CSEC 340: Fundamentals of Information Assurance

Spring 2020-2021 / Class Number: 30054, Section 901

DePaul UNIVERSITY
COLLEGE OF COMPUTING AND DIGITAL MEDIA

Course and Instructor Information

Instructor:Mohammed J. Khan
Office:Zoom
Office Hours:by appointment
Class Time/Place:D2L | Zoom | on-line
E-mail:mkhan@depaul.edu

Instructor Bio

Global head of digital health, IT, cyber and privacy audit at a global medical device and healthcare organization. He manages a global team responsible for enterprise risk management across the organization and conducting audits, assessments and advisory engagements. He has spearheaded multinational global audits and assessments in several areas, including enterprise resource planning systems, global data centers, cloud platforms (i.e., Amazon Web Services), third- party manufacturing and outsourcing reviews, process re- engineering, and improvement, global privacy assessments (EU Data Protection Directive, the US Health Information Portability, and Accountability Act [HIPAA], the EU General Data Protection Regulation [GDPR]), and FDA guidance specific to medical device cyber-security over the past several years. He previously worked as an advisory consultant for leading consulting firms and multinational companies.

Khan frequently speaks at national and international conferences on topics related to data privacy, cybersecurity and risk advisory. He volunteers as an ISACA® Journal article reviewer and contributes actively to the ISACA Journal and blogs. He also serves on the Digital Healthcare Committee for ISACA recommending industry leading thought leadership and guidance for the organization members.

Khan received his bachelor's and master's degree in Information Systems from DePaul University. He later obtained a Business Administration certificate from The University of Chicago. Complimenting his education, Khan has several certifications from leading organizations, including Information Systems Audit and Control Association (ISACA) and International Association of Privacy Professionals (IAPP). Khan is a Certified Information System Auditor (CISA), Certified in Risk and

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AND DIGITAL MEDIA

Information Systems Control (CRISC), Certified Information Privacy Manager (CIPM), Certified Data Privacy Solutions Engineer (CDPSE) and Six Sigma Certified Green Belt. He is a recipient of a prestigious award from ISACA, the John W. Lainhart IV Global Award, for recognition his major contributions to the development and enhancement of the common body of knowledge used by the ISACA organization and its members.
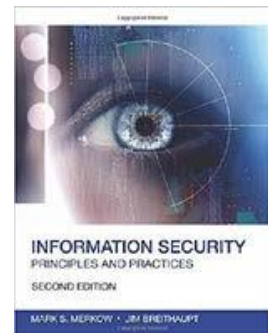
In my pastime, I participate in marathons around the world, road cycling, hiking with his kids at national parks and helping support aspiring young leaders as a mentor.

Textbook

Merkow & Breithaupt (2014). *Information Security: Principles and Practices.* 2nd Edition. Pearson IT Certification. ISBN 13: 9780789753250

Available at:

- http://www.informit.com/store/information-security-principles-and-practices-9780789753250

- Amazon

- DePaul Bookstore (price matches Amazon)

- Barnes & Noble

- *Digital copy is available at DePaul library*

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Table of Contents

CSEC 340: Fundamentals of Information Assurance

Spring 2020-2021 / Class Number: 30054, Section 901

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AND DIGITAL MEDIA

Course Description

This lecture/discussion 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; and ethical issues.

Prerequisite: None

Learning Outcomes

At the conclusion of the course, you will be able to:

- Understand and contextualize the principles of information security in complex systems and organizations
- Understand, implement and develop cybersecurity controls, security policies, procedures, and programs
- Perform threat, vulnerability, and risk assessments
- Plan a security awareness, training and education activity
- Respond in face of new cybersecurity exploits, campaigns, and latest challenges
- Think critically about role of a cybersecurity expert
- Think critically about broader set of factors affecting information security management

Grading

Assignment	Value
Quiz 1	10%
Quiz 2	10%
Quiz 3	10%
Quiz 4	10%
On-line Participation	20%
Mid-Term Paper	20%
Final Exam	20%
Total	100%

Percentage Grade	Letter Grade	Manner of Fulfillment
92-100	A	Excellent
90-91	A-	Excellent
88-89	B+	Very Good
82-87	B	Very Good
80-81	B-	Very Good
78-79	C+	Satisfactory
72-77	C	Satisfactory
70-71	C-	Satisfactory
68-69	D+	Poor
62-67	D	Poor
60-61	D-	Poor
0-59	F	Poor

CSEC 340: Fundamentals of Information Assurance

Spring 2020-2021 / Class Number: 30054, Section 901

Week-by-Week (Tentative)

Week	Week of	Event	Chapters
1	March 30	Introductions, expectations, assumptions, and diving into the first two chapters.	Chapter 1 Chapter 2
2	April 6	Quiz 1 (Chapters 1-4)	Chapter 3 Chapter 4
3	April 13		Chapter 5 Chapter 6
4	April 20	Quiz 2 (Chapters 5-7)	Chapter 7
5	April 27	Mid-Term Paper (See below under section 'EXAMS')	Chapter 8
6	May 4		Chapter 9 Chapter 10
7	May 11	Quiz 3 (Chapters 8-10)	Chapter 11
8	May 18		Chapter 12
9	May 25	Quiz 4 (Chapters 11-14)	Chapter 13 Chapter 14
10	June 1		Special Topics / Recap
Finals Week	June 8	Final Exam	

CSEC 340: Fundamentals of Information Assurance

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AND DIGITAL MEDIA

Coursework

Assignments

- Detailed instructions will be posted in D2L.

