MIS 5903 – Cyber Security Capstone *Summer 2021*

Instructor

William Bailey

Office: Online via Zoom

Office Hours: via **Zoom Meeting** by appointment

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Class Format: *Online*

Class Meetings: *Tuesday*, 17:30 – 20:00 (EDT) Where: Zoom Meeting (Linked to Canvas)

Community Website:

http://community.mis.temple.edu/mis5903sec711summer2021

Course Description

In this course you will learn how to prepare for the Certified Information Systems Security Professional (CISSP) exam. In addition, you will complete a Capstone Project where you evaluate an organization's Information Security Program.

Course Objectives

- 1. Prepare for national CISSP examination by reviewing key points in areas of:
 - a. Security and Risk Management
 - b. Asset Security
 - c. Security Engineering
 - d. Communication and Network Security
 - e. Identity and Access Management
 - f. Security Assessment and Testing
 - g. Security Operations
 - h. Software Development Security
- 2. Apply the (ISC)2 CBK towards a real-world case study.
- 3. Gain experience working as part of a team.

Credit Hours: 3

Required Reading & Materials

Textbook	CISSP All-In-One Exam Guide, Eighth Edition
	(Authors: Shon Harris, Fernando Maymi)
	ISBN-13: 978-1260142655
	Includes practice questions on electronic media
	Alternative Bundle w/Practice Exams:ISBN-13: 978-1260440812
	(includes required textbook plus CISSP Practice Exams Fifth Edition, ISBN-13: 978-
	1260142679)

Preassessment

The course starts with a preassessment, available in Canvas. The results of the preassessment is not included in your final grade, but you must complete the preassessment as a course requirement. The preassessment has been divided into the eight domains of the CBK, with each consisting of a series of multiple-choice questions.

Each of the eight domain-specific preassessment quizzes should be completed, and then document those individual domain scores in a table, sorting from lowest-scoring domain to highest, and upload that document to the Assignments section in Canvas.

Assignments

The readings, weekly discussion questions, and News of the Week assignments have been carefully chosen to bring the real world into class discussion while also illustrating fundamental concepts. Your participation in the online and class discussions is critical. Evaluation is based on you consistently demonstrating your engagement with the material. Assessment is based on what you contribute. The **frequency** and **quality** of your contributions are equally important.

Class #	Assignment/Discussion Topics	Due
2	Cybercrime	5/17
3	Protecting Privacy	5/24
4	Security Engineering	5/31
5	Network Security	6/7
6	Identity & Access Management	6/14
7	Security Assessments	6/21
8	Business Continuity and Disaster Recovery Planning	6/28
9	Application Development Security	7/5
10	New Trends in Information Security	7/12
11	Incident Response	7/19
12	Review: Security Threat and Mitigations	7/26

Participation

Much of your learning will occur as you prepare for and participate in discussions about the course material. The assignments, analysis, and readings have been carefully chosen to bring the real world into class discussion while also illustrating fundamental concepts.

To encourage participation, 20% of the course grade is earned by preparing before class and discussing the topics between and in class. Evaluation is based on you consistently demonstrating your engagement with the material. Assessment is based on what you contribute, not simply what you know.

- 1. Preparation before class To facilitate active participation in the class I request that you be prepared with the following before noon on the day of the class:
- 2. Participation between classes To facilitate ongoing learning of the course material, we will also discuss course material on the class blog between classes.

Team Presentation

During Class #3, the students will be organized into a series of presentation development and delivery teams. Students will be assigned to team(s) to each perform their own risk assessment of a specified real (or fictitious) organization. During the risk assessment, students should be aware of and address the eight domains of the (ISC)2 Common Body of Knowledge (CBK), linking the assessment findings to the CBK.

The presentation will be designed/planned so that is completed in no less than 30 minutes and no more than 45 minutes. Each member of the team will present for no less than 5 minutes. While this is a team effort, the grade earned for the presentation may be adjusted to reflect each member's level of participation within the team.

Following the group presentation, the group will address Q&A from the class for a period of up to 15 minutes.

While addressing each domain of the CISSP CBK, the team should address each area:

- 1) Business/organizational context
- 2) Technical environment
- 3) Risk management/mitigation focus

Class #	Team Presentation Schedule	Due
3	Teams and topics assigned	
10	Draft presentation submitted	7/13
11	Presentations	7/20
12	Presentations	7/27

Exams

There are two multiple-choice question exams during the course:

- 1. The first exam will cover the first four domains of the CISSP CBK, weighted as 10% of the course final grade.
- 2. The second exam will be comprehensive, covering all material for the course, weighted as 20% of the course final grade.

