

**FAYETTEVILLE STATE UNIVERSITY**  
**Department of Mathematics and Computer Science**  
**Course Syllabus, Spring 2018**  
**CS 490 Senior Project**

**CLASS WILL MEET IN ROOM 335 Sci &Tech Building**

**I. Locator Information:**

Instructor: Dr. Daniel Okunbor E mail address: diokunbor@uncfsu.edu  
Office Phone: (910) 672-2104 Office Location: LSA 224  
Course Number and Section: CSC 490-H1 Semester Credit Hours: 3  
Day and Time Class Meets: 8:00-9:15 a.m. R  
Office hours: 9:30 a.m. - 11:00 a.m., 12:30 p.m. - 2:00 p.m. TR. 11:00 a.m. - 1:00 p.m. W  
Final Exam: Oral Presentation, Thursday, May 3, 2018, Time TDB!

**NOTE THAT THIS IS A HYBRID COURSE, WHICH MEANS THAT CLASS WILL HAVE LIMITED FACE TO FACE MEETINGS. HALF OF CLASS MEETINGS WILL OCCUR ONLINE ON CANVAS USING THE DISCUSSION BOARD. MANY OF THE COURSE MATERIALS WILL BE AVAILABLE ON CANVAS. IT IS IMPERATIVE THAT YOU LOGIN TO CANVAS ON REGULAR BASIS TO AVOID MISSING RELEVANT COURSE DISCUSSIONS. FIRST DAY OF FACE-TO-FACE CLASS MEETING IS THURSDAY, JANUARY 18, 2018 AT 8:00AM IN ROOM 335 OF SCI. & TECH. BLD.**

**FSU Policy on Electronic Mail:** Fayetteville State University provides to each student, free of charge, an electronic mail account ([username@broncos.uncfsu.edu](mailto: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:** In accordance with Section 504 of the 1973 Rehabilitation Act and the Americans with Disabilities Act (ACA) of 1990, if you have a disability or think you have a disability to please contact the Center for Personal Development in the Spaulding Building, Room 155 (1<sup>st</sup> Floor); 910-672-1203.

**IV. Title IX – Sexual Misconduct**

Fayetteville State University (University) is committed to fostering a safe campus environment where sexual misconduct — including sexual harassment, domestic and dating violence, sexual assault, and stalking - is unacceptable and is not tolerated. The University encourages students who may have experienced sexual misconduct to speak with someone at the University so that the University can provide the support that is needed

and respond appropriately. The Sexual Misconduct policy can be found at the following link:  
<http://www.uncfsu.edu/Documents/Policy/students/SexualMisconduct.pdf>

**Consulting with a Health Care Professional** - A student who wishes to confidentially speak about an incident of sexual misconduct should contact either of the following individuals who are required to maintain confidentiality:

Ms. Dionne Hall	Ms. Linda Melvin
Licensed Professional Counselor	Director, Student Health Services
Spaulding Building, Room 167	Spaulding Building, Room 121
(910) 672-2167	(910) 672-1454
<a href="mailto:dhall9@uncfsu.edu">dhall9@uncfsu.edu</a>	<a href="mailto:lmelvi10@uncfsu.edu">lmelvi10@uncfsu.edu</a>

**Reporting an Incident of Sexual Misconduct** - The University encourages students to **report** incidents of sexual misconduct. A student who wishes to **report** sexual misconduct or has questions about University policies and procedures regarding sexual misconduct should contact the following individual:

Title IX Coordinator  
Barber Building, Room 242  
(910) 672-1141

Unlike the Licensed Professional Counselor or the Director of Student Health Services, the Deputy Title IX Coordinator is legally obligated to investigate reports of sexual misconduct, and therefore cannot guarantee confidentiality, but a request for confidentiality will be considered and respected to the extent possible.

Students are also encouraged to report incidents of sexual misconduct to the University's Police and Public Safety Department at (910) 672-1911.

## **V. Course Materials:**

Textbook: None.

