MIS 5903 – Cyber Security Capstone
Summer 2022

About the Instructor

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Office hours: By appointment

Class Location and Time

Classroom: Online (Canvas)
Time: Tuesday 5:30 pm – 8:00 pm
Class blog: https://community.mis.temple.edu/mis5903sec711summer2022/

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.

Required Textbook and Readings

Textbook	CISSP Official Study Guide, Ninth Edition (Authors: Shon Harris, Fernando Maymi) ISBN-13: 978-1260467376 *Includes practice questions on electronic media*

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 consists of a series of multiple-choice questions.

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.

1. **Readings:** Below is the reading schedule you are responsible for completing. You are responsible for completing each of the readings (prior to answering the Weekly Reading Discussion Questions posted each Friday) before the Class Date:

Class #	Readings	Class Date
2	• CISSP Study Guide – Chapters 1 through 4	5/17
3	• CISSP Study Guide – Chapter 5 & 6	5/24
4	• CISSP Study Guide – Chapters 7 through 10	6/1
5	• CISSP Study Guide – Chapters 11 & 15	6/8
6	• CISSP Study Guide – Chapters 16 & 17	6/15
7	• CISSP Study Guide – Chapters 18 & 19	6/22
8	• CISSP Study Guide – Chapters 20 through 23	6/29
9	• CISSP Study Guide – Chapters 24 & 25	7/5

('*' indicates a change in class date due to holiday)

2. **Practice Quizzes:** Below is the schedule of Practice Exams schedule you are responsible for completing. You are responsible for completing each of the practice quizzes by Friday during the week:

Class #	Quiz Based On	Complete By Date
2	• CISSP Domain 1	5/22
3	• CISSP Domain 2	5/29
4	• CISSP Domain 3	6/6
5	• CISSP Domain 4	6/13
6	• CISSP Domain 5	6/20
7	• CISSP Domain 6	6/27
8	• CISSP Domain 7	7/3
9	• CISSP Domain 8	7/10

('*' indicates a change in class date due to holiday)

3. **Answers to Weekly Reading Discussion Questions:** Each Friday morning, you will find a post that includes several discussion questions about the coming week's readings. You will be expected to post your answer to one of the discussion questions on the week's readings by **Monday @11:59 AM.** A paragraph or two of thoughtful analysis is expected for your initial answer to the question. Post your answer to the weekly class assignment blog. You must come to class prepared to discuss all of these questions in detail when we meet.

Schedule for submitting answers to **Weekly Reading Discussion Questions**:

Class #	Assignment/Discussion Topics	Due
2	Cybercrime	5/16
3	Protecting Privacy	5/23
4	Security Engineering	5/30
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

('*' indicates a change in class date due to holiday)

Participation

Much of your learning will occur as you prepare for and participate in discussion about the course material. The assignments, cases, and readings have been carefully chosen to bring the real work 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.

Therefore, in addition to fulfilling your weekly assignment by actively participating in class and posting your answer to one of the reading discussion questions, each week you are also expected to participate in two other activities: 1) Comments on Weekly Reading Discussion Questions and Other Students Answers and 2) In the News articles:

1. **Comments on other student's answers and comments to weekly reading discussion questions:** Read the responses of others to the discussion questions and contribute at least **four** (4) substantive posts that include your thoughtful comments as you participate in the discussion of the questions. The posting of these additional **four** comments for most weeks is **Sunday @ 11:59pm**.

Below is the schedule for your submittals of **Comments on Weekly Reading Discussion Questions**:

Class #	Weekly Discussion Topics - Comments	Due
2	Cybercrime	5/22
3	Protecting Privacy	5/29
4	Security Engineering	6/5
5	Network Security	6/12
6	Identity & Access Management	6/19
7	Security Assessments	6/26
8	Business Continuity and Disaster Recovery Planning	7/3
9	Application Development Security	7/10
10	New Trends in Information Security	7/17
11	Incident Response	7/24
12	Review: Security Threat and Mitigations	7/31

2. **"In the News" Article:** Research, identify, write a summary, post a link to your summary, and be prepared to discuss in class an article you found about a current event in the Information Security arena. An ideal article would be tied thematically to the topic of the week. However, any article you find interesting and would like to share is welcome. The deadline for posting for most weeks is **Wednesday @ 11:59am**. Below is the schedule for your "*In the News"* submittals:

