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
- 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.

Preferred Name & Gender Pronouns: I will gladly honor your request to address you by an alternate name or gender pronoun: http://policies.depaul.edu/policy/policy.aspx?pid=332

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" **Homework** – Submit a topic for your class paper/project to be approved (over email).
		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** – "Risking security: Policies and paradoxes of cyberspace security"
		Lab 10 - Implementing an Information Systems Security Policy
7	**Security Education, Training and Awareness**	**Homework** - Final Paper – Outline
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8	**Economics of Cybersecurity**	**Homework** - Final Paper – Draft Paper
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9	**Ethics and Regulation**	/
10	**Final Presentations**	Present your work