



Syllabus for CYB 707

Cybersecurity Program Planning and Implementation

NOTE: This syllabus document contains the basic information of this course. The most current syllabus is available in the full course.

Course Description

Instruction on the process used to develop and maintain appropriate security levels for an organization with a focus on implementing a comprehensive security program, a documented set of security policies, procedures, guidelines, and standards. Topics include security planning, strategies, controls, and metrics for measuring the effectiveness.

Prerequisite(s)

CYB 700 Fundamentals of Cybersecurity

Program Outcomes

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

- Program Outcome 3: Cybersecurity planning and management – Perform security risk analysis for an organization and develop system-specific security programs.

Course Outcomes

Upon completing this course, you will be able to do the following:

- Examine the placement of security functions in a system and describe the strengths and weaknesses.
- Develop contingency plans for various size organizations to include: business continuity, disaster recovery and incident response.
- Develop system specific plans for:
 - The protection of intellectual property
 - The implementation of access controls
 - Patch and change management
- Outline and explain the roles of personnel in planning and managing security, including:
 - Board of Directors
 - Senior Management
 - Chief Information Security Officer (CISO)
 - IT Management (CIO, IT Director, etc)
 - Functional Area Management
 - Information Security personnel
 - End users



Course Requirements/Components

Quizzes

Every topic will include a terminology/basic concept quiz. These quizzes may be taken as many times as possible to achieve full marks.

Assignments and Small Group Discussions

Most lecture topics will include a workbook assignment. These assignments will provide you with the base material to be used in the project assignment. You will be asked to submit your work for peer review and enhancement via small-group discussions.

Topical Discussions

Most real learning comes not from mere reading or listening to a lecture but from a true exchange of ideas and questions. In a traditional classroom, discussions are easy and natural. In the online environment, we will attempt to simulate these discussions through prompting questions and a space for responses. While there is a longer description of discussion expectations elsewhere in the course material, fundamentally, you are expected to participate in those discussions fully—not only for your education but for the expanded education of your classmates.

Major Project: Security Plan

Throughout the semester, you will be working on an implementable security plan for an organization of your choice. There will be multiple submissions for this assignment. A submission approximately halfway through the course will consist of the first part of the security plan document and a session with the instructor to discuss progress and issues. The second submission will include the entire security plan document. Finally, you will submit a recorded, formal presentation of the plan along with your presentation materials.

Important information about the security plan in this course

1. Since this plan is designed to be implementable, you will need access to people in the organization who can answer questions about organizational processes, technology, and policy.
2. Later courses in this degree program build upon this Security Plan project. Keep this in mind as you build it; a sufficient level of quality and detail could be required for success in later classes.

Grading

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

Grade	Percentage Range
A	94% - 100%
A-	90% - < 94%
B+	87% - 90%
B	84% - 87%
B-	80% - 84%
C+	77% - < 80%



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C	74% - 77%
C-	70% - 74%
F	0 - < 70%

Assignments	Percentage
Major Project	40%
Topical Discussions	30%
Workbook Assignments and Small Group Discussions	20%
Quizzes	10%
Total	100%