CSCE 490 - Capstone Computing Project I

- **Credit Hours:** 3 hours
- **Contact Hours:** 3 team meeting hours with Professor
- **Instructor:** Dr. Vidal
- **Required Textbooks:** None
- **Bulletin Description:** Major team-based software design project to be undertaken in a student's final year of study; project planning, software requirements analysis, design, and specification. Written reports and oral presentations in a technical setting.
- **Prerequisites:** D or better in CSCE 240. Prerequisite or Corequisite: D or better in CSCE 350
- **Required Course** in CE, CIS, and CS
- **Course Outcomes:** Students will be able to:
  1. Apply new technologies such as software platforms, libraries, source control tools, or APIs, to the development of a software application.
  2. Design an effective and appealing user interface for a software application using modern design tools.
  3. Gather and write requirements for a software application.
  4. Design and implement a prototype system, consisting of an appropriate mix of software and possibly hardware components, using the techniques, skills, and tools of modern computer system development practice.
  5. Work effectively as part of a team. Make significant contributions to the team's work.
  6. Recognize professional responsibilities and make informed judgements in computing practice based on legal and ethical practices.

- **Student Outcomes addressed by course**

Program	Student Outcomes Addressed
Computer Engineering	1, 2,4, 5, 7
Computer Information Systems	1, 2, 4, 5
Computer Science	1, 2, 4, 5

Topics covered:

1. Teaming
2. Project management and scheduling
3. Requirements specification and optimization
4. System Design
5. Functional decomposition
6. UML models
7. Software Development
8. Oral presentations
9. Reports