

MIS 7381 Management of Information Security
Spring 2016: Tuesday 6-9PM
Room: 114 MH

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Office Hours

Course Focus

This course provides an introduction to the management of information security. Throughout the semester, we will be focusing on issues such as the following:

- Identifying and prioritizing the importance of security for an organization's information assets, considering profit, legal, and ethical issues.
- Identifying and prioritizing potential threats to an organization's information assets.
- Identifying models and techniques for managing and controlling an organization's information asset security
- Determining an effective information security strategy and architecture
- Planning for and responding to information system security incidents, including disaster recovery

Required Textbook and Materials

- Whitman, M.E. & Mattord, H.J. Management of Information Security, Fourth Edition, Course Technology, 2014, ISBN: 1-285-06229-9.
- Get copies of two Harvard cases: ChoicePoint (A): 9-306-001 and iPremier Co. (A): 9-601-114. The easiest way to get these is to put the following URL in your web browser:

<https://cb.hbsp.harvard.edu/cbmp/import/ptos/32495443>

You then need to register on the site to create a user name if you do not already have one. **MAKE SURE THAT YOU REGISTER AS A STUDENT.** You will have access to the two cases for 6 months. After you register, you can get to the cases at any time by doing the following:

1. Visit hbsp.harvard.edu and log in.
2. Click "My Coursepacks" and then click "Management of Information Security 2016"

Course Grades

A 90-100 B 80-89 C 70-79 D 60-69

Course Evaluation

Assignments (30%) There are 3 assignments, each worth 10%. Assignments are due at the beginning of the assigned class. Feel free to email assignments to me if you cannot make it to class. Assignments that are turned in up to one week late will earn a maximum of ½ credit. Assignments more than one week late are not accepted.

Participation (15%) A significant amount of learning occurs during class presentations and discussions. Therefore, students will receive a participation grade for each class meeting. Students who are absent will receive a zero for that class; students attending only a portion of a class period will receive a maximum participation grade equal to that portion. The two lowest grades will not be counted in determining the final participation grade.

Exam 1 (27%) You may bring notes on **one** 8 ½ x 11 sheet of paper to the exam.

Exam 2 (28%) You may bring notes on **one** 8 ½ x 11 sheet of paper to the exam.

Class Announcements/Assignments/Readings

Announcements, assignments, readings, etc. will be provided on the Blackboard Learn site for this class

Accommodations for Students with Disabilities

We would like to help students with disabilities achieve their highest potential in this class. To this end, in order to receive academic accommodations (e.g., for an exam), students must register with the Center for Students with Disabilities (CSD) (telephone 713-743-5400), at the beginning of the semester.

Professional Conduct and Academic Honesty

All students are expected to conform to the Bauer Code of Ethics and Professional Conduct (see <http://www.bauer.uh.edu/BCBE/BauerCode.htm>). In addition, the University of Houston Academic Honesty Policy is strictly enforced. No violations of this policy will be tolerated in this course. A discussion of the policy is included in the University of Houston Student Handbook at the following website: <http://www.uh.edu/dos/hdbk/acad/achonpol.html>. Students are expected to be familiar with the Bauer Code and the University of Houston Academic Honesty Policy.

