University of the Incarnate Word

SYLLABUS/COURSE OUTLINE

Logistics

University of Incarnate Word, ADCaP Course: BINF4340 Information Security

Prerequisite: BINF2321 Term: Fall 1, 2015 Instructor: Priscila Fiala

Contact information: pfiala@uiwtx.edu

<u>Make sure to read this COURSE SYLLABUS carefully</u>. It highlights expectations for this course, and also provides answers to FAQ questions. The COURSE OUTLINE contains important information on assignments and its due dates. *If you foresee a problem, or need help, etc., notify me as soon as possible BEFORE the deadline.*

This course is eight weeks long. Participation and discussion is critical to your successful completion of this class and will have a major bearing on your final grade.

UIW Online week refers to the span of seven days from Monday to Sunday. All homework assignments are due by 11:59pm central time, Sunday of the week indicated on the course outline. All homework assignments must be turned in by the designated due date or a grade of Zero (0) will be issued. If you encounter any other problems with meeting a given deadline, contact me right away and the situation will be evaluated on an individual basis. Quizzes, midterm and final exam have a different due time and date.

Please plan on reading the **ANNOUNCEMENTS** area a couple of times a week. Each week may have a general announcement to start, but if I have anything that you all need to know comes up, I will post it there.

You will find small lectures and PowerPoint presentations in the WEEK CLASS NOTES link.

I. Overview of the Course

This course is designed to develop knowledge and skills for security of information and information systems within a business environment. It includes concepts and methods associated with people, software, hardware, methodologies and protocols. The course presents techniques for assessing risk associated in breaches of security. It covers different ethical uses of information and some legal considerations.

- **A.** Cognitive Elements / Thematic Expectations / Skills Developments
 - 1. Demonstrate knowledge of the fundamental disciplines of business.
 - 2. Develop a sound understanding of the basic operation and limitations of common information safeguards

- 3. Develop a sound understanding of the broad framework of information security and privacy
- 4. Define an information security strategy and architecture
- 5. Present a disaster recovery plan for recovery of information assets after an incident
- 6. Demonstrate the ability to proficiently use technology to support analysis and decision making skills.
- 7. Demonstrate the ability to think critically and to communicate complex ideas.
- B. Requirements essential to the course
 - 1. Ability to utilize on-line communication tools
 - 2. Good reading comprehension ability
 - 3. Use of basic productivity software
- C. Research tools essential to the course
 - 1. WWW and internet research skills

II. Outcomes of the Course

- 1. Demonstrate knowledge of the fundamental disciplines of business, information security, disaster recovery, cryptography, and ethical, legal and privacy issues.
- 2. Demonstrate the ability to proficiently use technology to support analysis and decision making skills.
- 3. Demonstrate the ability to think critically and to communicate complex ideas.

III. Assessments for EACH Outcome of the course

- A. Instructor designed examinations evaluating objective and applied concepts.
- B. Applied technology-based assignments, short paper and presentation.
- C. Subjective evaluation of in class and/or on-line discussion and participation and written short papers.

IV. Course Texts/Supplies/Materials

Principles of Computer Security CompTIA Security+ and Beyond (Conklin/White 2010)

COURSE REQUIREMENTS:

A. EXAMINATIONS:

There will be a total of five quizzes. Quizzes will account for 25% (5% each) of your final grade. All quizzes can be accessed for viewing/printing as many times as you wish until the due date or submission of exam. There will be one midterm, which will account for 20% of your final grade. The midterm will be released on week four.

B. HOMEWORK

There will be one assigned work at the beginning of the course. This work will count for 5% of your final grade. No late work is accepted!

C. DISCUSSION

The weekly discussion will count for **30%** of the total grade. Discussion questions will be posted at the beginning of each week (Monday). Each student will be expected to research, read, and share facts or their opinions – depending on the nature of the questions. You must submit your first discussion contribution by Wednesday of the given week. You should then reply to someone else's posting. Late discussions will be deducted 10 points.

Discussion does not mean just answering the question or agreeing with another classmate. It means taking part in the give-and-take of communications to learn different points of view. If you do all of your discussion contribution towards the end of the week you will only get half of the allotted points. Let me remind you, Discussion is worth 30% of your final grade, failure to respond to discussion WILL have a serious impact on your grade and success of passing the course. Discussion area closes for the week at 11:59 pm Central on Sunday. I ask for only 3 meaningful comments from you each week. Your first response should be approximately three paragraphs in length (minimum 250 words). The other two responses should be approximately two paragraphs in length (100 – 150 words). The first comment should be in response to the question(s) I pose for the week. The remaining will be to a fellow classmate's comments in the discussion. With this method we can get a very good dialogue for the week. I will keep track of your discussion participation, your follow-up to other comments and the insightfulness you use in the discussion. Remember, the first posting is due by Wednesday of a given week. Prompt posting, by Wednesday, of your initial response will provide everyone the opportunity to respond and it gives us time to fully explore the topic.

