

# CNS 440 - Information Security Management

**Meeting time and location:** see myCDM

**Instructor:** Arlene Yetnikoff / [ayetniko@depaul.edu](mailto:ayetniko@depaul.edu)

**Office:** 55 E. Jackson, 7<sup>th</sup> floor / **Hours:** TUE 3:30PM - 5:00PM

Other hours available with appointment, email for appointment

**Type of Instruction:** lecture / lecture-discussion / lab

**Course Description:** Survey of information security management as it applies to information systems analysis, design, and operations:

<https://www.cdm.depaul.edu/academics/pages/courseinfo.aspx?CrseId=012735>

## Learning Objectives

At the conclusion of the course, students will be able to:

- Describe the building blocks of a comprehensive Information security program
- Develop and implement cybersecurity risk management strategies
- Implement technical and non-technical security controls to minimize the risk of cybersecurity breaches and/or incidents
- Apply the NIST Cybersecurity Framework and the NIST 800-30 Guide for Conducting Risk Assessments to real-world scenarios

**Textbook:** No text book is required. All the readings are posted in D2L for each week.

**Homeworks:** Each homework is described in details in a separate document included in the respective module in D2L for each week in the course.

**Laboratory Exercises:** We will use a virtual labs environment (see the introductory slides on how to access the labs). The labs are designed for you to work individually.

**Final Paper:** There will be a **final research paper** as your **term assignment**. This will be a paper on a topic of your choosing in the area of cybersecurity or closely related field, such as privacy.

Please read the “Final Paper Minimum Requirements” document in the *Course Logistics* module in D2L for deliverables and formatting. To produce an academic-level research paper, I strongly encourage you to schedule an appointment with the University Center for Writing-Based Learning: <http://condor.depaul.edu/writing/>

**Final Presentation** You have to create a presentation on your final paper for the entire class. It has to be no more than 5-6 slides, containing only the contribution of your work.

**Assignments Delivery:** Assignments are due one week after each is assigned at 11:59 PM. No late submission will be accepted.

**Grading:** Grading is based on a percentage basis, which convert to a letter as:

Percentage	Grade	Percentage	Grade	Percentage	Grade
		100-92	A	91-90	A-
89-98	B+	87-82	B	81-80	B-
79-78	C+	77-72	C	71-70	C-
69-68	D+	67-62	D	61-60	D-
59-0	F				

The weights of each assignment for contributing to the final average are as follows:

Assignment	Weight in final grade
Homework	30%
Labs	20%
Final Paper	40%
Presentation	10%

**Attendance:** I expect that you will attend every class; You are responsible for material covered, assignments delivered/received, and announcements made in class/ on D2L.

**Class Cancellation:** Unless DePaul University officially closes, we will have class.

**Incompletes:** Must formally be requested using the [Incomplete Grade Request Form](#).

**Academic Integrity:** You must read, understand, and comply with the DePaul's policy on academic integrity: <http://academicintegrity.depaul.edu/> . It is part of this syllabus.

**Changes to Syllabus:** I reserve the right to make changes to the syllabus.

**Academic Policies:** All students are required to manage their class schedules each term in accordance with the deadlines indicated in the University Academic Calendar: <http://www.cdm.depaul.edu/Current%20Students/Pages/PoliciesandProcedures.aspx>

**Students with Disabilities:** Students who feel they may need an accommodation based on the impact of a disability should contact the Center for Students with Disabilities (CSD) at: [csd@depaul.edu](mailto:csd@depaul.edu). Lewis Center 1420, 25 East Jackson Blvd. Phone number: (312)362-8002

**Agenda:**

<b>Wk</b>	<b>Topic</b>	<b>Assignment</b>
1	<b>Course Overview and Logistics Cybersecurity Fundamentals</b>	<b>Homework 1</b> – “Information security is information risk management”
		<b>Reading Questions:</b> Security in Computing, Fifth Edition, Pfleeger, et. al – Chapter 1 DePaul network link
		<b>Due Thursday April 4: Introductions</b>
2	<b>Information Security Management Fundamentals</b>	<b>Homework 2</b> – “Reliable Behavioral Factors in the Information Security Context”
		<b>Lab 1</b> - Performing Reconnaissance and Probing using Common Tools
		<b>Due: HW1</b>
3	<b>Threats and Vulnerabilities</b>	<b>Homework 3</b> –Threat Analysis
		<b>Lab 2</b> - Performing a Vulnerability Assessment
		<b>Due: HW2, Lab1</b>
4	<b>Risk Assessment I</b>	<b>Homework 4</b> – “Quantitative Risk Analysis in Information Security Management: A Modern Fairy Tale”, Develop paper topic proposal
		<b>Lab 3</b> - Enabling Windows Active Directory and User Access Controls
		<b>Due HW3, Lab2</b>
5	<b>Risk Assessment II</b>	<b>Homework 5</b> – Risk assessment exercise
		<b>Lab 4</b> - Using Group Policy Objects and MBSA for Change Control
		<b>Due: HW4, Lab3, Paper topic proposal</b>
6	<b>Security Policies and Decision Making</b>	<b>Homework 6</b> – Risking Security: Policy and Paradoxes of Cyberspace Security (tentative) Create paper outline

		<b>Lab 10 - Implementing an Information Systems Security Policy</b>
		<b>Due: HW5, Lab 4</b>
7	<b>Security Education, Training and Awareness</b>	<b>Homework – Write Paper draft</b>
		<b>Due: HW6, Lab 10, Paper Outline</b>
8	<b>Incident response, Security program development</b>	<b>Homework - Final Paper – Draft</b>
9	<b>Ethics and Regulation</b>	<b>Homework - Prepare your Final Presentation</b>
		<b>Due: Paper Draft</b>
10	<b>Final Presentations</b>	<b>Due: Present your work</b>
11		<b>Final paper due</b>