Syllabus: CSEC 440 - Information Security Management

General Course Information

CSEC 440: Information Security Management	Autumn 2023
Instructor: T. Andrew (Andy) Reeder	Email: treeder2@cdm.depaul.edu
Locations: 13337 – 701 W 5:45-9:00PM LEWIS 01110 13605 – 711 OLASY	Office hours: Tuesday, 5:00-8:00p – online; contact by email to set up appointment
Course homepage: https://d2l.depaul.edu Used for presentation materials, supplemental materials, and submission drop boxes	**Course Materials** (Required) – Cloud Labs for Information Systems Security, Fourth Edition (see D2L for JBL Course ID for enrollment) (Optional) Fundamentals of Information Systems Security, Fourth Edition, by David Kim and Michael G. Solomon; Publisher: Jones and Bartlett (e-book is preferred) **Ordering Options** (ordering from Jones and Bartlett is recommended – use promo code DEPAULCYBR for purchase): https://www.jblearning.com/science-technology/computing/cybersecurity Cloud Labs - ISBN: 9781284244564 eBook - ISBN: 9781284222951 eBook w/ Cloud Labs - ISBN: 9781284244571 **Other reading materials:** Provided through URL links or posting to D2L

Changes to Syllabus. This syllabus is subject to change as necessary during the Quarter. If a change occurs, it will be thoroughly addressed during class, posted under News/Announcements in D2L and sent via email.

Contents

Course Information

Course Description: Survey of information security management as it applies to information systems analysis, design, and operations. Managing information assets and the security infrastructure. Emphasis on managing security-related risk, as well as the process of developing, implementing, and maintaining organizational policies, standards, procedures, and guidelines. Identifying and evaluating information assets, threats, and vulnerabilities. Quantitative and qualitative risk analysis, risk mitigation, residual risk, and risk treatment as they relate to information security. Topics include information security vulnerabilities, threats, and risk management; security policies and standards; security audits; access controls; network perimeter protection, data protection; physical security; security education training and awareness. Introduction to compliance, as well as the CISSP domains.

Learning Objectives: Students will be able to:

- Explain information systems security and its effect on people and businesses.
- Describe how malicious attacks, threats, and vulnerabilities impact an IT infrastructure.
- Explain the role of access controls in an IT infrastructure.
- Explain the role of IT operations, administration, and security policies.
- Explain the importance of security audits, testing, and monitoring in an IT infrastructure.
- Describe the principles of risk management, common response techniques, and issues related to recovery of IT systems.

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- Explain how businesses apply cryptography in maintaining information security.
- Describe networking principles and security mechanisms.
- Apply information security standards and U.S. compliance laws to real-world applications in both the private and public sector.
- Describe information systems security educational opportunities and professional certifications.

Class Schedule/Assignment Schedule

Week	Topics Covered/Lecture	Assignment Schedule
Pre-Class	Introductions	Post on D2L: • Introductions • Case Study: "Operation Rich or Die Tryin'" • Survey: Making Learning Interesting • Quiz: Syllabus • Review Jones and Bartlett references
1	Course Introduction Changing How People and Businesses Communicate Information Security Overview	Article Summary Class Participation Lab
2	Threats Attack Methods and Phases Malware	Article Summary Class Participation Lab
3	Access Controls	Article Summary Class Participation Lab
4	Security Operations and Administration Supporting Functions	Article Summary Class Participation Lab
5	Auditing, Testing, and Monitoring Policies	Article Summary Class Participation Lab

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Week	Topics Covered/Lecture	Assignment Schedule
6	Change Control Software Development/Maturity Measurement Contingency Planning	Article Summary Class Participation Lab Outline of Final Paper
7	Cryptography Physical Security Controls	Article Summary Class Participation Lab
8	Networks and Telecommunications Safeguards and Controls Security Architecture and Design	Article Summary Class Participation Lab
9	Compliance, Privacy, Standards	Article Summary Class Participation Lab
10	Information Systems Security Education and Training Ethics	Article Summary Class Participation Lab
11	Final	The process to be used for final assessment is a Final Paper project which will need to be uploaded to D2L

