

COMP-4799 Course Syllabus

1 Course Information

Course Name	COMP 4799: Cybersecurity Capstone
Required Textbook	No textbook required

2 Course Description

The cyber security capstone project is intended to act as the culmination of the student's cyber security learning journey at the University of Denver. The work product of this course is a project/internship/related-work report detailing aspects of what the student finds most important about cyber security. The capstone is a personalized course for each student, depending on what area(s) they are interested in. Typically the final report is a 5-20 page white paper. Other options for the deliverable are possible depending on the student's chosen topic.

The capstone project is led by one of the cyber security professors at DU, and students should take advantage of this fact to get feedback on ideas for the capstone, as well as discussions with the professor throughout the capstone quarter. It is up to each individual student how much they engage; however the more they do the better the learning experience!

3 Textbook and Materials

There is no required textbook for participation in this class. All materials will be available for students enrolled in the course at <https://canvas.du.edu> and online at various internal and external web sites. You will need a good internet connection and a laptop that meets DU specifications. (See <https://www.du.edu/it/support/how-to/students/laptops>). For technical support in using Canvas, please go to <http://otl.du.edu/knowledgebase/canvas>

4 Course Learning Objectives

Learning objectives for this course vary. However, all students must demonstrate the following in completing the course:

1. The ability to communicate a topic effectively in writing

2. Possessing organization skills to manage time constraints on their own
3. An understanding of a cybersecurity topic at a deep level

5 Program Level Goals

Courses in the cyber security MS program, including this one, should contribute to overall program level outcomes for students. This course contributes to the following program level goals:

1. Understand common cyber security vocabulary, and understand and intelligently discuss cyber security topics (incidents, advisories, etc.)
2. Comprehend core computer security concepts from a theoretical standpoint. Components such as the CIA triad, security models, threat modeling, risk assessment, etc. are some examples of these topics.
3. Employ common tools and techniques used in the cyber security field.

6 Knowledge Units

This course covers the following NSA cybersecurity Knowledge Units:

1. Overview of Cyber Defense
2. Vulnerabilities
3. Legal and Ethics

7 Grading Policy

Grades will be assigned by the capstone supervisor on a per-project basis. Grading criteria will be discussed with the student once the project is determined.

8 Attendance Policy

Capstones are scheduled differently than normal courses. The student and supervisor will determine the amount of meeting time required.

9 Academic Integrity

All work submitted for this course must be the student's own original work. Any instance of plagiarism or cheating will be dealt with according to the university's academic integrity policy. Refer to the Student Rights and Responsibilities, as well as the University of Denver Student Honor code, here: <https://studentaffairs.du.edu/student-rights-responsibilities>