CBK (Practice Exams)

After each domain of the CBK, you will complete the Practice Exam(s) related to that specific domain via the textbook's test portal. (TotalSem) You can, and are encouraged, to make multiple passes through the CBK, to submit a screenshot with the highest score for that domain. When completing these CBK (Practice Exams) the purpose is not to memorize specific questions, but to understand the "why" one answer was the best answer versus the other options provided. The CBK (Practice Exams) is a tool to practice before attempting the weekly quiz.

Quizzes

After each domain of the CBK, there will be a quiz due during that week. The goals for these quizzes are as follows:

- 1. Help you identify areas requiring additional study.
- 2. Help you gain skills that improve your test-taking abilities.

Weekly Cycle

As outlined above in the **Assignments and Participation** sections, much of your learning will occur as you prepare for and participate in discussions about course content. To facilitate learning course material, we will discuss course material on the class blog in between classes. Each week this discussion will follow this cycle:

When	Actor	Task	Туре
Friday	Instructor	Post reading questions on Community web site	
Sunday 11:59 pm	Student	Complete Quiz for prior week (if applicable)	Quiz
Sunday 11:59 pm	Student	Post CBK Results(s) (End of Weeks 2-9) on Canvas	Assignment
Monday by 11:59	Student	Post initial Discussion Question responses	Participation
am			
Tuesday	ALL	Class meeting via Zoom	Participation
Monday – Friday	Student	Post replies to other students' DQ responses	Participation
(during the week)			

Evaluation and Grading

Item	Weight
Weekly Quizzes	25%
Discussion Questions &	20%
Participation	
Team Presentation	25%
Exams	30%
	100%

Grading Scale			
94 – 100	Α	73 – 76	С
90 – 93	A-	70 – 72	C-
87 – 89	B+	67 – 69	D+
83 – 86	В	63 – 66	D
80 – 82	B-	60 – 62	D-
77 – 79	C+	Below 60	F

Grading Criteria

The following criteria are used for evaluating assignments. You can roughly translate a letter grade as the midpoint in the scale (for example, an A- equates to a 92).

Criteria	Grade
The assignment consistently meets and exceeds expectations. It demonstrates originality of thought and creativity. Beyond completing all of the required elements, new concepts and ideas are detailed that transcend general discussions along similar topic areas. There are no mechanical, grammatical, or organization issues that detract from the ideas.	A- or A
The assignment meets expectations. It contains information prescribed for the assignment and demonstrates understanding of the subject matter. There may be some omissions or procedural issues, such as grammar or organizational challenges, but these do not significantly detract from the intended assignment goals.	B or B+
The assignment fails to consistently meet expectations. That is, the assignment is complete but contains significant problems that detract from the intended goals. These issues may be relating to content detail, be grammatical, or be a general lack of clarity. Other problems might include not fully following assignment directions.	B-

The assignment constantly fails to meet expectations. It is incomplete or in some other way consistently fails to demonstrate a firm grasp of the assigned material.

Below B-

Late Assignment Policy

An assignment is considered late if it is turned in after the assignment deadlines stated above. No late assignments will be accepted without penalty unless arrangements for validated unusual or unforeseen situations have been made.

- The exercise assignments will be assessed a **50% penalty** if they are late.
- No credit is given for late participation assignments including required posts of comments and In the News articles.
- You must submit all assignments, even if no credit is given. If you skip an assignment, an additional 10 points will be subtracted from your final grade in the course.
- Plan ahead and backup your work. *Equipment failure is not an acceptable reason for turning in an assignment late.*

University Policies

TEMPLE AND COVID-19

Temple University's motto is *Perseverance Conquers*, and we will meet the challenges of the COVID pandemic with flexibility and resilience. The university has made plans for multiple eventualities. Working together as a community to deliver a meaningful learning experience is a responsibility we all share: we're in this together so we can be together.

Attendance Protocol and Your Health

Instructors are required to ensure that attendance is recorded for each in-person or synchronous class session. The primary reason for documentation of attendance is to facilitate contact tracing, so that if a student or instructor with whom you have had close contact tests positive for COVID-19, the university can contact you. Recording of attendance will also provide an opportunity for outreach from student services and/or academic support units to support students should they become ill. Faculty and students agree to act in good faith and work with mutual flexibility. The expectation is that students will be honest in representing class attendance.