Assignments/Grading

Assignment	Description	Grade Points
Class Participation	Participation in class discussions will be measured by students actively asking questions and offering comments relevant to the lecture's topic. To receive class participation credit students must either participate in class – or - login to D2L each week and post responses to the class discussion section for the week by selecting and responding to at least one slide titled "Question" from the lecture content for the week and responding constructively to at least one other student discussion post.	15

Assignment	Description	Grade Points
Article Summary	Choose an article from a popular or scholarly publication **related to one of the current or past week's** lecture topics. In D2L, post to the Articles section a citation to the article (use APA format) and an abstract/summary (**10-15** *sentences*) of what the article addresses. A LinkedIn Learning online lesson or other suitable webinar can be substituted in lieu of a written article. *Note – an article summary is not needed to be posted for the week when the student provides or posts an Article Presentation*	20
Article Presentations	All students must present one presentation summary of an article selected during the Quarter. All presentations must be 2 to 3 minutes in length and be recorded and posted to the Presentation VoiceThread folder. Use of video and supplemental materials (e.g., PowerPoint) is encouraged but not required.	5
Labs	Labs are completed on a weekly basis. For each lab, visit the JBLearning site for the purchased Theory Labs to Launch the Labs for the course. Complete the lab in numeric sequence corresponding to the week of instruction (e.g., Week 1 = Lab 1) then export the .pdf from the Lab to the appropriate Lab folder in D2L.	30
Outline of Final Paper	Prepare a 1-2-page full sentence outline from one of the suggested topics or a topic approved prior by the instructor. An example of a full sentence outline can be found at https://owl.purdue.edu/owl/general_writing/the_writing_proc ess/developing_an_outline/types_of_outlines.html#:~:text=Full %20Sentence%20Outlines,when%20preparing%20a%20traditio nal%20essay The Final Paper outline must include: • A paragraph description of why the topic was selected (e.g., why was the topic interesting to you; why is it important) • Main points and sub-points in outline format which describe your intended content for the final paper • An initial list of 2-3 references to be used in writing the paper (use APA format)	10

Assignment	Description	Grade Points
Final Paper	Prepare and submit a research paper based on the outline that was submitted. Papers must: • Be formatted using APA guidelines • Include at least 3-5 references (use APA format) • Be 5-6 (single space) or 10-12 pages (double-space) - title page and endnotes are not part of page count	20
Total		*100*
Extra Credit: Professional Development	***Attend an activity associated with a professional association or conference/seminar/webinar focusing on information security, privacy, legal affairs, or a similar topic*** To receive credit – turn in at least a one (1) page summary of the event by posting to the Extra Credit section in D2L. Students should **not** attend something that costs a fee	2
Extra Credit: Writing Center – Outline of Final Paper	***Arrange a consultation with the DePaul Writing Center to review a draft of the outline of the final paper.*** Turn in the comments received from the Writing Center prior to the submission of the outline. Outlines reviewed by the Writing Center should be turned in only after Writing Center comments are incorporated. Writing Center contact information can be found at: https://condor.depaul.edu/writing/	2
Extra Credit: Writing Center – Final Paper	***Arrange a consultation with the DePaul Writing Center to review a draft of the final paper.*** Turn in the comments received from the Writing Center prior to the submission of the final paper. Final papers reviewed by the Writing Center should be turned in only after Writing Center comments are incorporated. Writing Center contact information can be found at: https://condor.depaul.edu/writing/	2

Late Submissions**:** All assignments are due by 5p the day before class. Late submissions will be permitted past a due date but with a point reduction in the "Timing" rubric for each missed day

Style Guide

• For reference citations, use APA (American Psychological Association), Purdue's OWL (Online Writing Lab): https://owl.purdue.edu/owl/research_and_citation/apa_style/apa_formatting_and_style_guide/general_format.html

• All written assignments should be 11 or 12-point; Calibri or Times Roman font; include name/date/course number and title of the content at top left of paper; .doc or .docx file type is preferred

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Grading Scale: (based on 100 points = 100%)

A	95	B-	81	D+	65
A-	91	C+	77	D	61
B+	88	C	73	F	60 or below
B	85	C-	69		

Rubrics will be used in grading based on the following criteria:

