Section I

INTRODUCTION TO INFORMATION ASSURANCE
Management in Information Systems
IS 401 \ 501
Fall 2010
(August 18th through December 1st)

General Course Information:

Instructor Contact Information	Co-Instructor Contact Information
Jeremy Conway	**Paul E. Clark**
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Class Room: BAB, Room 214	**Days: Wednesday** **Times: 05:30 to 08:20 PM**

Prerequisites:
While no specific course pre-requisites are prescribed for this course, it is understood the student understands basic business functions and has some background in information technology and computer literacy.

Resources:

(Optional) *Text: Principles of Information Security, 3rd ed. Whitman & Mattord, © 2009 Course Technology,ISBN-10: 1423901770 | ISBN 13: 978-1-4239-0177-8*

Course Objectives

After completing the course, students will be able to:

- Understand & apply basic principles of Information Security (INFOSEC)
- Understand the purpose and difference between the components of a Continuity Of Operations Plan (COOP): an Incident Response Plan (IRP), Disaster Recovery Plan (DRP), and Business Continuity Plan (BCP)
- Identify information assets & threats to information assets.
- Prioritize through risk management techniques to protect information assets
- Describe legal and public relations implications of security and privacy issues.
- Analyze Business Impact to an enterprise for network security based on risk management and control techniques
- Demonstrate task management of an Information Assurance related project to the Level 2 Work Breakdown Structure (WBS) through the use of MS Project.
- Implement Network & Host-based hardening techniques
- Comprehend tools and techniques associated with host & network analysis

Learning Outcomes:
As a result of completing this course, students will be able to:

- Describe threats to information security
- Explain information security best practices based on International Standards Organization (ISO) and National Institute of Technology and Standards (NIST)
- Describe the need for and development of information security policies
- Define risk management and risk control strategies.
- Describe the plans that make up a Continuity of Operations Plan (COOP) and difference between each.
- Conduct a Business Impact Analysis related to network security
- Perform basic security administration for operating system hardening and data protection; Access Control Lists and User Account administration
- Develop a WBS in MS Project and assign resources
- Perform rudimentary risk analysis through the use of network monitoring tools on a Host computers and network devices.
- Familiarization with the use of Virtual Machine technologies

E-Mail
All students possess an UAH e-mail account. The UAH e-mail accounts will be the primary e-mail exchange between student and instructor. If you have any questions about the course or need assistance, please contact me in person or by telephone during office hours; or by e-mail at any time.

Grading and Evaluation Criteria

MIS 501 Graduate Students		MIS 401 Undergraduate Students	
Mid Term (10%) Final Exam (20%)	30 %	Mid Term (10%) Final Exam (20%)	30 %
Labs	30 %	Labs	30 %
Class Attendance & Participation, Opinion Papers (2)	10 %	Class Attendance & Participation	10 %
Group Project		Group Project	
Abstract & Research Paper	25 %	Abstract & Research Paper	25 %
Student Presentation	05%	Student Presentation	05%
TOTAL	100 %	TOTAL	100%

Section II: COURSE POLICIES

Grading Scale: There is no curve used in assigning grades. The following scale is used:

> or = 90%	A
80 to 89%	B
70 to 79%	C
60 to 69%	D
= or < 59%	F

Course Withdrawal: UAH policies will be followed.

Academic Honesty Agreement: By enrolling and continuing in this course, you affirm that you will not at any time be involved in cheating, plagiarism, fabrication, misrepresentation, or any other form of academic misconduct as outlined in the UAH Student Handbook while you are student in this course. You understand that violating this promise will result in penalties as severe as indefinite suspension from UAH. Your continued participation is an implicit acceptance of this agreement.

Class Attendance: Students are expected to attend and PARTICIPATE in all classes\labs noted in Section II, Course Outline of this syllabus. If you are going to be absent, please notify me one class period prior, so make up work can be assigned.