Tentative Schedule

Date	Class Topic	Read PRIOR To Class	Assignment (to be turned in at the beginning of class)
January 19	Introduction: Overview of Information Security	<ul style="list-style-type: none"> Chapter 1 	
26	Identifying Important Information Assets	<ul style="list-style-type: none"> Chapter 8: pages 279- 290 ChoicePoint(A), focusing on Information Asset Identification 	
February 2	Laws and Ethics and the Importance of Information Assets	<ul style="list-style-type: none"> Chapter 12 ChoicePoint(A), focusing on Laws & Ethics 	
9	Technical Threats & Protection Mechanisms	<ul style="list-style-type: none"> Chapter 10 The iPremier Company(A), focusing on Technical aspects 	Assignment 1: CIAP (See Blackboard)
16	Personnel-Related Threats	<ul style="list-style-type: none"> Chapter 11: pages 426-440 ChoicePoint(A) and iPremier Company(A), focusing on Personnel-Related Threats 	
23	Assessing the Threats & Riskiness of Information Assets	<ul style="list-style-type: none"> Chapter 8: page 291-297 Microsoft Risk Prioritization Approach Summary Handout (See readings in Blackboard) HGA, focusing on Risk Prioritization (see readings in Blackboard) 	
March 1	Assessing the Threats & Riskiness of Information Assets Review for Exam	<ul style="list-style-type: none"> Microsoft Cost-Benefit Analysis Assessment Summary Handout (See readings in Blackboard) HGA Case, focusing on Cost-Benefit Analysis (see readings in Blackboard) 	
March 8	Exam 1		
15	Spring Break!!		
22	Risk Control Strategies	<ul style="list-style-type: none"> Chapter 9 	Assignment 2: To Be Announced (see Blackboard)
29	Security Programs	<ul style="list-style-type: none"> Chapter 5 Creation of a Hospital Information Security Department (see readings in Blackboard) 	
April 5	Security Policy	<ul style="list-style-type: none"> Chapter 4 Texas Information Security Policies (see readings in Blackboard) 	
12	Contingency Planning	<ul style="list-style-type: none"> Chapter 3 iPremier Company (A), focusing on Business Impact Analysis and Incident Response Plan 	
19	Security Management Audit Review for Exam	<ul style="list-style-type: none"> Chapters 6 & 7 iPremier Company (A), focusing on metrics 	Assignment 3: To Be Announced (see Blackboard)
26	To Be Determined		
May 10 6:00-9:00PM	Exam 2		

Understanding Information Assets, their Threats, and Protection

Weeks 1 & 2
(Chapter 1 and 8: 279-290)
Overview of information security (NSTISSC Model) & evaluating the importance of information assets

What are we trying to protect and why?

Week 3
(Chapter 12)
Understanding how laws and ethics affect the importance of information assets

Week 4
(Chapter 10)
Understanding technical threats & vulnerabilities and associated protection mechanisms

What can harm information assets & how can we protect them?

Week 5
(Chapter 11: 426-440)
Understanding the human aspects of security: threats & vulnerabilities and associated protection mechanisms

Weeks 6 & 7
(Chapter 8 page 291-297 and Microsoft Approach)
Determining degrees of threats, vulnerabilities, and mitigation in order to assess relative risk

How can we quantify information asset risk and associated protection?
How can we determine what controls to implement?

Week 9
(Chapter 9 and Microsoft Approach)
Quantifying, controlling, and managing risk

Planning & Organizing for Information Security in an Organization

Week 10
(Chapter 5)
Understanding elements of a security program, security department (and its placement), and SETA program.

Week 11
(Chapter 4)
Understanding how to develop security policy, standards, and practice guidelines

Week 12
(Chapter 3)
Understanding contingency plans: what they are, how to create them, and how to test them.

Week 13
(Chapters 6 & 7)
Developing & evaluating a security management program using accepted models and practices

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Management of Information Systems Security

Your grades will not be posted without your authorization. If authorized, the posting will be by the last 3 digits of your Student (PeopleSoft) ID. No names will be shown. In the event you do not want your grades posted, you may request your grades in person during office hours.

By signing either "yes" or "no" below, I (the student) affirm that I have read the syllabus and understand the policies and requirements of this course.

We need a definite YES or NO answer:

YES - I want my grades posted

NO - I do NOT want my grades posted

Printed Name

Printed Name

Student ID Number

Student ID Number

Signature

Signature

Date

Date

Please Tell Me A Little About You

If you are currently working, where do you work and what do you do?

What is your formal (e.g., classroom) and informal (e.g., hobby) background in information technology?

Do you have any formal background in Information Security?