

COURSE SYLLABUS

COM 656: Management of Information Security

Course Description

This course focuses on the managerial aspects of information security and assurance. Topics covered include access control models, information security governance, and information security program assessment and metrics. Coverage on the foundational and technical components of information security is included to reinforce key concepts. The course includes up-to-date information on changes in the field, such as national and international laws and international standards like the ISO 27000 series.

General Course Information

| | |
|--|---------------------|
| Number of Units/Weeks/Sessions | 5/5/10 |
| #Hours Lecture/#Hours Laboratory/#Hours HWs* | 50/0/100 |
| Prerequisite(s) | None |
| Co-requisites (s) | None |
| Course Developer(s) | Mark A Peterson, MS |
| Date Approved / Last Review | Jun 2012 / Jun 2014 |

*Homework Projects

MSISM Program Learning Outcomes

- Develop Detailed Business Plans Including Budgets
- Propose an Information Technology Security Plan for a Global Business
- Construct a Human Resources Strategic Plan

Learning Outcomes

- Distinguish management responsibilities and information assurance principles and practices of security
- Assess methods, measures and mechanisms used to protect systems, data and personnel
- Evaluate the risk management process
- Formulate policy and standards to improve information security
- Manage business restitution planning, including continuity planning, contingency planning and disaster recovery planning

Instructional Methods Employed in this Course

- Lecture and reading assignments
- Research
- Student presentations
- Team Environment
- Practical application of theory and skills in authentic design projects
- Build on prior knowledge and experience of students to enhance richness of class activities

Information Resources for this Course



Textbook

Michael E. Whitman, Herbert J. Mattord, Management of Information Security, Third Edition. Course Technology, Cengage Learning, 2011, ISBN-13 978-1435488847.



Other Materials

NIST SP 800-26, Security Self-Assessment Guide for Information Technology Systems and ISO 27002 Questionnaire.

(2000). A Guide to Project Management Body of Knowledge (PMBOK). Project Management Institute.



Web Site Readings

The ISO 27000 Directory
<http://www.27000.org>
(Retrieved April 27, 2012)

MITRE Corporation. Common Vulnerabilities and Exposures.
<http://cve.mitre.org>
(Retrieved April 27, 2012)

Black Ice Software. Home Page.
<http://www.blackice.com> (Retrieved April 27, 2012)

Carnegie Mellon University Software Engineering Institute. Home Page.
<http://www.cert.org>
(Retrieved April 27, 2012)

McAfee, Inc. Foundstone Home Page.
<http://www.foundstone.com/>
(Retrieved April 27, 2012)

Tech Target. Information Security Magazine.
<http://www.infosecuritymag.com/>
(Retrieved April 27, 2012)

SANS Institute. Home Page.
<http://www.sans.org/> (Retrieved April 27, 2012)

SC Magazine. Home Page.

<http://www.scmagazineus.com/>
(Retrieved April 27, 2012)

Security Focus. Home Page.
<http://www.securityfocus.com/>
(Retrieved April 27, 2012)

Table/Topics & Assignments

Types of Assignments:

