**SYLLABUS TEMPLATE – CHANGE ONLY THE ITEMS HIGHLIGHTED YELLOW**

**COSC 3396 + COSC 4396**

**Senior Research Project**

**Semester: Fall 2020**

**Syllabus**

**Instructor/Research Mentor:** INSERT NAME

**Instructor/Research Mentor Email**: INSERT EMAIL

**Catalog Description, Degree Applicability, and Minimum Department Requirements:**

Directed research project culminating in a departmentally approved report. COSC 3396 and COSC 4396 must be satisfied in order to be used towards the degree. A final paper and presentation may be required at the end of COSC 3396 and are mandatory at the end of COSC 4396. This is a two-semester sequence that can be applied towards either 1) the NSM Capstone requirement or 2) a COSC advanced elective, but not both. A general petition must be submitted to enroll each semester.

**Research Project Description:**

Reports, readings, and discussions on materials relevant to pattern recognition and object identification. This course primary purpose is to develop each student’s ability to understand and master techniques in machine learning, pattern recognition, and image processing. Students will be required to develop their own research project, present a proposal talk, execute the project, present the results in a talk, and write a research paper based on their findings.

**Course Requirements and Expectations:**

Weekly updates and completion of a final report are mandatory. Depending on the number of credits selected, students are required to meet with the instructor for at least one hour per week. This course requires substantial independent work and individual responsibility. If you must miss a scheduled meeting, you must provide a substantial excuse and are responsible for rescheduling the meeting.

**Grading:**

Letter Grade - COSC 3396 will be graded as “In Progress” until successful completion of COSC 4396 in the subsequent semester. A letter grade will be assigned to both courses upon completion of the requirements in the second semester.

**Evaluation:**

Grades will be assessed as summarized below:

Weekly discussions /emails 20 % (based on participation, and preparation)

Oral presentation 20 % (based on preparation, format, and style)

Written paper 20 % (based on preparation, format, and style)

Project accomplishment 40% (based on the usability of the final product)