

### General Course Information

CSEC 440: Information Security Management	Autumn 2020
<b>Instructor:</b> Thomas Andrew (Andy) Reeder	Email: <a href="mailto:treeder2@cdm.depaul.edu">treeder2@cdm.depaul.edu</a>
<b>Locations:</b> Section 702 – Wednesdays - 5:45PM-9:00PM - - Online (Synchronous) Section 711 – Online (Asynchronous)	Office hours: Tuesdays, 5:30-8:30p online; contact by email to set up appointment
<b>Course homepage:</b> <a href="https://d2l.depaul.edu">https://d2l.depaul.edu</a> Used for presentation materials, supplemental materials, and submission drop boxes	<b>Course Materials</b> <b>Fundamentals of Information Systems Security, Third Edition</b> , by David Kim and Michael G. Solomon; Publisher: Jones and Bartlett (Required) – Virtual Security Lab (enroll in Course ID 938C56) (Optional) – Textbook Ordering Options <ol style="list-style-type: none"><li>1. Print Bundle (print textbook and lab access) - ISBN: 978-1-284-15971-4</li><li>2. eBook Bundle (eBook and Lab Access) - ISBN: 978-1-284-18862-2</li><li>3. Lab Access (only) - ISBN: 978-1-284-14166-5</li></ol> Order direct at <a href="http://go.jblearning.com/kim3e">go.jblearning.com/kim3e</a> ; use coupon code <b>DP44096KM</b> to receive a discounted price Other reading materials are provided through URL links or posting to D2L

**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.
- 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**

**Note: All assignments are due by 5p the day before class**

<b>Week</b>	<b>Topics Covered/Lecture</b>	<b>Assignment Schedule</b>
Pre-Class	Introductions	D2L Discussion Post – Introductions Review “Before You Begin” for Labs in Jones and Bartlett Navigate2 Pre-Course Activity - LinkedIn
1	Information Systems Security Changing How People and Businesses Communicate	Article Journal Class Participation (See Description under Assignments/Grading) Lab: Performing Reconnaissance and Probing Using Common Tools
2	Malicious Attacks, Threats, and Vulnerabilities The Drivers of the Information Security Business	Article Journal Class Participation (See Description under Assignments/Grading) Lab: Performing a Vulnerability Assessment
3	Access Controls	Article Journal Class Participation (See Description under Assignments/Grading) Lab: Enabling Windows Active Directory and User Access Controls

Week	Topics Covered/Lecture	Assignment Schedule
4	Security Operations and Administration	<p>Article Journal</p> <p>Class Participation (See Description under Assignments/Grading)</p> <p>Lab: Using Group Policy Objects and Microsoft Baseline Security Analyzer for Change Control</p>
5	Auditing, Testing, and Monitoring	<p>Article Journal</p> <p>Class Participation (See Description under Assignments/Grading)</p> <p>Lab: Performing Packet Capture and Traffic Analysis</p>
6	Risk, Response, and Recovery	<p>Article Journal</p> <p>Class Participation (See Description under Assignments/Grading)</p> <p>Lab: Implementing a Business Continuity Plan</p> <p>Final Paper Outline</p>
7	Cryptography	<p>Article Journal</p> <p>Class Participation (See Description under Assignments/Grading)</p> <p>Lab: Using Encryption to Enhance Confidentiality and Integrity</p>
8	<p>Networks and Telecommunications</p> <p>Malicious Code and Activity</p>	<p>Article Journal</p> <p>Class Participation (See Description under Assignments/Grading)</p> <p>Lab: Performing a Web Site and Database Attack by Exploiting Identified Vulnerabilities</p>
9	<p>Information Security Standards</p> <p>U.S. Compliance Laws</p>	<p>Article Journal</p> <p>Class Participation (See Description under Assignments/Grading)</p> <p>Lab: Eliminating Threats with a Layered Security Approach</p>

Week	Topics Covered/Lecture	Assignment Schedule
10	Information Systems Security Education and Training Information Security Professional Certifications	Article Journal Class Participation (See Description under Assignments/Grading) Lab: Implementing an Information Systems Security Policy
11	Final	Final Paper <a href="https://academics.depaul.edu/calendar/Pages/finals-calendar.aspx">https://academics.depaul.edu/calendar/Pages/finals-calendar.aspx</a>

### Assignments/Grading

Assignment	Description	Grade Points (Total = 100)
<b>Class Participation</b>	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 <b>login to D2L each week to view the lecture and post responses</b> to the class discussion section for the week by selecting and responding to at least 1 "Question" or "Exercise" (see slide titles from lecture content) from each section of the week's lecture slides. Please include a copy of the question selected in the title of your post. Also, respond in the D2L discussion section to at least one other student post by providing your thoughts/reactions and constructive feedback. Active participation in weekly Zoom sessions will also count toward the Discussion grade in lieu of posting on D2L	15
<b>Article Journal</b>	Choose an article from a popular or scholarly publication <b><u>related to one of the current week's</u></b> lecture topics. In D2L, post to the Articles section a citation to the article (use APA format – see "style guide") and an abstract/summary ( <b><u>10-15 sentences</u></b> ) of what the article addresses. A LinkedIn Learning lesson can be substituted in lieu of an article.	20

