

# Information Security Management

## ITP 370 (3 Units)

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**Spring 2013**

### Objective

Upon completing this course, students will:

- Understand the fundamentals of managing information security systems and personnel
- Learn how security and management are interrelated
- Understand the laws and regulations surrounding information security
- Learn how to plan for disaster recovery
- Learn how to conduct security audits

### Concepts

This course is designed to teach the fundamentals of security management. The course is not technical in nature, but relies on the student's previous understanding of security systems. The course instead looks at security from a managerial perspective with regards to design, implementation, maintenance, and disaster recovery.

### Prerequisites

ITP 125 or Department Approval

### Instructor

Joseph Greenfield

### Contacting the Instructor

[joseph.greenfield@usc.edu](mailto:joseph.greenfield@usc.edu)  
213-740-4604

### Office Hours

Listed on the ITP Website ([itp.usc.edu](http://itp.usc.edu))

### Lab Assistants

Listed on Blackboard under Contacts

### Lecture/Lab

Monday, 2:00 – 5:00, GFS 223

### Required Textbooks

*Security Planning & Disaster Recovery*. Maiwald and Sieglein. Osborne, 2002  
ISBN: 0-07-222463-0

### Website

All course material will be on Blackboard (<http://blackboard.usc.edu>).

### Grading

The following percentage breakdown will be used in determining the grade for the course.

Assignments	50%
Midterm Exam	20%
Final	30%
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Total	100%

## Grading Scale

The following shows the grading scale to be used to determine the final letter grade.

93% and above	A
90% - 92%	A-
87% - 89%	B+
83% - 86%	B
80% - 82%	B-
77% - 79%	C+
73% - 76%	C
70% - 72%	C-
67% - 69%	D+
64% - 66%	D
63% and below	F

## Policies

No make-up exams (except for documented medical or family emergencies) will be offered nor will there be any changes made to the Final Exam schedule.

The assignments will be posted on Blackboard under the “Assignments” section. Each lab will include instructions, a due date, and a link for electronic submission. Assignments must be submitted using this link.

It is your responsibility to submit your assignments on or before the due date. For every 24 hours late, 5% of the total points deducted from the graded score. Assignments turned in more than 7 days past the due date will receive no credit.

All assignments will be digitally submitted through Blackboard except where specified. Do not email them to the lecturer or lab assistant.

## Incomplete and Missing Grades

Excerpts for this section have been taken from the University Grading Handbook, located at <http://www.usc.edu/dept/ARR/grades/gradinghandbook/index.html>. Please see the link for more details on this and any other grading concerns.

A grade of Missing Grade (MG) “should only be assigned in unique or unusual situations... for those cases in which a student does not complete work for the course before the semester

ends. All missing grades must be resolved by the instructor through the Correction of Grade Process. One calendar year is allowed to resolve a MG. If an MG is not resolved [within] one year the grade is changed to [Unofficial Withdrawal] UW and will be calculated into the grade point average a zero grade points.

A grade of Incomplete (IN) “is assigned when work is no completed because of documented illness or other ‘emergency’ **occurring after the twelfth week** of the semester (or 12<sup>th</sup> week equivalency for any course scheduled for less than 15 weeks).”

## **Academic Integrity**

USC seeks to maintain an optimal learning environment. General principles of academic honesty include the concept of respect for the intellectual property of others, the expectation that individual work will be submitted unless otherwise allowed by an instructor, and the obligations both to protect one's own academic work from misuse by others as well as to avoid using another's work as one's own. All students are expected to understand and abide by these principles. *Scampus*, the Student Guidebook, contains the Student Conduct Code in Section 11.00, while the recommended sanctions are located in Appendix A: <http://www.usc.edu/dept/publications/SCAMPUS/gov/>. Students will be referred to the Office of Student Judicial Affairs and Community Standards for further review, should there be any suspicion of academic dishonesty. The Review process can be found at: <http://www.usc.edu/student-affairs/SJACS/>.

## **Students with Disabilities**

Any student requesting academic accommodations based on a disability is required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP. Please be sure the letter is delivered to your course instructor (or TA) as early in the semester as possible. DSP is located in STU 301 and is open from 8:30am to 5:00pm, Monday through Friday. Website and contact information for DSP [http://sait.usc.edu/academicsupport/centerprograms/dsp/home\\_index.html](http://sait.usc.edu/academicsupport/centerprograms/dsp/home_index.html) (213) 740-0776 (Phone), (213) 740-6948 (TDD only), (213) 740-8216 (FAX) [ability@usc.edu](mailto:ability@usc.edu)

## **Emergency Preparedness/Course Continuity in a Crisis**

In case of emergency, when travel to campus is difficult, if not impossible, USC executive leadership will announce a digital way for instructors to teach students in their residence halls or homes using a combination of the Blackboard LMS (Learning Management System), teleconferencing, and other technologies. Instructors should be prepared to assign students a "Plan B" project that can be completed 'at a distance.' For additional information about maintaining your classes in an emergency, please access: <http://cst.usc.edu/services/emergencyprep.html>

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### Course Outline

Note: Schedule subject to change

#### Week 1 – Introduction to Security Management

- Role of security
- Organizing security goals
- Relationship between the parts and players in an organization

#### Reading

Chapter 1

#### Week 2 – MLK Holiday; No Class

#### Week 3 – Legal & Assessment

- Working with the legal department
- Understanding applicable laws
- Internal vs. External audits
- Vulnerability assessment
- Penetration testing
- Risk assessment

#### Reading

Chapters 2 & 3

#### Week 4 – Security Policies and Procedures

- Purpose of documentation
- Writing good policies
- Writing legally acceptable policies
- Policy review
- Overview of common security policies

#### Reading

Chapter 4 and Instructor Handouts

#### Week 5 – Designing the Security Plan

- Solutions deployment
- Audit and reporting

#### Reading

Chapter 5 & Appendix A

#### Week 6 – President's Day Holiday; No Class

### **Week 7 – Security Training**

- User awareness
- Management awareness
- Training the security team
- Training methods

#### **Reading**

Chapter 7

### **Week 8 – Monitoring**

- Policy monitoring
- Network monitoring
- Reviewing audit logs

#### **Reading**

Chapter 8

### **Week 9 – Midterm**

### **Week 10 – Budgeting and Planning**

- Establishing the need
- Building the budget
- Staffing costs
- Hardware/software requirements analysis

#### **Reading**

Chapter 9 & Appendix B

### **Week 11 – Building the Security Team**

- Dealing with the previous team
- Security administration
- Identifying new candidates
- Small organization vs. large organization needs

#### **Reading**

Chapter 10

### **Week 12 – Reporting**

- Reporting Progress
- Measuring security metrics
- Risk Assessment and management
- Evaluating the ROI

#### **Reading**

Chapter 11

### **Week 13 – Developing Contingency Plans**

- Physical disasters
- Identifying critical systems and data

- Risk analysis
- Funding & justification
- General procedures

**Reading**

Chapter 13 and Instructor Notes

**Week 14 – Incident and Disaster Response**

- Incident response teams
- Leadership and roles
- Identifying an incident vs. disaster
- Containing the problem
- Responding to the problem
- Response, resumption, recovery and restoration

**Reading**

Chapters 12, 14 and Instructor Notes

**Assignment/Lab**

Description or listing of assignment

**Week 15 – Conclusion**

- Course conclusion
- Current jobs in security management