



# Syllabus for CYB 715 Managing Security Risk

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

## Course Description

Covers risk management processes and tools, risk assessment and analysis models, economic and control implications, risk measurement, and the ethics of risk. Students will communicate the technical and management-aspects of risk, based on research of their chosen industry, related regulation, recent industry reports, and risk implications to organizations, individuals and the nation.

## Prerequisite(s)

None

## Program Outcomes

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

- Competency C: Develop policies and procedures to manage enterprise security risks
  - Program Outcome 7: Conduct security risk management assessments
  - Program Outcome 8: Develop and implement a threat management framework
  - Program Outcome 9: Evaluate and create security policies and processes for an organization and apply appropriate security frameworks
  - Program Outcome 10: Implement identity and access management controls
- Competency D: Evaluate and communicate the human role in security systems with an emphasis on ethics, social engineering vulnerabilities, and training
  - Program Outcome 12: Engage in ethical decision-making and apply ethical principles to cybersecurity
  - Program Outcome 13: Engage in professional collaboration and communication with technical and non-technical stakeholders on issues related to security

## Course Outcomes

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

- Demonstrate a comprehensive understanding of the concepts, frameworks, and methodologies of IT risk management.
- Identify and assess potential cybersecurity risks within an organization, considering the threat landscape, vulnerabilities, and potential impacts.
- Apply risk analysis techniques to evaluate the likelihood and potential impact of identified risks, enabling informed decision-making for risk mitigation strategies.
- Develop effective risk mitigation strategies and controls to minimize cybersecurity risks, considering industry best practices, legal and regulatory requirements, and organizational objectives.
- Conduct business impact analysis to evaluate the potential consequences of cybersecurity incidents on business operations, financials, reputation, and critical assets.
- Mitigate risks by developing response and recovery plans, e.g., incident response plans, business continuity plans, and disaster recovery plans.



- Communicate risk posture to technical and nontechnical stakeholders in an understandable and professional manner.

## Course Requirements/Components

### Module Quizzes

The quizzes cover the fundamental concepts and terms being covered in the course. Because you are allowed multiple attempts, they serve more as an activity than an assessment.

### Discussions

In a Master-level class, it is expected that you participate in the knowledge-creation process. The goal of the discussions is to provide a space for you to do so.

### Assignments

The assignments are meant to prepare you for the course project deliverables by giving you an opportunity to use the concepts and/or processes covered within a structured example or scenario.

### Course Project: Risk Management Plan

The heart of risk management is a formal risk management plan. The project in this course allows you to fulfill the role of an employee participating in the risk management process for a specific business situation of your choosing. The project is divided into several parts, each with a deliverable.

**Important:** 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.



## Grading

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

Assignment	Points	Percentage
8 Discussion (10 pts each)	80	11.4%
9 Quizzes (10 pts each)	90	12.8%
9 Module Assignments (points vary)	280	40%
Course Project (5 Deliverables 50 pts each)	250	35.8%
<b>Total Points</b>	<b>700</b>	<b>100%</b>

Grade	Percentage Range
A	>94%
A-	>90%
B+	>87.5%
B	>85%
B-	>80%
C+	>77.5%
C	>70%
C-	>65%
F	0 - < 65%