Assignment	Description	Grade Points (Total = 100)
<b>Article Presentations</b>	All students must present a 2-3-minute summary of one of their articles as a class discussion. Only one presentation is required for the Quarter per student; each week's presentation is due by 5p the day of class for which the student has signed up. All students will post presentations to the "VoiceThread" folder set-up under the "Article Presentations" thread under "Content". Use of video and supplemental materials (e.g., PowerPoint) is encouraged but not required.	5
<b>Labs</b>	Review each lab, including any case study or online research that is needed. In a separate document write answers to the questions asked in the D2L Submissions folder – fully answer each question in a short statement or paragraph. To answer questions, only the Introduction and Hands-On Demonstration sections need to be completed. Other sections for each lab may be reviewed but are not necessary for each assignment	30
<b>Outline of Final Paper</b>	Prepare a 1-2-page full sentence outline of the topic selected for the final paper. The 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 must then be outlined to describe your intended content for the final paper. An initial list of 2-3 references to be used in writing the paper must also be included (using APA format for citation). An example of a full sentence outline can be found at: <a href="http://fowens.people.ysu.edu/FullSentenceOutlineFormat.htm">http://fowens.people.ysu.edu/FullSentenceOutlineFormat.htm</a>	5
<b>Final Paper</b>	Write a paper (title page and endnotes are not part of page count) from one of the suggested topics or from a topic pre-approved by the instructor in advance. Include at least 3-5 references cited. Use APA format for the paper and citations from Style Guide. Page count should be 5-6 pages (single space) or 10-12 pages (double-space)	25
<b>Total</b>		<b>100</b>
<b>Extra Credit</b>	<b><i>Attend at least one professional association activity focusing on information security, privacy, legal affairs, or a similar topic.</i></b>  Attendance can be online or in-person and should be at least one hour in length. Students should <u>not</u> attend something that costs a fee just for the extra credit. To receive credit – turn in at least a ½ page summary of the event by posting to the Extra Credit section in D2L	2

Assignment	Description	Grade Points (Total = 100)
Extra Credit	<p><b><i>Arrange a consultation with the DePaul Writing Center to review a draft of the final paper.</i></b></p> <p>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: <a href="https://condor.depaul.edu/writing/">https://condor.depaul.edu/writing/</a></p>	2

**Late Submissions:** Late submissions will be permitted past a due date but with a point reduction in the “Timing” rubric for each missed day. Discuss any circumstances in advance with the instructor if a late submission becomes necessary.

### 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](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

### 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:

“Labs”, “Final Outline”, “Final Paper”	<ul style="list-style-type: none"> <li>Results/Findings (Content is well developed with analytical thought)</li> <li>Mechanics (Correctness of grammar and spelling)</li> <li>Timing (Assignment is submitted by required date)</li> </ul>
“Participation”	<ul style="list-style-type: none"> <li>Participation (Initiative in providing feedback)</li> <li>Quality (Thoughtful and interactive discussion)</li> <li>Timing (Assignment is submitted by required date)</li> </ul>
“Article Journal”	<ul style="list-style-type: none"> <li>Citations (Proper form and format is used)</li> <li>Applicability (Relates to the current week’s topics)</li> <li>Timing (Assignment is submitted by required date)</li> </ul>

### **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](http://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.

**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.

### **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 login to D2L to view lectures each week. Attendance in online Zoom sessions is also encouraged to participate in class question and answer sessions. Failure to 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 Social Distance and Mask Policy**

Keeping our DePaul community safe is of utmost importance in the pandemic. Students, faculty, and staff are always expected to wear a cloth face covering while on campus, both inside buildings and outside on the grounds. All are also expected to maintain physical distance (at least six feet) in all DePaul spaces (including classrooms, meeting rooms, hallways, rest rooms, offices, and outdoor spaces). These recommendations may change as local, state, and federal guidelines evolve. Anyone not keeping to these requirements will be asked to leave the classroom. Students who have a medical reason for not complying should register with DePaul's Center for Student with Disabilities (CSD).

#### **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.** This course will be subject to the university's academic integrity policy. More information can be found at <https://resources.depaul.edu/teaching-commons/teaching/academic-integrity/Pages/default.aspx>

#### **Students with Disabilities**

Students seeking disability-related accommodations are required to register with DePaul's Center for Students with Disabilities (CSD) enabling them to access accommodations and support services to assist with their success. There are two office locations: Loop Campus – Lewis Center #1420 – (312) 362-8002; Lincoln Park Campus – Student Center #370 – (773) 325-1677. Students who register with the Center for Students with Disabilities are also invited to contact the Director of the Center privately to discuss assistance in facilitating the accommodations to be used in a course. This is best done early in the term. The conversation will remain confidential to the extent possible. Please see <https://offices.depaul.edu/student-affairs/about/departments/Pages/csd.aspx> for Services and Contact Information.

**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](mailto: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](mailto: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>