Class #	Topic of the Week	Due
2	Cybercrime	5/18
3	Protecting Privacy	5/25
4	Security Engineering	6/1
5	Network Security	6/8
6	Identity & Access Management	6/15
7	Security Assessments	6/22
8	Business Continuity and Disaster Recovery Planning	6/29
9	Application Development Security	7/6
10	New Trends in Information Security	7/13
11	Incident Response	7/20
12	Review: Security Threat and Mitigations	7/27

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

Below is the schedule for the Team Presentations:

Class #	Team Presentation Schedule	Due
3	Teams and topics assigned	
9	Draft presentation submitted	7/10
10	Presentations	7/19
11	Presentations	7/26

Exams

There will be three exams given during the semester.

Below is the Exam schedule:

Class #	Exam	Date
6	Domains 1-4	6/14
10	Domains 5-8	7/17
	Cumulative Exam (online)	8/2

All exams will consist of multiple-choice, fill in the blank and possible short answer questions. You will have a fixed time to complete the exam, and you will have only one attempt at each exam.

Exam 1 will occur during week 6, and Exam 2 will occur during week 10. In general, the first two exams will not be cumulative but focused on the course materials since the beginning of last exam. However, some concepts highlighted in class as important or a 'Core Principle' may appear on either or both exams.

A Cumulative Exam will be administered online, and will cover topics from both Exam 1 and Exam 2.

A missed exam can only be made up in the case of documented and verifiable extreme emergency situations. No make-up is possible for the Cumulative Exam.

Quizzes

After each domain of the CBK, there will be a quiz due during that week. We will review the quiz during the following class. The goals for these quizzes are twofold:
1. Help you identify areas requiring additional study and attention,
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 the course content. To facilitate learning the 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	Type
Friday	Instructor (me)	Post reading questions (Friday am)	
Monday 11:59am	Student	Post answers to reading questions	Assignment
Tuesday 5:30pm – 8:00pm	Both of Us	Class meeting	Participation
Wednesday 11:59am	Student	Post "In The News" article	Participation
Sunday 11:59 pm	Student	Complete Practice Quiz for the week.	

| Sunday 11:59pm | Student | Post 4 substantive comments to others' answers | Participation |
| Monday | Instructor | Post summary notes from prior week | |

Evaluation and Grading

Item	Weight
Quizzes	20%
Discussion Questions and Participation (in class / online)	20%
Team Presentation	25%
Exams	35%
	100%

Grading Scale			
94 – 100	A	73 – 76	C
90 – 93	A-	70 – 72	C-
87 – 89	B+	67 – 69	D+
83 – 86	B	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 91.5).

Criteria	Grade
The assignment consistently exceeds expectations. It demonstrates originality of thought and creativity throughout. 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 consistently meets expectations. It contains all the information prescribed for the assignment and demonstrates a command of the subject matter. There is sufficient detail to cover the subject completely but not too much as to be distracting. There may be some procedural issues, such as grammar or organizational challenges, but these do not significantly detract from the intended assignment goals.	B-, B, B+
The assignment fails to consistently meet expectations. That is, the assignment is complete but contains 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.	C-, C, C+
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 C-

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.

- Class Blog contributions cannot be turned in late. If you miss contributing prior to class for that week's discussion / questions you will receive no credit for it.
- The exercise assignments will be assessed **a 20% penalty** each day they are late. No credit is given for assignments turned in over five calendar days past the due date.
- 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.*

Citation Guidelines

If you use text, figures, and data in reports that were created by others you must identify the source and clearly differentiate your work from the material that you are referencing. If you fail to do so you are plagiarizing. There are many different acceptable formats that you can use to cite the work of others (see some of the resources below). The formats are not as important as the intent. You must clearly show the reader what is your work and what is a reference to someone else's work.

Plagiarism and Academic Dishonesty

All work done for this course: papers, examinations, homework exercises, blog posts, laboratory reports, oral presentations — is expected to be the individual effort of the student presenting the work.

Plagiarism and academic dishonesty can take many forms. The most obvious is copying from another student's exam, but the following are also forms of this:

- Copying material directly, word-for-word, from a source (including the Internet)
- Using material from a source without a proper citation
- Turning in an assignment from a previous semester as if it were your own
- Having someone else complete your homework or project and submitting it as if it were your own
- Using material from another student's assignment in your own assignment

Plagiarism and cheating are serious offenses, and behavior like this will not be tolerated in this class. In cases of cheating, both parties will be held equally responsible, i.e. both the student who shares the work and the student who copies the work. Penalties for such actions are given at my discretion, and can range from a failing grade for the individual assignment, to a failing grade for the entire course, to expulsion from the program.