Lecture -

Considered Lecture Hours

Classroom Discussion -

Considered Lecture Hours

In Class Critique -

Considered Lecture Hours

Delivering Oral Presentations -

Considered Lecture Hours

In Class (IC) Exercise -

Considered Lecture Hours

Reading -

Considered Homework (HW), work done outside of class

WebClass lesson (non-online courses) –

Considered HW, work done outside of class

Lab Work -

Considered Lab Hours

Quiz, Midterm or Final -

Considered Lecture Hours

| Session 1 | | | | | | |
|-----------------|--|----------|----------|---------|-------------|-----------|
| Type | Topic/Description | LEC Time | LAB Time | HW Time | Point Value | Due |
| LEC | Course Introduction | 1 | 0 | 0 | 0 | |
| LEC 1A | Introduction to the Management of Information Security | 1 | 0 | 0 | 0 | |
| LEC 1B | Law and Ethics | 1 | 0 | 0 | 0 | |
| IC EX 1A | Student Security Assessment Quiz | 0.5 | 0 | 0 | 0 | |
| IC EX 1B | Pair-share Articles | 1 | 0 | 0 | 0 | |
| IC EX 1C | Discussion Thread 1 | 0 | 0 | 0 | 50 | |
| HW 1A | Read Chapters 1 & 12 | 0 | 0 | 7 | 0 | |
| HW 1B | Weekly Thesis Assignment 1 | 0 | 0 | 10 | 25 | Session 3 |
| HW 1C | Individual Assessment Project | 0.5 | 0 | 3 | 50 | Session 8 |
| HW 1D | Curricular Practical Training Activity | 0 | 0 | 10 | 80 | Session 8 |
| IC EX 1C | In-class Participation | 0 | 0 | 0 | 10 | Session 1 |
| Total Session 1 | | 5 | 0 | 30 | 215 | |
| Session 2 | | | | | | |
| Type | Topic/Description | LEC Time | LAB Time | HW Time | Point Value | Due |
| LEC 2A | Planning for Security | 1 | 0 | 0 | 0 | |
| LEC 2B | Planning for Contingencies | 1 | 0 | 0 | 0 | |
| IC EX 2A | Break-out Discussion | 1 | 0 | 0 | 0 | |
| HW 2A | Read Chapters 2 & 3 | 0 | 0 | 8 | 0 | |
| IC EX 2B | In-class Participation | 0 | 0 | 0 | 10 | Session 2 |
| Total Session 2 | | 5 | 0 | 8 | 10 | |
| Session 3 | | | | | | |
| Type | Topic/Description | LEC Time | LAB Time | HW Time | Point Value | Due |
| LEC 3A | Information Security Policy | 2 | 0 | 0 | 0 | |
| IC EX 3A | Policy Discussion | 1 | 0 | 0 | 0 | |
| HW 3A | Read Chapter 4 | 0 | 0 | 4 | 0 | |

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|-----------------|----------------------------|---|---|----|-----|-----------|
| HW 3B | Security Policies | 1 | 0 | 4 | 200 | Session 8 |
| HW 3C | Weekly Thesis Assignment 2 | 0 | 0 | 10 | 25 | Session 5 |
| ICEX3B | In-class Participation | 0 | 0 | 0 | 10 | Session 3 |
| ICEX3C | Discussion Thread 2 | 0 | 0 | 0 | 50 | |
| Total Session 3 | | 5 | 0 | 18 | 285 | |

Session 4

| Type | Topic/Description | LEC Time | LAB Time | HW Time | Point Value | Due |
|-----------------|-------------------------------------|----------|----------|---------|-------------|-----------|
| LEC 4A | Developing the Security Program | 1.5 | 0 | 0 | 0 | |
| IC EX 4A | Security Policies Team Presentation | 1 | 0 | 0 | 0 | Session 6 |
| IC EX 4B | Security Awareness Presentation | 1.5 | 0 | 5 | 0 | Session 5 |
| HW 4A | Read Chapter 5 | 0 | 0 | 5 | 0 | |
| ICEX4C | In-class Participation | 0 | 0 | 0 | 10 | Session 4 |
| Total Session 4 | | 5 | 0 | 10 | 10 | |

Session 5

| Type | Topic/Description | LEC Time | LAB Time | HW Time | Point Value | Due |
|-----------------|---|----------|----------|---------|-------------|-----------|
| EXAM 5A | Prepare for Mid-Term | 1 | 0 | 0 | 0 | |
| LEC 5A | Security Management Models | 1 | 0 | 0 | 0 | |
| IC EX 5A | Present Security Awareness from Session 4 | 1 | 0 | 5 | 50 | |
| HW 5A | Read Chapter 6 | 0 | 0 | 3 | 0 | |
| HW 5B | Weekly Thesis Assignment 3 | 0 | 0 | 10 | 25 | Session 7 |
| HW 5C | Individual Assessment Project | 0 | 0 | 0 | 0 | Session 5 |
| ICEX5B | In-class Participation | 0 | 0 | 0 | 10 | Session 5 |
| ICEX5C | Discussion Thread 3 | 0 | 0 | 0 | 50 | |
| Total Session 5 | | 5 | 0 | 18 | 135 | |

