

## MIS 5214 – Security Architecture Spring 2017

### Instructor

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Office hours: Mondays 12-2pm, and by appointment (in person, or via phone or WebEx)

### Class Locations and Times

Class blog: <http://community.mis.temple.edu/mis5214sec001sp2017/>

Section	Location	Day	Time
001	Classroom Alter 603	Monday	9:00-11:30 AM
701	Online –WebEx	Tuesday	5:30-8:00 PM

### Description

In this course you will study and learn about frameworks and methodologies for helping an organization: plan and develop its enterprise security architecture, align its IT security capabilities with its business goals and strategy, and how IT system security architectures and capabilities are assessed.

### Objectives

1. Learn key Enterprise Security Architecture concepts
2. Understand how information system security frameworks are used to develop and review enterprise information system security architectures
3. Learn how security architectures are planned, designed and operated
4. Develop an understanding of conceptual, logical, physical and component levels or security architectures and how they relate to one another
5. Gain an overview of how operational security is achieved and managed
6. Gain experience working as part of team, developing and delivering a professional presentation

### Textbook and Readings

- **Enterprise Security Architecture – A Business-Driven Approach**, 2005, John Sherwood, Andrew Clark and David Lynas, CRC Press – Taylor & Francis Group, ISBN: 978-1-57820-318-5
- Weekly reading articles and documents which will be identified and provided on the MIS5214 Community class web site from: National Institute of Standards and Technology (NIST), Federal Information Processing Standards (FIPS) Publications, Office of Management Budget (OMB), SANS and ISACA, and other sources.
- Harvard Business Publishing Course Pack available for purchase from:  
<http://cb.hbsp.harvard.edu/cbmp/access/58886942>

### Schedule

Week #	Topics	Section 001	Section 701
2	Introduction	1/23	1/24
3	Enterprise Architecture	1/30	1/31
4	Strategy & Planning - Contextual Security Architecture	2/6	2/7
5	Strategy & Planning - Conceptual Security Architecture	2/13	2/14
6	Design - Logical Security Architecture 1	2/20	2/21
7	Design – Logical Security Architecture 2	2/27	2/28
8	Mid-Term Exam	3/6	3/7
9	<i>Spring Recess</i>	3/13	3/14
10	Design – Physical Security Architecture 1	3/20	3/21
11	Design – Physical Security Architecture 2	3/27	3/28
12	Design – Component Security Architecture	4/3	4/4
13	Operations – Security Policy & Risk Management	4/10	4/11
14	Operations – Assurance Management, Admin and Ops	4/17	4/18
15	Team Project Presentations	4/24	4/25
16	Security Architecture Review	5/1	5/2
17	Final Exam	5/8	5/9

## Assignments

Weekly readings and weekly discussion questions will be posted on the class' MIS Community web site to help convey and illustrate fundamental concepts, facilitate thinking and class discussion. Your participation in the online and class discussions is important. Evaluation will be based on you consistently demonstrating your engagement with the material via your answers to questions and contribution to the online and in-class discussions. The **frequency** and **quality** of your contributions are equally important.

1. **Readings:** Each week you will be responsible for completing the readings assigned for the week prior to class and prior to answering the Weekly Reading Discussion Questions posted. Readings are located on the class web site under the menu: SCHEDULE -> First Half of Semester/Second Half of Semester -> Week#-Topic.

Be sure to check the list of readings for the week one week prior to each class for the updated reading list you are responsible for completing before answering the reading discussion questions and preparing to come to class.

2. **Answers to Weekly Reading Discussion Questions:** Each **Wednesday** you will find a post that includes several discussion questions about the coming week's readings. Post a paragraph or two of thoughtful analysis in your initial answer to one of the discussion questions by **Friday @11:59 PM**. Be sure to come to class prepared to answer and discuss all of the questions in detail when we meet.

## Participation

Much of your learning will occur as you prepare for and participate in discussion about the course material. 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. **"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 is by **Sunday @ 11:59 AM (i.e. noon)**.
2. **Comments on other student's: answers to weekly reading discussion questions:** Read the responses of others to the discussion questions and contribute at least three (3) substantive posts that include your thoughtful comments as you participate in the discussions. The posting of these additional three comments is due by **Sunday @ 11:59 AM (i.e. noon)**.

## Team Project

During Week #10, students will be organized into presentation development and delivery teams. Each team will be responsible for researching, developing and presenting a report on an assigned topic (e.g. system security plan for a cloud based enterprise information system.) Each member of the team will be responsible for a subsection of the report. The report will include diagrams illustrative of the architectural layering and content of the security architecture of the system. The team will develop and deliver a 15-minute presentation designed/planned and answer questions from the audience for an additional 5 minutes.

Below is the schedule for the Team Projects:

Week #	Team Presentation Schedule	Due 001	Due 701
10	Teams and topics assigned	3/20	3/21
11	Draft outlines submitted	3/27	3/28
12	Draft presentation submitted	4/3	4/4
14	Presentations	4/17	4/18
15	Presentations	4/24	4/25
16	Presentations	5/1	5/2

## Exams

There will be two exams given during the semester: Mid-Term and Final exams. Together these exams are weighted 30% of your final grade.

Below is the Exam schedule:

Week #	Exam	Date 001	Date 701
8	Mid-Term	3/6	3/7
17	Final	5/8	5/9

You will have a fixed time (e.g. 60 minutes) to complete the exam. Mid-Term Exam will occur during week 8's class, and Final Exam will occur during finals week. In general, the 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 missed exam can only be made up in the case of documented and verifiable extreme emergency-situation. No make-up is possible for Final Exam.

## 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
Wednesday	Instructor (me)	Post readings & reading questions	Assignment
Friday 11:59pm	Student	Post answers to reading questions	Assignment
Sunday 11:59am	Student	Post 3 comments to others' answers	Participation
Sunday 11:59am	Student	Post "In the News" article	Participation
Sec001Wed.9-11:30am Sec701 Tue. 5:30-8pm	Both of Us	Class meeting	Participation

## Evaluation and Grading

Item	Weight
Assignments	25%
Participation (in class and online)	20%
Team Project	25%
Exams	30%
	<b>100%</b>

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.

### Student and Faculty Academic Rights and Responsibilities

The University has adopted a policy on Student and Faculty Academic Rights and Responsibilities (Policy # 03.70.02) which can be accessed through the following link:

[http://policies.temple.edu/getdoc.asp?policy\\_no=03.70.02](http://policies.temple.edu/getdoc.asp?policy_no=03.70.02)

**Additional Information**

<b>Availability of Instructor</b>	<ul style="list-style-type: none"><li>▪ 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</li><li>▪ I am available to meet personally with you:<ul style="list-style-type: none"><li>✓ Immediately after class</li><li>✓ During office hours</li><li>✓ By appointment prior to class</li><li>✓ By appointment by phone</li></ul></li></ul>
<b>Attendance Policy</b>	<ul style="list-style-type: none"><li>▪ Class discussion is intended to be an integral part of the course. Therefore, full attendance is expected by every student.</li><li>▪ If you are absent from class, speak with your classmates to catch up on what you have missed.</li></ul>
<b>Class Etiquette</b>	<ul style="list-style-type: none"><li>▪ Please be respectful of the class environment.</li><li>▪ Class starts promptly at the start time. Arrive on time and stay until the end of class.</li><li>▪ Turn off and put away cell phones, pagers and alarms during class.</li><li>▪ 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.</li><li>▪ 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.</li><li>▪ During class time speak to the entire class (or breakout group) and let each person “take their turn.”</li><li>▪ Be fully present and remain present for the entirety of each class meeting.</li></ul>