Reports

5. Design a system, consisting of both hardware and software components, using the techniques, skills, and tools of modern computer engineering practice.													
---	--	--	--	--	--	--	--	--	--	--	--	--	--

* 3 = major contributor, 2 = moderate contributor, 1 = minor contributor; blank if not related

5. Design a system, consisting of both hardware and software components, using the techniques, skills, and tools of modern computer engineering practice.												
---	--	--	--	--	--	--	--	--	--	--	--	--

* 3 = major contributor, 2 = moderate contributor, 1 = minor contributor; blank if not related