Section III: Course Outline

Date DD\MMM 2010 (Wednesday)	Topics	Lecture References	Notes
18 Aug	Syllabus Review Class Project Guidance Group Assignments **Lab #1: Introduction to Lab Environment (Virtual Box)**		
25 Aug	Introduction to Information Security MS Project 2007 Overview **Lab #2: Research Project Plan**	**Text Chapters 1, 2, & 10**	
01 Sep	Planning for Security BCP\DRP\IRP **Lab #3: Feasibility Analysis Matrix (FAM)**	**Text Chapter 5 & 8**	Project Abstracts Due
08 Sep	Risk Management & Access Control **Lab #4 – Password Cracking Lab**	**Text Chapters 1, 4, 7**	
15 Sep	Protection Mechanisms **Lab #5 –Access Control Lists (ACLs) & File Permissions**	**Text Chapter 1, 6. 7 & 8**	Opinion Paper #1 Topic Assigned
22 Sep	Web Security Law & Ethics Due Diligence\Due Care **Lab #6: Web Security Lab**	**Text Chapter 3 & 6**	
29 Sep	Network Analysis – Tools & Techniques **Lab #7 – Network Analysis, Part I**	**Text Chapter 7 &12**	Opinion Paper #1 due
06 Oct	FALL BREAK – NO CLASS		
13 Oct	Passive OS and Service Identification **Lab #8 – Network Analysis, Part II**		Opinion Paper #2 Topic Assigned
20 Oct	Security Metrics Information Security Program Management	**Text Chapter 10, 11, & 12**	
27 Oct	Open Source Reconnaissance (Scanning) **Lab #9 – Open Source Reconnaissance-Lab**	**Text Chapter 12**	

03 Nov	Network Attack Techniques **Lab #11 Offensive Techniques**	**Text Chapter 2 & 12**	Opinion Paper #2 due
10 Nov	**Final Exam Review**		Research Paper Due
17 Nov	**Student Presentations**		MS Project Reports Due
24 Nov	NO CLASS OBSERVANCE OF THANKSGIVING HOLIDAY – BE SAFE		
01 Dec	Final Exam		

Note: As an instructor and part time employee of UAH, I will be available to you on Wednesdays from 5:30 to 8:20 P.M. Additionally, outside these classroom\lab hours, I am available for clarification of course requirements and\or student expectations via e-mail or cell phone. I want to ensure your success in this course, so please feel free to contact me and discuss any items of concern.

Section IV MIS 501 Project Requirements

Purpose: Your class Security Project's purpose demonstrates the student's understanding of concepts presented in this course and shows his/her ability to research a current Information Technology Security topic, gather and analysis relevant data, and draw a solution oriented conclusion. This process synopsis will be demonstrated in the forms of an one page abstract, a 12 to 15 page research paper, and a 12 to 15 minute oral presentation.

Abstract: The project abstract will be no longer than one double spaced typed page summarizing your topic and relevancy to information security. The intent of the abstract is to achieve instructor approval for your project and ensure scope can cover project purpose stated above.

Research Paper Requirements: All research papers will be Times New Roman Font, 12 pitch, double-spaced with one inch margins. Page count should be between 12 to 15 pages, single sided fastened together. All papers will include a cover page and a bibliography of at least 5 different sources; of which, 3 sources are Academic quality. References provided on the UAH Angel course homepage as Course Resources are encouraged for use. Cover page and bibliography are **NOT** included in the 12 to 15 page count for the paper.

Oral Presentation Requirements: Each team will provide a 15 minute presentation on their research findings. Each team member should have a speaking part. All main points and concluding findings documented in your research paper should be covered with relevancy to class content.

Project Grading Criteria: Research papers will be graded on use of concepts in the class, technical accuracy, and feasibility of solution.

(MIS 501 Students Only): *Graduate students will have the additional requirement of documenting their opinions on two current and controversial security related topics provided by the instructor. These opinion papers will be double spaced, Times New Roman Font of 12 pitch, 1" margins, and at least one page long, but no longer than two pages in length.*