## **VI. 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

## **VII. Course Requirements**

- The class will meet every Thursday from 8:00am to 9:15am (unless otherwise modified by the instructor) – so it is very important that you check your university email and/or Canvas course website regularly. **NOTE THAT THIS IS A HYBRID COURSE – THAT MEANS WE WOULD HAVE LIMITED NUMBER OF FACE-TO-FACE CLASS MEETINGS. THESE MEETINGS, YOU WOULD BE REQUIRED TO PRESENT PROGRESS**

**REPORTS USING POWERPOINT PRESENTATION. YOU MUST DISPLAY THE DESIGN, DELINEATE TASKS COMPLETED AND ONGOING TASKS.**

- 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 and your teammate(s) will devote the entire semester to this project.
- Each team should meet with the chosen project advisor at least once a week for guidance and assistance (**These meetings must be documented**). Failing to hold regular appointments with the advisor/instructor will result in grade deduction in attendance/participation.
- Team members should manage their team in a professional manner, with each team member performing clearly assigned tasks by the required time indicated in the project proposal.
- You should remain in frequent contact with teammates to ensure that satisfactory progress is being made.
- Each team is required to maintain a group journal on Canvas, **updated at least every week**. A journal entry can be created with any topic related to the project, not limited to recent activities, new ideas about the project, a problem solution, etc.
- 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 project advisor. It is only when team and project advisor are unable to resolve the conflict will it be reported to instructor. Try to resolve conflicts as quickly as possible to avoid delays in the project completion.
- **Specify Course Requirements and Deadlines**  
You will need to:
  1. Find a partner to form a team (This must be completed within the first week of the semester)
  2. Find a project topic and a project advisor.
  3. Each team should write a short proposal (3-5 pages) with your advisor's approval and submit to the instructor by **THURSDAY, FEBRUARY 8, 2018. The proposal must include project goals and significance, review of existing literature (if any), project design and methodologies, timeline of tasks and responsible teammates, list of deliverables and references. Note that you have ten weeks to complete and present the project with appropriate demonstrations. Indicate programming languages and software packages that would be utilized with sufficient details.**
  4. **ALL SUBMISSIONS MUST BE DONE ON CANVAS. ALTHOUGH, THIS IS A TEAM WORK, EACH MEMBER MUST SUBMIT THE TEAM REPORT/JOURNAL INDIVIDUALLY TO RECEIVE CREDIT.**
  5. Conduct research, design, implementation, and test software for the problem.
  6. Submit **bi-weekly** timesheets as online group journal entries on Canvas. Update with activities in the group journal weekly. Give a talk on your project progress and have discussion with classmates every time 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.
  7. Submit a final written report by **SATURDAY, MAY 5, 2018. FINAL REPORTS SUBMITTED AFTER THIS DEADLINE WILL NOT BE GRADED.**

8. Give a final oral presentation on **THURSDAY, MAY 3, 2018**. All CS faculty will be invited and will evaluate all presentations. TIME TBD!

### VIII. 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%
(Including meetings with advisors)	
Formal project proposal .....	10%
Group journal.....	10%
Project quality.....	25%
Final written report .....	20%
Oral presentation.....	15%
Team Management.....	10%

Evaluation rubrics will be provided separately about how your work is evaluated. Please refer to Canvas about the project evaluation rubrics also attached to this syllabus separately.

a. Grading Scale -

Grade	Total point range	Credit Hours	Quality Points	Meaning
A	90% – 100%	Hours attempted and earned	4 per credit hour;	Exceptionally high
B	80% – 89.99%	Hours attempted and earned	3 per credit hour	Good
C	65% – 79.99%	Hours attempted and earned	2 per credit hour	Satisfactory
D	55% – 64.99%	Hours attempted and earned	1 per credit hour	Marginally passing
F	below 55%	Hours attempted – Not earned	0 per credit hour	Failing
FN		Hours attempted – Not earned	0 per credit hour	Failing due to non-attendance. (Student registered, but <u>never</u> attended.)
W		Hours attempted – Not earned	No impact on GPA	Class withdrawal prior to deadline (see Academic Calendar)
P		Hours attempted and earned	No impact on GPA	Satisfactory - Assigned only in classes specified as Pass/Fail
WU		Hours attempted – Not earned	No impact on GPA	Withdrawal from all classes for semester or term
AU		Hours attempted – Not earned	No impact on GPA	Auditing