Articles	Citations
	Applicability
	Abstract
	Timing
Discussions	Participation
	Quality
	Timing
Labs	Results/Findings
	Mechanics
	Timing
Outline/Final Paper	Results/Findings
	Mechanics
	Timing
	Page Count
	Originality
	Citations

Incomplete Grades: An incomplete grade is a special, temporary grade that may be assigned by an instructor when unforeseeable circumstances prevent a student from completing course requirements by the end of the term and when otherwise the student had a record of satisfactory progress in the course. All incomplete requests must be approved by the instructor of the course and a CDM Associate Dean. Only exceptions cases will receive such approval. Information about the Incomplete Grades policy can be found at http://www.cdm.depaul.edu/Current%20Students/Pages/Grading-Policies.aspx

Writing Center: I strongly recommend you make use of the Writing Center throughout your time at DePaul. The Writing Center provides free peer writing tutoring for DePaul students, faculty, staff, and alumni. Writing Center tutors work with writers at all stages of the writing process, from invention to revision, and they are trained to identify recurring issues in your writing as well as address any specific questions or areas that you want to talk about. To schedule a Face to Face, Written Feedback, or Online Realtime Appointment, visit www.depaul.edu/writing. You can also call one of the Writing Center offices: (312) 362-6726 (Loop Office, Lewis

Center 1600) or (773) 325-4272 (LPC Office, SAC 212). When possible, the Writing Center accepts walk-in requests, but it is always a good idea to schedule your appointment ahead of time. You may schedule tutorials on an as-needed basis or as weekly standing appointments up to 3 hours per week. You can also request an Appointment Report, to confirm your visit to the Writing Center to work on your paper(s) for this course.

Course Expectations and Guidelines

Attitude and Civil Discourse: A professional and academic attitude is expected throughout this course. Measurable examples of non-academic or unprofessional attitude include but are not limited to: talking to others when the instructor is speaking, mocking another's opinion, using mobile phones or laptops for personal business during class. If any issues arise a student may be asked to leave the classroom. DePaul University is a community that thrives on open discourse that challenges students, both intellectually and personally, to be Socially Responsible Leaders. It is the expectation that all dialogue in this course is civil and respectful of the dignity of each student. Any instances of disrespect or hostility can jeopardize a student's ability to be successful in the course. The professor will partner with the Dean of Students Office to assist in managing such issues.

Attendance:

- Students are expected to attend class and login to D2L to view lectures each week. Failure to attend class or login to the lecture or turn in assignments will count as a class absence. Up to three unexcused absences are permitted whether excused or not. Each additional absence will result in a third-letter grade reduction (plus (+) or (-)). All absences should be discussed with the instructor.

- **Excused Absence**. To petition for an excused absence, students who miss classes due to illness or significant personal circumstances should complete the Absence Notification process through the Dean of Students office. The form can be accessed at http://studentaffairs.depaul.edu/dos/forms.html. Students must submit supporting documentation alongside the form. The professor reserves the sole right whether to offer an excused absence and/or academic accommodations for an excused absence.

Withdrawal. Students who withdraw from the course do so by using the Campus Connect system (http://campusconnect.depaul.edu). Withdrawals processed via this system are effective the day on which they are made. Simply ceasing to attend, or notifying the instructor, or nonpayment of tuition does not constitute an official withdrawal from class and will result in academic as well as financial penalty.

Retroactive Withdrawal. This policy exists to assist students for whom extenuating circumstances prevented them from meeting the withdrawal deadline. During their college career, students may be allowed one medical/personal administrative withdrawal and one college office administrative withdrawal, each for one or more courses in a single term. Repeated requests will not be considered. Submitting an appeal for retroactive withdrawal does not guarantee approval. College office appeals for CDM students must be submitted online via MyCDM. The deadlines for submitting appeals are the last day of the last final exam for the subsequent Quarter.

Additional Policies and Resources

COVID-19 Health and Safety Precautions
: Please visit the DePaul Health and Safety Practices site for current Covid safety protocols: https://resources.depaul.edu/coronavirus/guidance/health-safety-practices/Pages/default.aspx#:~:text=Fully%20vaccinated%20individuals%20who%20are,masks%20by%20the%20general%20public

Academic Policies
: All students are required to manage their class schedules each term in accordance with the deadlines for enrolling and withdrawing as indicated in the University Academic Calendar. Information on enrollment, withdrawal, grading and incompletes can be found at: http://www.cdm.depaul.edu/Current%20Students/Pages/PoliciesandProcedures.aspx

Academic Integrity and Plagiarism
: This course will be subject to the university's academic integrity policy. More information can be found on DePaul's academic integrity website. If you have any questions be sure to consult with your professor.

