CMPS 3390 Application Development

Spring 2025

Lecture Classroom: Science III 311
Instructor: William Paul Royer
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Office Hours: Mon, Wed 11:00am - 1:00pm
Fri 10:00am - 12:00pm
Office Room: Science III 339

Course Description

Planning and design of applications for desktop and mobile platforms. Concepts include frameworks, networks and client/server protocols, data management, and user interface and experience. Students will deploy and test projects to understand current methods for providing services to the client.

Prerequisites

CMPS 2020 with a grade of C- or better.

Textbook

Various Class And Online Resources

Material Covered

Concept 1: Introduction to Application Development

Concept 2: Version Control

Concept 3: Programming Languages & Frameworks

Concept 4: Requirement Analysis

Concept 5: Software Design

Concept 6: Collaborative Development

Concept 7: Documentation

Concept 8: End User Experience

Concept 9: Graphic Design Basics

Concept 10: Client/Server Communications

Concept 11: Data Management

Concept 12: Security

Concept 13: Performance & Testing

Concept 14: Maintenance

NOTE: This list is subject to change based on the classes needs.

Attendance

It is recommended that you attend every class session and that you are not late to class. Lectures will begin at the class start time. This course is quite dense and covers a variety of concepts, so missing even one discussion or lab may set you back. **WE WILL HAVE A HEAVILY COLLABORATIVE LAB EACH TUESDAY AND I WILL BE TAKING ATTENDANCE!**

Academic Integrity Policy

Do your own work. While you will be permitted to use most tools, including artificial intelligence, documentation will be required. DOCUMENT EVERYTHING - EVEN IF YOU THINK IT'S NOT IMPORTANT!
Violations are determined in accordance with the Department's policy on academic honesty.

Open Computer Lab and Tutoring

The walk-in computer lab in Science III is available for use by students in this course outside of class time on a first come/first serve basis. Priority in the lab is given to students who are completing assignments for Computer Science and Computer Engineering courses.

Tutoring is also provided on a limited basis in the walk-in lab. The tutors are not allowed to solve the assignment for you, but they can assist with problems like compiler errors.

Grading

Labs: 25%
Project 1:   25%
Project 2:   25%
Final Project: 25%

All labs and projects are given equal weight unless stated otherwise.
This is subject to changes based on my assessment of the class's academic progress and needs.

Homework & Labs

25% of your grade will be based on lab assignments.
Makeup labs will be given at my discretion on an individual basis. Please notify me before lab day if you are unable to attend.

Homework

Homework will be provided on the course website as needed and will mostly consist of reading/watching online materials. Homework assignments are not graded, however they provide you with additional material to enhance your learning and prepare you for labs and projects.

Labs (EVERY TUESDAY)

Due to the nature of this class, lab attendance will be required.
Labs will be worth 10 points and may include any of the following:

- DIALOGUE: Class discussions, Q&A sessions, information gathering
- CODING: Guided labs, group work, individual coding challenges
- WRITTEN: Surveys, quizzes

Midterm & Finals

There will be two midterm projects and one final project. Late projects will not be accepted.

Midterm Projects

Project descriptions and due dates will be announced promptly ahead of time. Projects will be done concurrently with lectures and labs to reinforce the topics being taught. For each project, you will have 3-4 weeks to complete the requirements. Projects may involve presenting information to the class, submitting documentation, or both. Partial credit will be given for incomplete projects.

Final Projects

Your final project will consist of detailed documentation, a fully developed application, and a short presentation of your completed project. Unlike the midterm projects, the final project will be entirely up to your group. The requirements for the final project proposal and the criteria for the project will be announced at a later time. Presentations will be held during the last week of lecture. Attendance for presentations will be required. If a final project is not submitted and presented to the class, then the student will not pass the course.

Assignment & Project Submissions

Documentation will be required for labs and projects. You're expected to keep a detailed log, time tracking, and formal specs. I may ask you to submit documents through email, share your code repositories, or have regular check-ins during lab or office hours.

Statement Regarding Accommodations for Students with Disabilities

To request academic accommodations due to a disability, please contact the Office of Services for Students with Disabilities (SSD) as soon as possible. They may be reached at 661-654-3360 (voice), or 661-654-6288 (TDD). If you have an accommodation letter from the SSD Office, please present it to me during my office hours as soon as possible so we can discuss the specific accommodations that you might need in this class.