Session 6

| Type | Topic/Description | LEC Time | LAB Time | HW Time | Point Value | Due |
|---------|-------------------------------|----------|----------|---------|-------------|-----------|
| EXAM 6A | Midterm | 1 | 0 | 0 | 100 | |
| LEC 6A | Security Management Practices | 2 | 0 | 0 | 0 | |
| HW 6A | Read Chapter 7 | 0 | 0 | 3 | 0 | |
| ICEX 6A | In-class Participation | 0 | 0 | 0 | 10 | Session 6 |

| Total Session 6 | | 5 | 0 | 3 | 110 | |
|-------------------|---|----------|----------|---------|-------------|-----------|
| Session 7 | | | | | | |
| Type | Topic/Description | LEC Time | LAB Time | HW Time | Point Value | Due |
| LEC 7A | Risk Management: Identifying and Assessing Risk | 1 | 0 | 0 | 0 | |
| LEC 7B | Risk Management: Controlling Risk | 1 | 0 | 0 | 0 | |
| HW 7A | Read Chapters 8 & 9 | 0 | 0 | 5 | 0 | |
| HW 7B | Weekly Thesis Assignment 4 | 0 | 0 | 10 | 25 | Session 9 |
| ICEX 7A | In-class Participation | 2 | 0 | 0 | 10 | Session 7 |
| ICEX 7C | Discussion Thread 4 | 0 | 0 | 0 | 50 | |
| Total Session 7 | | 5 | 0 | 15 | 85 | |
| Session 8 | | | | | | |
| Type | Topic/Description | LEC Time | LAB Time | HW Time | Point Value | Due |
| LEC 8A | Protection Mechanisms | 2 | 0 | 0 | 0 | |
| LEC 8B | Personnel & Security | 1 | 0 | 0 | 0 | |
| IC EX 8A | Individual Assessment Project | 1 | 0 | 0 | 0 | Session 9 |
| HW 8A | Read Chapters 10,11 | 0 | 0 | 9 | 0 | |
| HW 8B | Curricular Practical Training | 0 | 0 | 10 | 80 | Session 8 |
| ICEX 8B | In-class Participation | 1 | 0 | 0 | 10 | Session 8 |
| Total Session 8 | | 5 | 0 | 19 | 90 | |
| Session 9 | | | | | | |
| Type | Topic/Description | LEC Time | LAB Time | HW Time | Point Value | Due |
| LEC 9A | Team Presentations | 4 | 0 | 0 | 0 | |
| EXAM 9A | Preview for Final | 1 | 0 | 0 | 0 | |
| Total Session 9 | | 5 | 0 | 0 | 0 | |
| Session 10 | | | | | | |
| Type | Topic/Description | LEC Time | LAB Time | HW Time | Point Value | Due |
| IC EX 10A | Security Policies Team Presentations | 4 | 0 | 0 | 40 | |

| | | | | | | |
|------------------|------------|---|---|---|-----|--|
| EXAM 10A | Final Exam | 1 | 0 | 0 | 100 | |
| Total Session 10 | | 5 | 0 | 0 | 140 | |

Course Hours Summary

| Session | Topic | LEC Time | LAB Time | HW Time |
|---------|---|----------|----------|---------|
| 1 | Course Introduction | 5 | 0 | 30 |
| 2 | Planning for Security | 5 | 0 | 8 |
| 3 | Information Security Policy | 5 | 0 | 18 |
| 4 | Developing the Security Program | 5 | 0 | 10 |
| 5 | Security Management Models | 5 | 0 | 18 |
| 6 | Security Management Practices – Midterm Exam | 5 | 0 | 3 |
| 7 | Risk Management: Identifying and Assessing Risk | 5 | 0 | 15 |
| 8 | Protection Mechanisms, Personnel & Security | 5 | 0 | 9 |
| 9 | Review – Team Presentations | 5 | 0 | 0 |
| 10 | Team Presentations – Final Exam | 5 | 0 | 0 |
| Total | | 50 | 0 | 111 |