- All assignments are due by 11:00 a.m. on the date specified. Assignments are considered on time only if they are submitted on the due date as per the submission guidelines.

- Late work is **only** accepted up to 24 hours after the due date for a deduction of 50%. No work will be accepted after that. You should plan beforehand properly. No excuses will be accepted. Please do NOT wait for the last minute to deliver assignments and DO plan for possible computer or network problems.

- For any deliverables, any instance of copying, cheating or plagiarism will be penalized. Students handing in similar work will both receive a zero on the assignment and will face disciplinary actions. All assignments will be checked for plagiarism. Assignments with higher than 20% similarity will not be graded (will receive zero credit).

Quizzes

- You will have four quizzes which will be conducted online in D2L.

- All quizzes are individual work.

- All quizzes will be open Wednesday 12:00 PM. and are due by Friday 11:00 AM. on the week specified in the course schedule

- If you miss a quiz, there will be no makeups—no exceptions.

Exams

- Mid-Term paper topic options will be posted on D2L

  - There will be 3-5 topics to pick from to write your mid-term paper, which will be due in on April 30th by 11 AM CST

  - Topic of the paper may range from Automation in Security, Insider Threats, Deep Fake Detection, Algorithms Impact on Privacy or if you have a topic you are very passionate about, talk to the instructor for prior approval

  - Paper length should be from five to ten pages, double-spaced (standard Word document in 12 pt Times New Roman)

  - Use endnotes at the end of the article, rather than footnotes, to credit sources. Include all relevant source information (e.g., author, publisher, title of book or article, magazine name, date/year of publication, country of publication)

- Final exam will be online in D2L in a fashion similar to the quizzes. More information will be posted in D2L.

- The final exam will include materials from both the textbook and from the topics covered in the lectures. Some of the lecture materials may not be found in the book. Therefore, it is very important to attend class regularly and view and participate in all on-line activities.

- Final exam will be in the form of multiple choice and True/False questions.

- Students are required to take tests at the scheduled time.

- There will be NO MAKEUP EXAM. If you miss the mid-term test without a valid excuse, then your grade on that will be zero. If you miss the mid-term test with a valid excuse and provide proper documentation along with the "Student Absence Notification Form" to the instructor, your final exam grade will be used as the grade for the missed exam. Documentation must be given to your instructor no later than one week following the exam. Detail instructions can be found at this link.

- If you have any question concerning a grade you receive on an exam, it is your responsibility to inform me within one week of the exam. Grades will not be discussed after that time.

Participation

Students are highly encouraged to ask questions and offer comments relevant to the day's topic. Participation allows me to "hear" your voice when grading papers and participation on-line.

The participation grade reflects the effort you put into the class by participating in discussions on-line. Your class participation grade will depend on the substantive contributions and insights you bring to the discussion.

If you miss a participation assignment, there will be no makeups—no exceptions.

Extra Credit Opportunities

You will have the option of extra credit assignments.

Podcasts / Articles / Case Studies

Cybersecurity-related suggestions may be announced weekly in class and your suggestions are welcomed.

Course Policies

Supplemental Material

Syllabus, assignments, rubrics, and announcements will be posted on D2L. You are expected to check the course website and your email at least twice a week.

Attendance

Students are expected to attend each class and to remain for the duration. Coming 15 minutes late or leaving 15 minutes early constitutes an absence for the student. You will be responsible for all material covered in class and for knowledge of any announcements or changes to the schedule made in class, even if you are unable to attend class. Three absences for any reason, whether excused or not, may constitute failure for the course.

Attitude

A professional and academic attitude is expected throughout this course. Measurable examples of nonacademic 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.

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.

Cell Phones/On Call

If you bring a cell phone to class, it must be off or set to a silent mode. Should you need to answer a call during class, students must leave the room in a non-disruptive 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.

Changes to Syllabus

This syllabus is subject to change as necessary during the quarter. If a change occurs, it will be addressed during class.

Online Course Evaluations

Evaluations are a way for students to provide valuable feedback regarding their instructor and the course. Detailed feedback will enable me to continuously tailor teaching methods and course content to meet the learning goals of the course and your academic needs. 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 instructors 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 click this link for additional information.

Academic Integrity and Plagiarism

This course will be subject to the university's academic integrity policy. More information can be found at here.

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 incomplete's can be found here.

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 here.

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 Dr. Gergory Moorhead, Director of the Center, privately to discuss how he may assist 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 click here for Services and Contact Information.

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Critical Dates

Students seeking to make adjustments to their courses including drop dates should see the current academic calendar here.