- b. Attendance Requirements – Students are expected to attend all class meetings, laboratories, and other instructional sessions for this course. Students are also expected to arrive to class on time and remain in class for the entire scheduled period. When students must miss class(es) for unavoidable reasons, i.e., illness, family emergencies, or participation in official university sponsored activities – they are responsible for informing faculty of the reasons for the absences, in advance if possible. Missed assignments, labs, quizzes and exams can only be made up for by explicit permission from the instructor. In order to receive this permission, the student has to provide convincing evidence (e.g. doctor's note) that the absence was due to an unavoidable reason. During the first half of the

semester/term, faculty will assign an interim grade of “EA,” Excessive Absences, for students whose class absences exceed 10% of the total contact hours for the class. Students who receive EA interim grades must either withdraw from the class or resume attendance. Students who resume attendance must consult with the instructor about completion of missed assignments. The EA is not a final grade, so students who are assigned an interim grade of EA, but do not withdraw from the class, will receive a final grade based on the evaluation criteria for the class. **Note: in case FSU must close for an emergency during the semester, instruction will continue using Canvas.**

- c. There is a penalty of 5% for each day a project is overdue. Project submissions that are more than a week overdue will not be accepted for grading.
- d. Dishonesty in academic affairs – Acts of dishonesty in any work constitute academic misconduct. Such acts include cheating, plagiarism, misrepresentation, fabrication of information, and abetting any of the above. Plagiarism in particular presents pitfalls to be avoided: failure to document any words, ideas, or other contributions that do not originate with the author constitutes plagiarism. Widespread use of the World Wide Web (Internet) requires particular attention to proper documentation practices. Individual course syllabi offer additional clarification about requirements for proper documentation. Actions outlined in the Fayetteville State University Student Handbook under Disciplinary System and Procedures will be followed for incidents of academic misconduct. The handbook may be obtained from the Office of Student Affairs located in the Collins Administration Building. Non-disclosure or misrepresentation on applications and other university records will make students liable for disciplinary action, including possible expulsion from the university.

**Please note: If these evaluation criteria must be revised because of extraordinary circumstances, the instructor will distribute a written amendment to the syllabus.**

**IX. Academic Support Resources** – This course uses FSU Blackboard for online dissemination. Students will find most materials online within the Blackboard module for this course. Project submissions and most tests will be

#### **FSU Policy on Disruptive Behavior in the Classroom**

The *Code of the University of North Carolina* (of which FSU is a constituent institution) and the *FSU Code of Student Conduct* affirm that all students have the right to receive instruction without interference from other students who disrupt classes.

FSU Core Curriculum Learning Outcome under Ethics and Civic Engagement (6.03): All students will “prepare themselves for responsible citizenship by fulfilling roles and responsibilities associated with membership in various organizations.” Each classroom is a mini-community. Students learn and demonstrate responsible citizenship by abiding by the rules of classroom behavior and respecting the rights all members of the class.

The FSU Policy on Disruptive Behavior (see FSU website for complete policy) identifies the following behaviors as disruptive:

1. Failure to respect the rights of other students to express their viewpoints by behaviors such as repeatedly interrupting others while they speak, using profanity and/or disrespectful names or labels for others, ridiculing others for their viewpoints, and other similar behaviors;
2. Excessive talking to other students while the faculty member or other students are presenting information or expressing their viewpoints.
3. Use of cell phones and other electronic devices
4. Overt inattentiveness (sleeping, reading newspapers)
5. Eating in class (except as permitted by the faculty member)
6. Threats or statements that jeopardize the safety of the student and others
7. Failure to follow reasonable requests of faculty members
8. Entering class late or leaving class early on regular basis
9. Others as specified by the instructor.

The instructor may take the following actions in response to disruptive behavior. Students should recognize that refusing to comply with reasonable requests from the faculty member is another incidence of disruptive behavior.

1. Direct student to cease disruptive behavior.
2. Direct student to change seating locations.
3. Require student to have individual conference with faculty member. At his meeting the faculty member will explain the consequences of continued disruptive behavior.
4. Dismiss class for the remainder of the period. (Must be reported to department chair.)
5. Lower the student’s final exam by a maximum of one-letter grade.
6. File a complaint with the Dean of Students for more severe disciplinary action.

Students who believe the faculty member has unfairly applied the policy to them may make an appeal with the faculty member’s department chair.

implemented through Blackboard, so students are required to check the Blackboard course website and their email at least once a day.

#### **X. Teaching Strategies**

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

#### **XI. References**

N/A