

CNS 440 - Information Security Management

Meeting time and location: see myCDM

Instructor: Filipo Sharevski / fsharevs@cdm.depaul.edu

Office: CDM 750 / **Hours:** TUE/WED 2:30PM - 5:00PM

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:

- 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. If don't have a preference, you can pick one of the following applications to cybersecurity: (1) Economic theories; (2) Bounded rationality; (3) Game theory; and (4) Usability and HCI design.

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. Lewis Center 1420, 25 East Jackson Blvd. Phone number: (312)362-8002

Agenda:

Wk	Topic	Assignment
1	Course Overview and Logistics Cybersecurity Fundamentals	Homework – “Information security is information risk management”
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2	Information Security Management Fundamentals	Homework – “Reliable Behavioral Factors in the Information Security Context”
		Lab 1 - Performing Reconnaissance and Probing using Common Tools
3	Threats and Vulnerabilities	Homework – Performing a Threat Assessment
		Lab 2 - Performing a Vulnerability Assessment
4	Risk Assessment I	Homework – “Quantitative Risk Analysis in Information Security Management: A Modern Fairy Tale”
		Lab 3 - Enabling Windows Active Directory and User Access Controls
5	Risk Assessment II	Homework – “Identifying How Firms Manage Cybersecurity Investment”
		Lab 4 - Using Group Policy Objects and MBSA for Change Control
6	Security Policies and Decision Making	Homework – “If someone is watching, I’ll do what I’m asked: mandatoriness, control, and security”
		Lab 10 - Implementing an Information Systems Security Policy
7	Security Education, Training and Awareness	Homework – “Leveraging behavioral science to mitigate cyber security risk”
		Lab 6 - Implementing a Business Continuity Plan
8	Economics of Cybersecurity	Homework - Final Paper – Draft Outline
		/
9	Ethics and Regulation	Prepare your Final Presentation / Draft Paper
10	Final Presentations	Present your work