The Management of Information Security
Spring 2019: Tuesday 6-9PM
Room: MH 116

Professor: R. Cooper
Office: 280B
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E-mail: rcooper@uh.edu (Rather than phone, e-mail is my preferred form of communication**.)**

Office Hours
 TBA

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
- Kim, D. and Solomon, M.G. (2018) *Fundamentals of Information Systems Security*, Third Edition, Burlington, Mass: Jones & Bartlett Learning. ISBN-13: 978-1284116458
- 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://hbsp.harvard.edu/import/601781
  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 "Information Security 2019"

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://publications.uh.edu/index.php?catoid=27 . Students are expected to be familiar with the Bauer Code and the University of Houston Academic Honesty Policy.
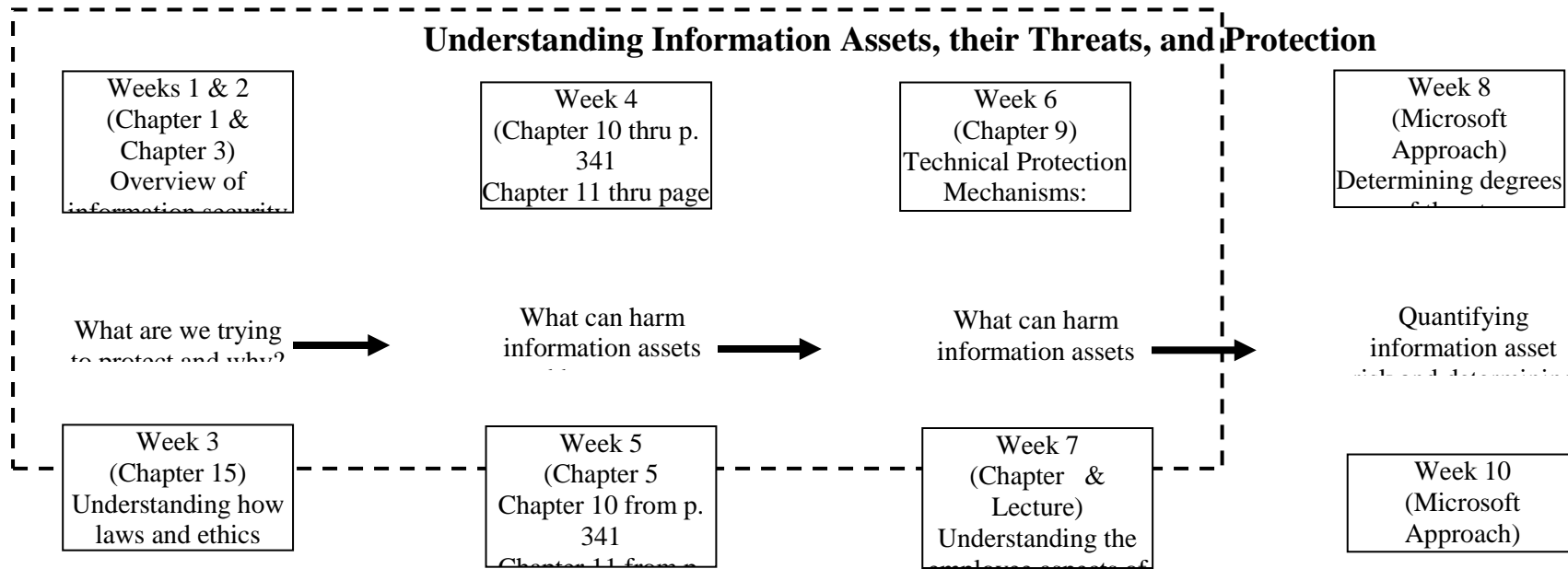
Counseling and Psychological Services (CAPS)
CAPS can help students who are having difficulties managing stress, adjusting to college, or feeling sad and hopeless. You can reach CAPS (www.uh.edu/caps) by calling 713-743-5454 during and after business hours for routine appointments or if you or someone you know is in crisis. Also, there is no appointment necessary for the "Let's Talk" program, which is a drop-in consultation service at convenient locations and hours around campus. http://www.uh.edu/caps/outreach/lets_talk.html .
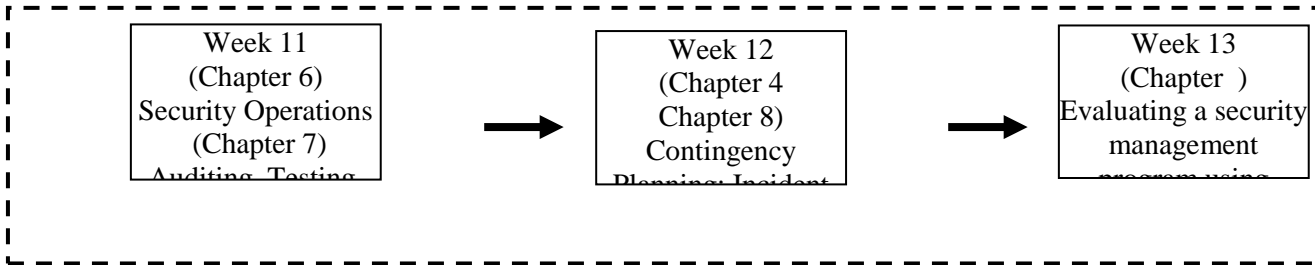
Tentative Schedule