Additional Information

Availability of Instructor	▪ Please feel free to contact me via e-mail with any issues related to this class. I will also be available at the end of each session. Please note that these discussions are to address questions/concerns but are <u>NOT</u> for helping students catch up on content they missed because they were absent.
	Note: I will respond promptly when contacted during the week
	▪ I am available to meet personally with you:
	  ✓ Immediately after class
	  ✓ During office hours
	  ✓ By appointment prior to class
	  ✓ By appointment by phone

Attendance Policy	▪ Class discussion is intended to be an integral part of the course. Therefore, full attendance is expected by every student. ▪ If you are absent from class, speak with your classmates to catch up on what you have missed.
Class Etiquette	▪ Please be respectful of the class environment. ▪ Class starts promptly at the start time. Arrive on time and stay until the end of class. ▪ Turn off and put away cell phones, pagers and alarms during class. ▪ Limit the use of electronic devices (e.g., laptop, tablet computer) to class-related usage such as taking notes. Restrict the use of an Internet connection (e.g., checking email, Internet browsing, sending instant messages) to before class, during class breaks, or after class. ▪ Refrain from personal discussions during class. Please leave the room if you need to speak to another student for more than a few words. If a student cannot refrain from engaging in private conversation and this becomes a pattern, the students will be asked to leave the classroom to allow the remainder of the students to work. ▪ During class time speak to the entire class (or breakout group) and let each person "take their turn." ▪ Be fully present and remain present for the entirety of each class meeting.

University Policies

TEMPLE AND COVID-19

Temple University's motto is Perseverance Conquers and we will continue to meet the changing circumstances of the COVID pandemic with flexibility and resilience. Working

together as a community to deliver a meaningful learning experience is a responsibility
we all share.

Attendance Protocol and Your Health

To achieve course learning goals, students must attend and participate in classes,
according to your instructors' requirements. However, if you feel unwell or if you are
under quarantine or in isolation because you have been exposed to the virus or tested
positive for it, you should not come to campus or attend in-person classes or activities. It
is the student's responsibility to contact their instructors to create a plan for participation
and engagement in the course as soon as they are able to do so, and to make a plan to
complete all assignments in a timely fashion, when illness delays their completion

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.

Student Support Services

The following academic support services are available to students: Student Success
Center University Libraries Undergraduate Research Support Career Center Tuttleman
Counseling Services Disability Resources and Services If you are experiencing food
insecurity or financial struggles, Temple provides resources and support. Notably, the
Temple University Cherry Pantry and the Temple University Emergency Student Aid
Program are in operation as well as a variety of resources from the Division of Student
Affairs.

Technology specifications for this course

Mac or PC-compatible computer, Word processor, Presentation software. (must be able to export to Office-formatted files), Internet access.

 ● Limited resources are available for students who do not have the technology they need for class. Students with educational technology needs, including no computer or camera or insufficient Wifi-access, should submit a Student Technology Assistance Application located in TUPortal and linked from the Dean of Students Support and Resources webpage. The university will endeavor to meet needs, such as with a long-term loan of a laptop or Mifi device, a refurbished computer, or subsidized internet access. Internet Essentials from Comcast provides the option to purchase a computer for $150 and high-speed Internet service for $9.95 a month, plus tax. The Emergency Broadband Benefit (EBB) is available to purchase Xfinity, Verizon, T-Mobile, and other internet services. Qualified households can receive a temporary monthly credit of up to $30/month toward their Internet service and leased Internet equipment until the program's funding runs out.

● On-campus computer labs have resumed normal operations and are available for student use.

● Note that there are technology resources available for students, including some software that is available for free download and other specialty software that may be available for remote access through ITS.

Code of Conduct Statement for Online Classes Online Behavior

The best way to maintain a safe and focused learning environment is for everyone to get vaccinated. Masking is optional in most campus spaces, but is still required in classrooms, labs, studios, healthcare facilities, shuttles or other locations where in-person classes (including examinations) are taking place. For your general health and well-being, hand washing and monitoring your health is still highly recommended.

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