Syllabus: CNS 340 - Fundamentals of Information Assurance

General Course Information

CNS 340 - Fundamentals of Information Assurance	Spring 2017
Instructor: Thomas Andrew (Andy) Reeder	Email: treeder2@depaul.edu
Meeting location/times: Section 901 (in class) ID: 33319; CS&TC 00218 (Loop campus); Wednesdays 5:45 – 9pm Section 910 (online), ID: 33324	Office hours: Mondays, 5:00p – 6:30p, CS&TC 635
Course homepage: https://d2l.depaul.edu Used for presentation materials, supplemental materials, and submission drop boxes	**Text:** **Information Security: Principles and Practices**, 2nd Edition, Mark S. Merkow, Jim Breithaupt, June 2014, Paperback: 324 pages; Publisher Pearson Education ISBN-13: 978-0-7897-5325-0 Optional: **Certified Ethical Hacker (CEH), Cert Guide**, Michael Gregg, May 2014, Hardcover 677 pages; Publisher Pearson Education ISBN-13: 978-0-7897-5127-0 Other reading materials are provided through URL links or posting to D2L

Description:

This course is a survey of the fundamental elements of computer security and information assurance. Topics may include confidentiality, integrity, and availability; security policies; authentication; access control; risk management; threat and vulnerability assessment; common attack/defense methods; ethical issues. Through weekly lectures and assignments students will gain a high-level understanding of the subject of information assurance.

Course topics include leading practices for information security and assurance governance and risk management; network architecture and design of systems to maximize assurance; business continuity, disaster recovery planning, resiliency; data privacy risks and laws; understanding legal, investigation, information-security incident response and management processes; and developing secure application software.

Prerequisite(s): None.

Learning Objectives

Develop a fundamental understanding of the information security profession, enterprise physical security, cryptography, application development security, enterprise incidence response, enterprise business continuity, disaster recovery planning, cyber resiliency, enterprise risk management and governance.

Syllabus: CNS 340 - Fundamentals of Information Assurance

Understand new trends that are transforming enterprise information security and assurance related to cloud computing and mobile applications, Bring Your Own Device (BYOD) strategies, and current, increasingly rigorous security and information assurance compliance requirements.

Class Schedule/Assignment Schedule

Week	Topics Covered/Lecture	Assignment Schedule
1	• Introduction • Why Study Information Security? (Chapter 1) • Information Security Principles of Success (Chapter 2)	
2	• Certification Programs and the Common Body of Knowledge (Chapter 3) • Governance and Risk Management (Chapter 4)	D2L Discussion Post (Online Class) Project/Homework (Online and In-Class)
3	• Security Architecture and Design (Chapter 5) • Business Continuity Planning and Disaster Recovery Planning (Chapter 6)	D2L Discussion Post (Online Class) Project/Homework (Online and In-Class)
4	• Law, Investigations, and Ethics (Chapter 7)	D2L Discussion Post (Online Class) Project/Homework (Online and In-Class)
5	• Physical Security Control (Chapter 8) • Operations Security (Chapter 9)	D2L Discussion Post (Online Class) Project/Homework (Online and In-Class) ***Mid-Term***
6	• Access Control Systems and Methodology (Chapter 10) • Cryptography (Chapter 11)	D2L Discussion Post (Online Class) Project/Homework (Online and In-Class)
7	• Telecommunications, Network, and Internet Security (Chapter 12) • Software Development Security (Chapter 13)	D2L Discussion Post (Online Class) Project/Homework (Online and In-Class)

Syllabus: CNS 340 - Fundamentals of Information Assurance

Week	Topics Covered/Lecture	Assignment Schedule
8	• Securing the Future (Chapter 14) • Special Topics	D2L Discussion Post (Online Class) Project/Homework (Online and In-Class)
9	• Special Topics	D2L Discussion Post (Online Class) Project/Homework (Online and In-Class)
10	• Special Topics	D2L Discussion Post (Online Class) Project/Homework (Online and In-Class)
11	• Final Exam/Final Class http://offices.depaul.edu/oaa/academic-calendar/Pages/Final-Exam-Schedule-2016-2017.aspx	D2L Discussion Post (Online Class) Project/Homework (Online and In-Class) ***Final Exam***

Course Policies

Changes to Syllabus. This syllabus is subject to change as necessary during the quarter. If a change occurs, it will be addressed during class and posted at the standard class link on the DePaul website

Professionalism. **All assignments are to include a document heading with your Name, Course number, Assignment title, Date.** Correct spelling and grammar are very important; use *spell check* and *grammar check* where possible. Use line-spacing, bullet-points, and other *formatting to improve the readability* of your documents. In general, presentation matters, not only in this course, but in the industry, as well.

Academic Integrity and Plagiarism. This course will be subject to the academic integrity policy passed by faculty. More information can be found at http://academicintegrity.depaul.edu/.

The university and school policy on plagiarism can be summarized as follows: Students in this course should be aware of the strong sanctions that can be imposed against someone guilty of plagiarism. If proven, a charge of plagiarism could result in an automatic F in the course and possible expulsion. The strongest of sanctions will be imposed on anyone who submits as his/her own work any assignment which has been prepared by someone else. If you have any questions or doubts about what plagiarism entails or how to properly acknowledge source materials be sure to consult the instructor.

