



### Department of Information Systems School of Business Administration, College of Business and Public Affairs, Morehead State University

# CIS 322 Security and Information Assurance (Spring 2012)

## **Instructor Information**

Name: Euijin Kim, Ph.D.
Office: Combs 114C
Phone: 606) 783-9357

Email: e.kim@moreheadstate.edu

Office Hours: Monday, Wednesday 2:00 – 5:00

## **Course Information**

An overview of information systems security, with applications. The course emphasizes methods for the management of information security through the development of policies, procedures, audits, and logs. It also addresses threats, risks, and vulnerabilities, emerging technologies in areas like smart cards, digital signatures, and biometrics, and methods for the analysis of legal, ethical, and privacy issues in information systems.

Upon successful completion of this course, students should be able to:

- Identify and prioritize information assets
- Identify and prioritize threats to information assets
- Define an information security strategy and architecture
- Plan for and respond to intruders in an information system
- Describe legal and public relations implications of security and privacy issues
- Present a disaster recovery plan for recovery of information assets after an incident

## **Class Materials**

The main textbook for this course is

**Principles of Information Security** (**4**<sup>th</sup> **ed.**) by Michael E. Whitman and Herbert J. Mattord, Course Technology (CENGAGE Learning), 2012.

Other course materials will be provided by the instructor when they are necessary. These include, but not limited to, lecture notes, video lectures, etc.

Library materials (e.g., journal articles, books, etc.) are also to be used so that students should have Internet access.

## **Teaching Methods and Evaluation**

This is an online course so that it depends heavily on students' honest efforts (i.e., reading the textbook and other provided materials and completing assignments and exams honestly on time). The instructor will do his best to provide efficient learning experience, but students' active involvement is critical. Every week, a set of instructions for the week will be provided, and students are expected to follow it to study what is assigned.

Periodically written assignments will be given to evaluate students' mastery of the course. Diligent reading of the textbook will help students complete the assignments successfully. Students' understanding of the concepts and technologies will be evaluated with a series of written exams. The MSU Blackboard course website will be used as a channel. Each exam will include multiple-choice questions as well as other types (e.g., True-False questions).

Participation will be assessed with the Discussion Board forums. This course includes three forums, and each student should post at least one contribution to each forum. More information on how to contribute to the forums will be provided as scheduled.

Comprehensive achievement of each student will be tested by a term project. For the project, a student will have to apply all the knowledge and skills he/she learns in this course. The project will be evaluated according to the two main guidelines: content (how well a student understands the concepts and technologies) and presentation (how well a student explains them in a complete and concise manner) and more detailed instructions will be provided later in the semester.

The activities shown in the following table will be used to provide the final grade.

Category	Points Percentage
Exams	30%
Assignments	20%
Participation (Discussion Board)	25%
Project	25%
Total	100%

## **Required Field Experience Hours:** None for this course.

The total points earned will be used to provide a student's final grade. For instance, if a student gets 90% of the total points or more, the grade will be an A; less than 90% but 80% or more, a B; less than 80% but 70% or more, a C; less than 70% but 60% or more, a D. If a student gets less than 60%, the grade will be an E (failure).

**Campus Safety Statement:** For the in-class courses, emergency response information will be discussed in class. When students stay on campus, they should familiarize themselves with the nearest exit routes in the event evacuation becomes necessary. You should notify your instructor at the beginning of the semester if you have special needs or will require assistance during an emergency evacuation. Students should familiarize themselves with emergency response protocols at <a href="https://www.moreheadstate.edu/emergency">www.moreheadstate.edu/emergency</a>.

**Academic honesty:** Cheating, fabrication, plagiarism or helping others to commit these acts will not be tolerated. Academic dishonesty will result in severe disciplinary action including, but not limited to, failure of the student's assessment item or course, and/or dismissal from MSU. If you are not sure what constitutes academic dishonesty, read *The Eagle: Student Handbook* or ask your instructor. The policy is located at http://www2.moreheadstate.edu/dsl/eaglehandbook/?id=1028 (p. 11 and 39). For example, copying information from the Internet is plagiarism if appropriate credit (i.e., citation) is not given.