Video Recording and Sharing Policy

Any recordings permitted in this class can only be used for the student's personal educational use. Students are not permitted to copy, publish, or redistribute audio or video recordings of any portion of the class session to individuals who are not students in the course or academic program without the express permission of the faculty member and of any students who are recorded. Distribution without permission may be a violation of educational privacy law, known as FERPA as well as certain copyright laws. Any recordings made by the instructor or university of this course are the property of Temple University. Any unauthorized redistribution of video content is subject to review by the Dean's office, and the University Disciplinary Committee. Penalties can include receiving an F in the course and possible expulsion from the university. This includes but is not limited to: assignment video submissions, faculty recorded lectures or reviews, class meetings (live or recorded), breakout session meetings, and more.

Code of Conduct Statement for Online Classes Online Behavior

Students are expected to be respectful of one another and the instructor in online discussions. The goal is to foster a safe learning environment where students feel comfortable in discussing concepts and in applying them in class. If for any reason your behavior is viewed as disruptive to the class, you will be asked to leave and you will be marked absent from that class. Please read the university policy concerning disruptive behavior:

The disruptive student is one who persistently makes inordinate demands for time and attention from faculty and staff, habitually interferes with the learning environment by disruptive verbal or behavioral expressions, verbally threatens or abuses college personnel, willfully damages college property, misuses drugs or alcohol on college premises, or physically threatens or assaults others. The result is the disruption of academic, administrative, social, or recreational activities on campus.

Online Classroom Etiquette

The expectation is that students attending online courses will behave in the same manner as if they were in a live classroom. Be courteous and professional in your location, attire and behavior. Specifically, your location should reflect a clean and professional appearance - not a bedroom, crowded conference room, loud restaurant/bar, etc. Your attire should mirror what you might wear to a live classroom. We expect that students will not disrupt class through visuals or verbal outbursts, such as but not limited to, conversations with other people in the room, engaging in inappropriate behavior while you are in class or distracting the class in any other way. In addition, students should refrain from doing something in their online class that they would not do in a live classroom. which includes eating large meals, drinking alcohol, vaping, getting up often and leaving the online class (not staying at their computer). You should arrive on time and leave when the class is over. If there is an emergency of some kind, notify your faculty member via email or the chat function in Zoom.

Online exam proctoring

Proctorio or a similar proctoring tool may be used to proctor exams or quizzes in this course. These tools verify your identity and record online actions and surroundings. It is your responsibility to have the necessary government or school issued ID, a laptop or desktop computer with a reliable internet connection, the Google Chrome and Proctorio extension, a webcam/built-in camera and microphone, and system requirements for using Proctorio or a similar proctoring tool. Before the exam begins, the proctor may require a scan of the room in which you are taking the exam.

Student and Faculty Academic Rights & Responsibilities

Freedom to teach and freedom to learn are inseparable facets of academic freedom. The University has a policy on Student and Faculty Academic Rights and Responsibilities (Policy #03.70.02) which can be accessed at policies.temple.edu.

Inclement Weather Policy

Please be advised that while Temple University campuses may close for inclement weather, online courses are not on-campus and therefore are still expected to meet. Your instructor

will contact you regarding any adjustments needed in the event of a power outage or severe circumstances. Should you have any questions, please contact the professor.

Academic Honesty

Learning is both an individual and a cooperative undertaking. Asking for and giving help freely in all *appropriate* setting helps you to learn. **You should represent only your own work as your own.** *Personal integrity* is the basis for intellectual and academic integrity. Academic integrity is the basis for academic freedom and the University's position of influence and trust in our society. University and school rules and standards define and prohibit "academic misconduct" by all members of the academic community including students. You are asked and expected to be familiar with these standards and to abide by them. A link to Temple's Policy on Academic Dishonesty can be found at the following link: https://grad.temple.edu/resources/policies-procedures

Disability Statement

Any student who has a need for accommodations based on the impact of a documented disability or medical condition should contact Disability Resources and Services (DRS) in 100 Ritter Annex (drs@temple.edu; 215-204-1280) to request accommodations and learn more about the resources available to you. If you have a DRS accommodation letter to share with me, or you would like to discuss your accommodations, please contact me as soon as practical. I will work with you and with DRS to coordinate reasonable accommodations for all students with documented disabilities. All discussions related to your accommodations will be confidential.

Temple University's Technology Usage Policy

This site includes information on unauthorized access, disclosure of passwords, and sharing of accounts. https://secretary.temple.edu/sites/secretary/files/policies/04.71.11.pdf