

## **Syllabus**

**Course Title: Fundamentals of E-Security I**

**Course Number: CN 460**

### **Course Description:**

Introduces the concept of security management and addresses the ambient factors that constitute a sound organizational security policy. Examines basic security management, security models, risk analysis, internal and external security threats, privacy issues and security laws and regulations in an effort to provide a solid foundations for future e-security courses.

### **Prerequisite Courses:**

CN 316 Network Infrastructure or CS 450 Data Networks

### **Course Overview**

Through this course, students will begin to understand the security threats and vulnerabilities that face computer network engineers. This course is not intended to be a comprehensive discourse on all 10 security domains, but simply an introduction to these topics. Continued discussion of the 10 security domains will be addressed in CN 461 and will be covered comprehensively by the finish of both courses.

Key concepts to be covered in this course include:

- Physical security
- Risk management
- Ubiquitous security
- Authentication
- Confidentiality, integrity, and availability

### **Course Outcomes:**

Upon completion of this course, learners should be able to:

- Understand the need for computer network security
- Comprehend the importance of physical security
- Evaluate the impacts of mobile devices on computer network security
- Apply risk management techniques to computer network security

- Comprehend the importance of access control and authentication
- Understand the three fundamental concepts of a security network plan
- Evaluate a simple network security plan

## Course Materials:

### Required Texts:

Harris, S. (2012). *CISSP All-in-One Exam Guide* (6th ed.): McGraw-Hill Osborne Media. ISBN 0071781749, 978-0071781749.

Stajano, F. (2002). *Security for Ubiquitous Computing*. Wiley. ISBN-10: 0470844930.

American Psychological Association. (2010). *Publication Manual of the American Psychological Association* (6th ed.). Washington, DC: American Psychological Association. ISBN 1433805618, 978-1433805615. Companion website: <http://www.apastyle.org>.

### Optional Materials:

Grossaint, K. (2001). *Essential Writing Knowledge*. Denver, Colorado. Regis University  
 APA course materials as provided by your instructor.

## Pre-Assignment:

**All Formats:** These assignments must be completed by the first night of class. Read Ch. 1 “Reasons to Become a CISSP”- Harris, S. *All-in-One CISSP Exam Guide 6<sup>th</sup> Edition*. (2012). Introduce yourself in the discussion forum explaining your reasons for becoming involved in network information assurance. Be prepared to discuss your reasons with your classmates, your previous experiences in computer networking, including the classes you have attended, and how they may have been influenced by your experiences. Please let us know approximately how many classes you have remaining at Regis.

Download the following class files before the first night of class:

- |                               |   |
|-------------------------------|---|
| • Essential Writing Knowledge | • APA Template  |
| • CyberWar (six segments)     | • APA citation methods  |
| • Tiger Team-24k heist        | • APA on-line citation methods  |
| • Tiger Team-Exotic car heist | • Second Life browser for your computer <a href="http://secondlife.com/support/downloads">http://secondlife.com/support/downloads</a> |