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) at: Student Center, LPC, Suite #370, Phone number: (773)325.1677, Fax: (773)325.3720, TTY: (773)325.7296

Online Course Evaluations. Instructor and course evaluations provide valuable feedback that can improve teaching and learning. The greater the level of participation, the more useful the results. As students, you are in the unique position to view the instructor over time. Your comments about what works and what doesn't can help faculty build on the elements of the course that are strong and improve those that are weak. Isolated comments from students and instructors' peers may also be helpful, but evaluation results based on high response rates may be statistically reliable (believable). As you experience this course and material, think about how your learning is impacted. Your honest opinions about your experience in and commitment to the course and your learning may help improve some components of the course for the next group of students. Positive comments also show the department chairs and college deans the commitment of instructors to the university and teaching evaluation results are one component used in annual performance reviews (including salary raises and promotion/tenure). The evaluation of the instructor and course provides you an opportunity to make your voice heard on an important issue — the quality of teaching at DePaul. Don't miss this opportunity to provide feedback!

Other Course Expectations and Guidelines

Attendance:

- **In Class:** Students are expected to attend each class and to remain for the duration of the class. Late arrivals or departures should be discussed in advance with the Instructor.

- **Online**: Students are expected to watch each week's lecture online and turn in assignments as indicated. Failure to turn in assignments will count as a class absence.

Three absences for any reason, whether excused or not, may constitute failure for the course. The exceptions are a family or medical emergency or extenuating circumstances that are supported by documentation or evidence. Guest speakers are announced in advance if possible; all in-class students are expected to be present during guest lectures.

(Note: It is not possible for students to informally "switch" class types after the course has started (i.e., online students must attend online and in class students must attend in class))

Excused Absence. To petition for an excused absence, students who miss class 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.

Attitude. 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, cell phones ringing, emailing, texting or using the Internet whether on a phone or computer. If any issues arise a student may be asked to leave the classroom. The professor will work with the Dean of Students Office to navigate such student issues.

Cell Phones/Mobile Devices. If you bring a cell phone or a mobile device to class, the call feature must be **off or set to a silent mode**. Should you need to answer a phone call during class, students must leave the room in an undisruptive manner. Out of respect to fellow students and the professor, texting is never allowable in class. If you are required to be on call as part of your job, please advise me at the start of the course. **Laptops should ONLY be used in class for note-taking or in-class research.**

Syllabus: CNS 340 - Fundamentals of Information Assurance

Civil Discourse. 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.

Withdrawal. Students who withdraw from the course do so by using the Campus Connection 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 as follows:

- Autumn Quarter: Last day of the last final exam of the subsequent winter quarter

- Winter Quarter: Last day of the last final exam of the subsequent spring quarter

- Spring Quarter: Last day of the last final exam of the subsequent autumn quarter

- Summer Terms: Last day of the last final exam of the subsequent autumn quarter

Incomplete. 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. CDM policy requires the student to initiate the request for incomplete grade before the end of the term in which the course is taken. Prior to submitting the incomplete request, the student must discuss the circumstances with the instructor. Students may initiate the incomplete request process in MyCDM.

- All incomplete requests must be approved by the instructor of the course and a CDM Associate Dean. Only exceptions cases will receive such approval.

- If approved, students are required to complete all remaining course requirements independently in consultation with the instructor by the deadline indicated on the incomplete request form.

- By default, an incomplete grade will automatically change to a grade of F after two quarters have elapsed (excluding summer) unless another grade is recorded by the instructor.

An incomplete grade does NOT grant the student permission to attend the same course in a future quarter.

Syllabus: CNS 340 - Fundamentals of Information Assurance

Assignments/Grading

Assignment	Description	Percentage of Grade
Class Participation	***In Class Students***. Participation in class discussions will be measured by students actively asking questions and offering comments relevant to the day's topic or by the instructor asking students to offer comments related to the reading assignments. ***Online Students.*** • Post to D2L by selecting and responding to at least 2 "Questions" from the week's lecture (both questions should be included in a single "Thread"). Respond in D2L to at least 2 other students' postings by providing your thoughts/reactions and constructive feedback. Discussion posts are due in D2L by each Saturday at 5p.	12%
Project/Homework	Choose and answer one "Project/Homework" topic from the week's discussion. • Written summaries should be no more than 1-2 paragraphs and no more than one page; submit to D2L as .pdf as the preferred format • Due each Saturday by 5p	12%
Project/Homework presentations	All students must present one of their weekly Project/Homework topics as a class discussion • This is discussion only – no other presentation materials are required • Online students may present either by posting a sound or video recording to D2L or by a phone call made by the Instructor • Students must sign up in advance for the week to present – a link to sign-up will be provided by the instructor • Due in class of week selected by student	6%
Mid-Term	Multiple Choice based exam	35%
Final Exam	Multiple Choice based exam	35%

Syllabus: CNS 340 - Fundamentals of Information Assurance

Late Submissions. Late submissions will be permitted past a due date but with a 10%-point reduction for each missed day. Discuss any circumstances with the instructor if a late submission becomes necessary.

Grading

Scale (based on 100 points = 100%)
93 A
90 A-
87 B+
83 B
80 B-
77 C+
73 C
70 C-
60 D
<60 F