CS 8741 – Robo Capstone Project: Syllabus

Course Information

Course Prefix and Number: CS 8741
Course Name: Robo Capstone Project
Instructor: Prof. Matthew Gombolay
Semester: Fall 2026
Section: G13
CRN: 88748

Course Description

Teams or individuals apply the knowledge and skills acquired throughout the MS program to a faculty-supervised robotics project. Projects emphasize system integration, experimentation, and deployment of robotics methods in real-world or simulated environments.

Course Learning Outcomes

By the end of this course, students will:
- Design and execute a substantial robotics project
- Integrate perception, planning, and control components
- Work effectively in teams (if applicable)
- Communicate technical results clearly
- Demonstrate professional project management and iteration

Required Course Materials

No required textbooks. Materials depend on the specific project and will be determined in consultation with the instructor.

Grading Policy

Final grades will be assigned as letter grades based on the quality, execution, and impact of the capstone project.

Grades are determined using the following components:
- Project Progress and Execution (25%)
- Teamwork and Communication (15%)

- Intermediate Milestones (20%)
- Final System and Demonstration (25%)
- Final Report and Documentation (15%)

Grades reflect both the development process and the final system performance.

Attendance Policy

This course does not follow a traditional lecture format. Students are expected to engage consistently in project work and attend scheduled check-ins, reviews, and demonstrations.

Academic Honesty/Integrity Statement

Students are expected to maintain the highest standards of academic integrity. All work must be original and properly cited.

Accommodations for Students with Disabilities

Students requiring accommodations should contact the Office of Disability Services and inform the instructor as early as possible.

Student-Faculty Expectations

Students are expected to maintain professional conduct, communicate regularly, and make steady progress. Collaboration must be appropriate and clearly documented.