

FAYETTEVILLE STATE UNIVERSITY
Dr. Henry Eldridge
Department of Mathematics and Computer Science
Course Syllabus, Spring 2012
CS 490 Senior Project

I. Locator Information:

Instructor: Dr. Mingxian Jin E mail address: mjin@uncfsu.edu
Office Phone: (910) 672-1558 Office Location: SBE 336
Course Number and Section: CSC 490 Semester Credit Hours: 3
Office hours: T R 9:30 am – 12:30 pm; M 8:00 am -9:00 am; 10:00-11:00am; or by appointment
Day and Time Class Meets: T R 3:45 pm – 5:00 pm
Final Exam: N/A

FSU Policy on Electronic Mail: Fayetteville State University provides to each student, free of charge, an electronic mail account (username@broncos.uncfsu.edu) that is easily accessible via the Internet. The university has established FSU email as the primary mode of correspondence between university officials and enrolled students. Inquiries and requests from students pertaining to academic records, grades, bills, financial aid, and other matters of a confidential nature must be submitted via FSU email. Inquiries or requests from personal email accounts are not assured a response. The university maintains open-use computer laboratories throughout the campus that can be used to access electronic mail. Rules and regulations governing the use of FSU email may be found at <http://www.uncfsu.edu/policy/general/FSUE-mailFINAL.pdf>

II. Course Description

This course presents a formal approach to state-of-the-art techniques in computer science and provides a means for students to apply the techniques. An integral part of the course is the involvement of students working in teams in the organization, management, and development of a large project. Project topics include software systems and methodology, computer organization and architecture, theory and mathematical background, computer security and social issues.

Prerequisites: CSC 470 And Senior standing And 9 hours of CSC at the 300 level

III. Disabled Student Services

If you have a disability or think you have a disability, please contact the Center for Personal Development in the Spaulding Building, Room 155 (1st Floor); 910-672-1203.

IV. Course Materials:

Textbook: None.

V. Student Learning Outcomes

Upon completion of this course,

- Students will be able to comprehend the key knowledge of the undergraduate computer science curriculum and allow for the integration and reflection on previous knowledge
- Students will demonstrate their advanced abilities and skills in solving computing problems
- Students will be able to use current techniques, skills, and tools to analyze, design and implement computing systems for real-world cases
- Students will demonstrate an understanding of the importance of team work in research/software development and be able to effectively play a role in a team-work environment

- Students will be able to prepare clear and concise documentation in a professional manner.
- Students will be able to present the final software and/or research results to others who are not familiar with the project.
- Students will demonstrate their ability to keep abreast of technical developments on selected topics

VI. Course Requirements

- Each student must work in a team of two (at most three in special cases) to complete a major project that investigates, analyzes, and solves a real-world problem. This real-world problem can be a research project or a software development project. The project should demonstrate both your academic knowledge and professional skills. Find a teammate and choose a project carefully. You will work with your teammate to devote the entire semester to this project.
- The students will manage their team in a professional manner, with each team member performing assigned tasks by the required time and keep a timesheet for each team
- Each team should meet with the advisor and/or the instructor at least once a week for guidance and assistance.
- The class will meet every 2nd and 4th Thursday of each month, and otherwise notified meetings – so it is very important that you check your university email and/or Blackboard course website regularly.
- The students will remain in frequent contact within the team to insure that satisfactory progress is being made, and that the interface requirements and the project specifications are being implemented.
- When any disagreements arise within the team, the students will first attempt to resolve the conflict. If conflicts persist, then the group will seek the counsel of the instructor and/or the advisor.

Specifically, you will need to:

1. Find a partner and to make a team.
2. Find a project topic and a project advisor (see the project pool provided separately)
3. Each team writes up a short proposal (one page is fine) with your advisor signed and submit it by **Thursday January 26, 2012**.
4. Conduct research, design, implementation, and test software for the problem.
5. Submit **bi-weekly** timesheets and progress reports (both oral and written) every second and last Thursday of the month when the class meets. For software development, each team should submit complete documentation for each phase of the development cycle. This includes requirements, analysis, design, and implementation, and testing.
6. Submit a final written report by **Tuesday May 1, 2012** (Graduating seniors should submit it by **Tuesday April 24, 2012**).
7. Give a final oral presentation during the week of **April 23, 2012** and the finals week to the class and/or the CS faculty.

VI. Evaluation Criteria/Grading Scale

The final grade for each team member will be the same, unless there are extenuating circumstances. The grading scale for determining the course grade is given below:

Attendance/Participation.....	10%
(Second and fourth Thursdays of each month, and otherwise notified)	
Formal project proposal	15%
Bi-weekly progress reports including timesheets and/or development documentation	15%
Project quality.....	30%
Final written report	15%
Oral presentation.....	15%

Evaluation rubrics will be provided separately about how your work is evaluated. Please refer to Blackboard about the project evaluation rubrics.

The grading scale is based on the *Undergraduate Catalog* and is as follows:

- A 90%—100%
- B 80%—89%
- C 70%—79%
- D 60%—69%
- F 0%—50%
- W Student initiated withdrawal from class.
- FN Failure for Non-attendance.

There will be **NO** extra credit assignments, projects, etc.

VII. Academic Support Resources

N/A

VIII. Teaching Strategies

The teaching strategy for this course will be individual, small group discussion, and class presentation.

X. References

N/A