Week	Date	Class Topic	Read PRIOR To Class	Assignment (to be turned in at the beginning of class)
1	January 15	Introduction	• Chapter 1	
2	22	Identifying Important Information Assets	• Chapter 3 • ChoicePoint(A), focusing on Information Asset Identification	
3	29	Laws and Ethics and the Importance of Information Assets	• Chapter 15 • ChoicePoint(A), focusing on Laws & Ethics	
4	February 5	Technical Threats & Vulnerabilities	• Chapter 10 ending at p. 341 • Chapter 11 ending at p. 387 •	
5	12	Technical Protection Mechanisms	• Chapter 10 starting at p. 341 • Chapter 11 starting at p. 387 • The iPremier Company(A), focusing on Technical aspects	Assignment 1: CIAP (See Blackboard)
6	19	Technical Protection Mechanisms: Cryptography	• Chapter 9	
7	26	Employee-related threats and vulnerabilities and associated protection mechanisms		
8	March 5	Quantifying relative risk Review for Exam	• Microsoft Risk Prioritization Approach Summary Handout (See readings in Blackboard) • HGA, focusing on Risk Prioritization (see readings in Blackboard)	
	12	*Spring Break!!*		
9	**March 19**	**Exam 1**		
10	26	Cost-Benefit Analysis	• Microsoft Cost-Benefit Analysis Assessment Summary Handout (See readings in Blackboard) • HGA Case, focusing on Cost-Benefit Analysis (see readings in Blackboard)	Assignment 2: To Be Announced (see Blackboard)
11	April 2	Security Operations	• Chapter 6 • Chapter 7	
12	9	Contingency Planning	• Chapter 4 • Chapter 8 • iPremier Company (A), focusing on Business Impact Analysis and Incident Response Plan	
13	16	Evaluating a security Program	•	
14	23	To Be Determined Review for Exam	•	Assignment 3: To Be Announced (see Blackboard)
15	**May 7 6:00-9:00PM**	**Exam 2**		

Understanding Information Assets, their Threats, and Protection

Weeks 1 & 2 (Chapter 1 & Chapter 3) Overview of information security	Week 4 (Chapter 10 thru p. 341 Chapter 11 thru page	Week 6 (Chapter 9) Technical Protection Mechanisms:	Week 8 (Microsoft Approach) Determining degrees of threat

What are we trying to protect and why? → What can harm information assets → What can harm information assets → Quantifying information asset risk and determining

Week 3 (Chapter 15) Understanding how laws and ethics	Week 5 (Chapter 5 Chapter 10 from p. 341 Chapter 11 from p.	Week 7 (Chapter & Lecture) Understanding the employee aspects of	Week 10 (Microsoft Approach)

Week 11 (Chapter 6) Security Operations (Chapter 7) Auditing, Testing	Week 12 (Chapter 4 Chapter 8) Contingency Planning: Incident	Week 13 (Chapter) Evaluating a security management program using

Planning & Organizing for Information Security in an Organization

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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 <u>in person</u> 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?