D. FINAL PROJECT

The final project will account for **30%** of the total grade. Details about the final project will be released at a later date.

TOTAL POINTS: 100% (Homework 5% + 5 quizzes 25% + Midterm 10% + Discussion 30% + Final Project 30%)

GRADING:

Your course grade will depend on the weighted average of the quizzes, two exams and the assigned work. It will be graded as follows:

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A (100-93%), A- (92%-90%)
B+ (89%-87%), B (86%-83%), B- (82%-80%)
C+ (79%-77%), C (76%-70%)
*D+ (69%-67%), D (66%-63%), D- (62%-60%)
*F (below 60%)
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^{*} All of our discussion and person-to-person contact will be done through the website to maintain the integrity of the learning process. Questions or comments regarding grades or other personal matters should be sent directly to me.

DISABILITY ACCOMMODATIONS:

The University of the Incarnate Word is committed to providing a supportive, challenging, diverse and integrated environment for all students. In accordance with Section 504 of the Rehabilitation Act – Subpart E and Title III of the Americans with Disabilities Act (ADA), the University ensures accessibility to its programs, services and activities for qualified students with documented disabilities.

For more information, contact: Student Disability Services Administration Building, Suite 105 Ph. (210) 829-3997 Fax (210) 829-6078

Website: http://www.uiw.edu/ada/

*Information listed above is contact information for Student Disability Services' Academic Counselor, Michelle Beasley.

ACADEMIC HONESTY STATEMENT:

The highest standards of academic honesty are expected in the course. Forms of academic dishonesty include, but are not limited to cheating, plagiarism, counterfeit work, falsification of academic record, unauthorized reuse of work, theft, collusion. See the student handbook for definitions and procedures for investigation of claims of academic dishonesty.

IMPORTANT "DROP COURSE" INFORMATION:

It is the student's responsibility to drop their course within the 100% refund period to avoid assessment of tuition and fees. There will not be a university-initiated drop for non-participation. If you do not plan to attend, you must drop your courses by Friday at 5pm of the first week of the term to be within the 100% refund period. You may do so by visiting http://online.uiw.edu/dropwithdrawal-policy. A \$50 administrative fee is applied for all drops from courses offered through the UIW Online.

ARMY Students must drop their course(s) through GoArmyEd and the drop fee will be waived.

NEXT SECTION: OUTLINE

COURSE OUTLINE

Each week you will notice a number in parenthesis. This is the Alternative Learning Equivalency for this course. It is an expectation for the minimum amount of time (hours) you will spend on each topic each week.

Sections	Homework/Case/Research
Week One	Read Course Syllabus
Introduction and Security Trends	Read Assigned Sections
General Security Concepts	Review Presentations (3.0)
Operational and Organizational Security	Required introductory response (0.5)
The Role of People in Security	Required discussion participation (3.0)
	Homework: Lab Project 4.1 and Project 4.2 -
	This homework is to be submitted in a Word
	file (This homework will be due by the end of
	week 2 – start researching now).
Week Two	Read Assigned Sections
Cryptography	Review Presentations (2.0)
Public Key Infrastructure	Required discussion participation (2.5)
Standards and Protocols	Quiz 1 (1.0)
Week Three	Read Assigned Sections
Physical Security	Review Presentations (2.0)
Network Fundamentals	Required discussion participation (2.5)
Infrastructure Security	Quiz 2 (1.0)
Week Four	Read Assigned Sections
Authentication and Remote Access	Review Presentations (2.0)
Wireless Security	Required discussion participation (2.5)
 Intrusion Detection Systems and Network Security 	Midterm (2.0)
Week Five	Read Assigned Sections
Baselines	Review Presentations (2.0)
Types of Attacks and Malicious Software	Required discussion participation (2.5)
E-Mail and Instant Messaging	Quiz 3 (1.0)
Week Six	Read Assigned Sections
Web Components	Review Presentations (2.0)
Secure Software Development	Required discussion participation (2.5)
Disaster, Recovery, Business Continuity,	Quiz 4 (1.0)
and Organizational Policies	
Week Seven	Read Assigned Sections
Risk Management	Review Presentations (2.0)
Change Management	Required discussion participation (2.5)
Privilege Management	Quiz 5 (1.0)

Week Eight	Review Presentations (2.0)
Computer Forensics	Required discussion participation (2.5)
Legal Issues and Ethics	Final Project (2.0)
Privacy	

Keep in mind: If you do have questions at any time, ask!

Wishing everyone a great term! Priscila