

**Department of Computer Science and Information Technology
Fall 2020**

COURSE NUMBER

and NAME: CSCI 498 - Senior Project I [3 Credit Hours]

PRE/CO-REQ: Senior standing or above

CATALOG

DESCRIPTION: Students learn emerging topics and vocabularies in the discipline and problem-solving skills through capstone projects. This course teaches students how to continuously explore new ideas through their post-graduation life.

TEXTBOOK: None

INSTRUCTOR: Oladunni, Timothy
Building: 42/112-E, Email: timothy.oladunni@udc.edu,
Phone: 202-274-5512

OFFICE HOURS: F 5:00PM-7:00 PM. or by appointment.

INSTRUCTIONAL FORMAT: Online.

LECTURES: FRIDAY 10:00 am - 12:50 pm

COURSE GOAL and OBJECTIVES:

The goal of this course is to demonstrate competency in the application of technical knowledge gained from all core and elective courses of the program courses. It satisfies both the professional components as defined by ABET Inc. and the general education writing requirements. It also satisfies the CSIT program objectives.

Course objectives:

Students who complete this course should be able to perform the following tasks:

- Demonstrate a knowledge of research techniques and literature survey skills by investigating the feasibility of a proposed project and its societal implications.
- Know how to plan, propose, and prepare to implement a new project in the discipline.
- Demonstrate communication skills and public speaking skills through written and oral presentations
- Learn proposal development skills to initiate an application-oriented or research based project in the discipline.

STUDENT LEARNING OUTCOMES (Student Outcomes):

Upon completion of the course the student will be able to:

SO3-A Produce a variety of written documents using appropriate formats and grammar with discipline-specific conventions including citations appropriate to the audience

SO3-C Produce appropriate graphics such as figures, tables in written and oral communications

SO5-A Participate as a team member or leader in developing and selecting ideas, establishing team goals and objectives, and creating a collaborative and inclusive environment

SO5-B Plan collaborative tasks, understand individual responsibility, share responsibilities and information on schedule, and engage in the success of team goals

SO6-A Apply computer science theory, principles and practices learned in various courses to produce a computing-based solution

SO6-C Identify risks of computing-based solutions and describe approaches to manage them

COURSE OUTLINE:

- a. Technical writing and Literature Review using the IEEE format.
- b. Top-down and bottom-up engineering design methodologies
- c. Capstone Project Design Topic Assignment
- d. Review of basic design tools and methodologies
- e. Modern system level software and hardware design and simulation tools.
- f. Design documentation and review.
- g. Design validations
- h. Engineering ethics and societal impact of Engineering.

GRADING STANDARD:

Assignment 1 10%

Assignment 2 10%

Project Proposal 10%

Proposal Presentation 10%

Project Report 40%

Project Presentation 10%

Class Attendance & 5%

Classroom Participations

Reflect on your learning experience by providing thoughtful feedback on course content and format 5%

A – 90 to 100 points

B – 80 to 89 points

C – 70 to 79 points

D – 60 to 69 points

F – less than 60 points