Resources for Students with Disabilities
: Students who feel they may need an accommodation based on the impact of a disability should contact the instructor privately to discuss their specific needs. All discussions will remain confidential. To ensure that you receive the most appropriate accommodation based on your needs, contact the instructor as early as possible in the quarter (preferably within the first week of class), and make sure that you have contacted the Center for Students with Disabilities (CSD) by emailing csd@depaul.edu and/or visiting one of the locations below.

Loop Campus	**Lincoln Park Campus**
Lewis Center Suite 1420	Student Center, Suite #370
25 East Jackson Blvd	2250 N Sheffield Ave
phone: (312) 362-8002	phone: (773) 325-1677
fax: (312) 362-6544	fax: (773) 325-3720
tty: (773) 325-7296	tty: (773) 325-7296

Dean of Students Office
: The Dean of Students Office (DOS) helps students in navigating the university, particularly during difficult situations, such as personal, financial, medical, and/or family crises. Absence Notifications to faculty, Late Withdrawals, and Community Resource Referrals, support students both in and outside of the classroom. Additionally, we have resources and programs to support health and wellness, violence prevention, substance abuse and drug prevention, and LGBTQ student services. We are committed to your success as a DePaul student. Please feel free to contact us at http://studentaffairs.depaul.edu/dos

Online Course Evaluations
. Evaluations are a way for students to provide valuable feedback regarding their instructor and the course. Detailed feedback will enable the instructor to continuously tailor teaching methods and course content to meet the learning goals of the course and the academic needs of the students. They are a requirement of the course and are key to continue to provide you with the highest quality of teaching. The evaluations are anonymous; the instructor and administration do not track who entered what responses. A program is used to check if the student completed the evaluations, but the evaluation is completely separate from the student's identity. Since 100% participation is our goal, students are sent periodic reminders over three weeks. Students do not receive reminders once they complete the evaluation. Please see https://resources.depaul.edu/teaching-commons/teaching/Pages/online-teaching-evaluations.aspx for additional information.

Sexual and Relationship Violence: As a DePaul community, we share a commitment to take care of one another. Classroom relationships are based on trust and communication. Sometimes, material raised in class may bring up issues for students related to sexual and relationship violence. In other instances, students may reach out to faculty as a source of help and support. It is important for students to know that faculty are required to report information reported to them about experiences with sexual or relationship violence to DePaul's Title IX Coordinator. Students should also know that disclosing experiences with sexual or relationship violence in course assignments or discussion does not constitute a formal report to the University and will not begin the process of DePaul providing a response. Students seeking to report an incident of sexual or relationship violence to DePaul should contact Public Safety (Lincoln Park: 773-325-7777; Loop: 312-362-8400) or the Dean of Students and Title IX Coordinator (Lincoln Park: 773-325-7290; Loop: 312-362-8066 or titleixcoordinator@depaul.edu). Students seeking to speak confidentially about issues related to sexual and relationship violence should contact a Survivor Support Advocate in the Office of Health Promotion & Wellness for information and resources (773-325-7129 or hpw@depaul.edu). More information is available at http://studentaffairs.depaul.edu/hpw/shvp.html . Students are encouraged to take advantage of these services and to seek help around sexual and relationship violence for themselves as well as their peers who may need support.

Preferred Name & Gender Pronouns: Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with differences of race, culture, religion, politics, sexual orientation, gender, gender variance, and nationalities. I will gladly honor your request to address you by an alternate name or gender pronoun. Please advise me of this preference early in the Quarter so that I may make appropriate changes to my records. Please also note that students may choose to identify within the University community with a preferred first name that differs from their legal name and may also update their gender. The preferred first name will appear in University related systems and documents except where the use of the legal name is necessitated or required by University business or legal need. For more information and instructions on how to do so, please see the Student Preferred Name and Gender Policy at http://policies.depaul.edu/policy/policy.aspx?pid=332