Policy for Accommodating Students with Disabilities: Professional staff from MSU Academic Services Center (ASC) coordinates efforts to address accessibility needs and class accommodations with instructors of students who have learning or physical disabilities. Faculty will cooperate with the ASC staff to accommodate the needs of students taking departmental courses.

**Policy on Late Submission and Missing Exams or Quizzes:** Assignments which are submitted after the due date will not be accepted. Makeup exams or quizzes will not be given in any circumstances. The only exception is when an official document with authoritative signature is provided. Students can get official documents from the MSU Academic Services Center.

**Technology Requirements**: Students will need access to a personal computer and Internet (WWW) connection with electronic mail. For more information on technology requirements for online courses, students should refer to the MSU Information Technology website (http://www.moreheadstate.edu/it/).

## **Conceptual Framework**

(For Teacher Preparation Students)

## Community Engagement: A Light to and from the Mountains

The Professional Education Unit at Morehead State University delivers rigorous, high quality programs that prepare professionals informed by best national and international scholarship, plus research, literature, and experiences specific to Appalachia- preparing professionals to improve the schools, quality of life, and the communities in which they live and serve. This statement is not only the strategic mission for the College, but it also incorporates the conceptual framework that guides all our activities.

## Conceptual Framework Outcomes (CFO's):

The Unit and the faculty within individual programs assess the degree to which its graduates:

- 1) Master the content knowledge, professional and the twenty first century skills need to make an optimal contribution to "whole" student learning in education settings.
- 2) Are competent in the collection and use of data to inform decision making and to demonstrate accountability for student learning.
- 3) Demonstrate professional dispositions
- 4) Are culturally competent and understand the regions from which they have come utilizing knowledge and experiences to effectively "bridge the gaps" (economic, achievement, and geographic) ensuring optimal learning for all students.
- 5) Engage in authentic field experiences in collaboration with committed school based partners and are empowered to improve the quality of education throughout this region and beyond.

#### NCATE/ EPSB Accreditation Alignment of SLO's and CFO's

#### Program: Business and Marketing Education, Grades 5-12, Security and Information Assurance Aligned with → Kentucky Kentucky **Kentucky Core** Education National Teacher Education Academic **Professional Business Standards Reform Act Standards** Standards **Education** (KYS) (KERA) (KCAS) Board Association (EPSB) Diversity, Textbook/ 2.14 - 2.201, 2, 4, 5, 6 Career assessment, All content areas **Ancillary** Awareness, literacy, **Materials** Employability achievement **Review** Skills gap, technology Career Diversity, Content 1, 2, 4, 5, 6 2.14 - 2.20Awareness, assessment, All content areas **Enhancement** Employability literacy, Skills achievement

	Program: Business and Marketing Education, Grades 5-12, Security and Information Assurance				
Aligned with →	Kentucky Teacher Standards (KYS)	Kentucky Education Reform Act (KERA)	Kentucky Core Academic Standards (KCAS)	Education Professional Standards Board (EPSB)	National Business Education Association
				gap, technology	
Technology Usage	6	2.14 – 2.20	Communication/ Technology	Technology	All content areas
Professional Preparation	8	2.14 – 2.20	Career Awareness, Employability Skills	Diversity, assessment, literacy, achievement gap	All content areas

# **Temporary Schedule\*\*\***

Week	Contents	Reading
1	Introduction	Chapter 1
2	The Importance of Security	Chapter 2
3	Legal and Ethical Issues in Information Security	Chapter 3
4	Risk Management	Chapter 4
5	Review Exam 1	
6	Security Planning	Chapter 5
7	Firewalls and VPNs	Chapter 6
8	Other Security Tools	Chapter 7
9	Cryptography	Chapter 8
10	Review Exam 2	
11	Physical Security	Chapter 9
12	Information Security Implementation	Chapter 10
13	Security and Personnel	Chapter 11
14	Information Security Maintenance	Chapter 12
15	Review Exam 4	
16	Project Workshop	
17	Final	

<sup>\*\*\*</sup> The instructor reserves the right to change any portion of this syllabus at any time.