Table/Point Breakdown

| Session | Assignment | Possible Points | Percent of Grade |
|---------|--|-----------------|------------------|
| 1 | Individual Assessment Project - Activity | 50 | 5% |
| 1,3,5,7 | Weekly Thesis Assignments | 100 | 10% |
| 1,3,5,7 | Discussion Thread 1-4 | 200 | 20% |
| 5 | Security Awareness | 50 | 5% |
| 3 | Security Policies Research Paper | 200 | 20% |
| 9,10 | Security Policies Team Presentation | 40 | 4% |
| 8 | Curricular Practical Training Activities | 80 | 8% |
| 1-8 | In-class Participation | 80 | 8% |
| 6 | Mid-Term Exam | 100 | 10% |
| 10 | Final Exam | 100 | 10% |
| Total | | 1000 | 100% |

Weekly Thesis Assignments

The primary purpose of the Weekly Thesis Assignments is to prepare each graduate student at Coleman University for the final Master's Thesis.

Each week, students will submit additional progress toward his or her chosen thesis topic. Progress toward the thesis will include a minimum of three (3) pages of new content toward the thesis and cite no fewer than three (3) scholarly

sources.

Each weekly submission should include a highlighted section indicating the new content from the previous week. New content could either be completely new material, or revision to existing material based on feedback provided by your Thesis Mentor or Teaching Assistant.

At the end of Week 3, each student will provide an in-progress review submission to his or her Thesis Mentor via WebClass in the Thesis In Progress section. The Thesis Mentor will provide feedback regarding the framework and approach each student is taking and provide general guidance regarding completion. This in addition to the Weekly Thesis Assignment submission is graded by the course Teaching Assistant.

Your Grades for this Course

Your final grade for this course will be based on an assessment by the Instructor of your performance on a number of course activities, which may include objective tests, classroom exercises, laboratory demonstrations, project papers, or other types of activities. The chart below indicates in what activities you will engage, how many possible points can be earned for each activity, and the percentage of your final grade that will be accounted for by each activity.

Students in this course should be graded following Coleman University assessment practices and policies. A point system is used in the University to indicate student performance on various required activities or projects. For this course, it is recommended that points be distributed as follows:

Coleman University Grade Assignment Policy:

| Percent | Letter Grade | Grade Points |
|-------------|--------------|--------------|
| 94-100 | A | 4 |
| 90-93 | A- | 3.67 |
| 87-89 | B+ | 3.33 |
| 84-86 | B | 3 |
| 80-83 | B- | 2.67 |
| 77-79 | C+ | 2.33 |
| 74-76 | C | 2 |
| 70-73 | C- | 1.67 |
| 67-69 | D+ | 1.33 |
| 64-66 | D | 1 |
| 60-63 | D- | 0.67 |
| N/A | INC | 0 |
| N/A | W | 0 |
| 60 or above | CR | 0 |

| | | |
|-------------|----|---|
| 59 or below | NC | 0 |
| N/A | I | 0 |
| N/A | W | 0 |
| N/A | AU | 0 |
| N/A | TR | 0 |
| N/A | WV | 0 |

| Legend | |
|----------------|-----------------------|
| CR = Credit | NC = No Credit |
| I = Incomplete | W = Course Withdrawal |
| AU = Audit | TR = Transfer Credit |
| WV = Waiver | |

Academic Accommodation / Adjustment Policy:

In accordance with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act (ADA), Coleman University offers accommodations to students with documented physical, psychological, and/or cognitive disabilities. Coleman University will adhere to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations as required to offer equal educational opportunities to qualified disabled individuals.

To qualify for an academic accommodation under ADA, the student must provide adequate documentation of a disability. Students seeking academic accommodations should contact the campus ADA Coordinator at 858-966-3953 or via email at ada@coleman.edu. The ADA Coordinator will review the documentation provided and verify ADA coverage. Students covered under ADA must meet with the ADA Coordinator at the beginning of every term to determine the appropriate academic accommodations. Failing to meet with the ADA Coordinator at the beginning of every term may impact the availability of accommodations.

After the academic accommodations have been determined, the students' instructors will be notified by the ADA Coordinator. If any problems or concerns regarding the provision of accommodations occur, the student must inform the ADA Coordinator. If the student feels accommodation is not being made appropriately, the student may follow the published Student Grievance Procedures.