**Online Format:** Sign on to D2L (Home Page) and become familiar with the course navigation of the Web Curriculum.

## Pre-Assignment Due Dates:

**Classroom-based Format:** This assignment is due the first night of class.

**Online Format:** The instructor will specify the due date for this assignment.

## Course Assignments and Activities:

	Topics	Readings	Activities Assignments and Associated Points
1	Risk Management and Physical Security	Harris, S. (2012). Ch. 2- Information Security and Risk Management (pp. 21-73)	Class Discussion: <ul style="list-style-type: none"> <li>• Introductions</li> <li>• Discussion Questions (20 points)</li> </ul> Written Assignment: <ul style="list-style-type: none"> <li>• Essay on Second Life Security Audit (100 points).</li> </ul>
2	Risk Management and Ubiquity	Harris, S. (2012). Ch. 3- Information Security and Risk Management (pp. 73-138) Stajano, F. (2002) Ch. 1- Introduction	Class Discussion: <ul style="list-style-type: none"> <li>• Discussion Questions (50 points)</li> </ul>
3	Mitigating Physical Security Risks	Harris, S. (2012). Ch. 5- Physical and Environmental Security	Class Discussion: <ul style="list-style-type: none"> <li>• Discussion Questions (50 points)</li> </ul>
4	History of Ubiquitous Computing	Stajano, F. (2002) Ch. 2- Ubiquitous Computing	Class Discussion: <ul style="list-style-type: none"> <li>• Discussion Questions (20 points)</li> </ul> Written Assignment: <p>WigIT Risk Management Paper (100 points).</p>
5	Access Control	Harris, S. (2012). Ch. 3- Access Control Stajano, F. (2002) Ch. 3- Computer Security	Class Discussion: <ul style="list-style-type: none"> <li>• Discussion Questions (20 points)</li> </ul> Written Assignment: <p>Paper on Access Controls (100 points).</p>
6	Authentication, Confidentiality, Availability, and Integrity	Stajano, F. (2002): <ul style="list-style-type: none"> <li>• Ch. 4-Authentication</li> <li>• Ch. 5- Confidentiality</li> <li>• Ch. 6-Availibility</li> <li>• Ch. 7-Integrity</li> </ul>	Class Discussion: <ul style="list-style-type: none"> <li>• Discussion Questions (20 points)</li> </ul> Written Assignment: <p>Paper on Authentication, Confidentiality, Availability, and Integrity (100 points).</p>
7	Developing Your Own Data Security Plan	Harris, S. (2012). Ch. 5- Security Architecture and Design (pp. 297-359)	Class Discussion: <ul style="list-style-type: none"> <li>• Discussion Questions (20 points)</li> </ul>
8	Data Security Plan Presentation	Harris, S. (2012). Ch.5- Security Architecture and Design (pp. 359-412)	Written Assignment: <p>Group Project Development of Data Security Plan (200 points).</p> <p>Group Project Presentation of Data Security Plan (100 points).</p>
			<b>Maximum Points Possible: 900</b>

## Course Policies and Procedures:

### CC&IS Grading Scale

Letter Grade	Percentage	Grade Point
A	93 to 100	4.00
A–	90 to less than 93	3.67
B+	87 to less than 90	3.33
B	83 to less than 87	3.00
B–	80 to less than 83	2.67
C+	77 to less than 80	2.33
C	73 to less than 77	2.00
C–	70 to less than 73	1.67
D+	67 to less than 70	1.33
D	63 to less than 67	1.00
D-	60 to less than 63	.67
F	Less than 60	0

Additional information about grading can be found in the latest edition of the University Catalog, available at <http://www.regis.edu/Academics/Course%20Catalog.aspx>.

### CC&IS Policies and Procedures

Each of the following CC&IS Policies & Procedures is incorporated here by reference. Students are expected to review this information each term, and agree to the policies and procedures as identified here and specified in the latest edition of the University Catalog, available at <http://www.regis.edu/Academics/Course%20Catalog.aspx> or at the link provided.

- The CC&IS Academic Integrity Policy.
- The Student Honor Code and Student Standards of Conduct.
- Incomplete Grade Policy, Pass / No Pass Grades, Grade Reports.
- The Information Privacy policy and FERPA. For more information regarding FERPA, visit the [U.S. Department of Education](http://www.ed.gov).
- The HIPAA policies for protected health information. The complete Regis University HIPAA Privacy & Security policy can be found here: <http://www.regis.edu/About-Regis-University/University-Offices-and-Services/Auxiliary-Business/HIPAA.aspx>.
- The Human Subjects Institutional Review Board (IRB) procedures. More information about the IRB and its processes can be found here: <http://regis.edu/Academics/Academic-Grants/Proposals/Regis-Information/IRB.aspx>.

The CC&IS Policies & Procedures Syllabus Addendum summarizes additional important policies including, Diversity, Equal Access, Disability Services, and Attendance & Participation that apply to every course offered by the College of Computer & Information Sciences at Regis University. A copy of the CC&IS Policies & Procedures Syllabus Addendum can be found here: <https://in2.regis.edu/sites/ccis/policies/Repository/CCIS%20Syllabus%20Addendum.docx>.