Syllabus for CYB 789 Cybersecurity Pre-Capstone

Course Description

Prepares students for the capstone experience. Drawing on skills learned, students will submit a written project proposal - with organization, timeline, learning objectives, and specific deliverables identified – for faculty approval. This course is a pre-requisite for the capstone course.

Prerequisite(s)

Completion of core courses.

Program Outcomes

This course addresses the following competencies and program outcomes of the Master of Science in Cybersecurity:

- Competency D: Evaluate and communicate the human role in security systems with an emphasis on ethics, social engineering vulnerabilities, and training
  - o Program Outcome 13: Engage in professional collaboration and communication with technical and nontechnical stakeholders on issues related to security

Course Outcomes

Upon completing this course, you will be able to do the following:
1. Demonstrate competency in defining project milestones, defining deliverables, and creating project plans.
2. Gain buy-in from project authorities and decision-makers
3. Engage in quantitative and qualitative research to support analysis, design, and planning in accordance with recognized industry best practices.
4. Regularly communicate with key stakeholders to refine project goals, discuss progress, and discuss obstacles

Course Components

Weekly Progress Reports

Each week, you must submit a report which describes the activities you performed during the previous 7-day period relating to this course. The weekly progress reports keep you focused on the course and provide documentation of your work. Some form of activity logging is common practice in many sectors of the technology industry.

Project Selection Assignments

A major part of a successful capstone experience is identifying a suitable project. The scope of the project shouldn't be too big, nor should it be too small. The capstone project should align with the track that you have selected. Ideally, you should have suitable access to members of the organization where you complete the project. The project selection assignments are designed to provide you with

a structured process to 1) identify possible candidates for your capstone experience and 2) help you narrow the list down to one project that meets the capstone requirements.

Project Plan Assignments

Once a suitable project has been identified, it's time to flesh out the goals of the project, the timeline, and contingency plans if things don't go as initially planned. The project plan assignments is where you will dig into the details.

Grading

The following grading scale will be used to evaluate all course requirements and to determine your final grade:

Grade	Percentage Range
A	90% or greater
A-	87% - < 90%
B+	83% - < 87%
B	80% - < 83%
B-	77% - < 80%
C+	73% - < 77%
C	70% - < 73%
C-	65% - < 70%
F	0 - < 65%

Assignment	Percentage
Weekly progress reports	35%
Selection of project candidates	5%
Evaluation of project candidates	5%
Project Plan, Draft #1	15%
Project Plan, Draft #2	15%
Project Plan, Final	25%
Total Percentage	**100**