

ISM4323

Information Security and Risk Management

School of Information Systems and Management Information Assurance and Cybersecurity Management Program

Instructor: Dr. Giti Javidi

Office Location: Sarasota Campus – C217 Office Hours: Virtual hours Tuesdays 2p-3p

Phone Number: 941-359-4257

Email: javidi@usf.edu

Semester: Spring 2023

Class Meeting Days: 100% online Class Meeting Time: 100% online

Class Meeting Location: Canvas/Microsoft Teams

IMPORTANT DATES:

January 9 Classes begin

January 13 **Drop/add ends; fee liability/tuition payment deadline**

January 16 Martin Luther King, Jr. Holiday; no classes and USF offices closed

February 6 Spring graduation application due

February 20 Midterm grading opens March 7 Midterm grading closes March 13 Spring Final grading opens

March 13-19 SPRING BREAK

March 25 Spring last day to withdraw; no refund & no academic penalty

March 27 Summer/Fall registration begins

April 22-28 Test Free Week

April 28 Spring last day of classes

Apr. 29-May 4 Final Exam Week May 9 Final grading closes

May 12 Final grades visible on OASIS

COURSE PREREQUISITES: ISM3011

COURSE DESCRIPTION: (From Catalog). Introduction to information security and IT risk management in organizations. Covers essential IT general controls and frameworks to assess IT risk in a business environment.

REQUIRED TEXTBOOK:

Agrawal, Campo and Pierce, Information Security and Risk Management, Wiley, 2014, ISBN 9781118335895

Information Security and IT Risk Management | Wiley

OPTIONAL TEXTBOOKS:

Westerman, George and Richard Hunter, IT Risk: Turning Business Threats into Competitive

Advantage, Harvard Business School Press, 2007, ISBN 1422106667

Gibson, Darril and Igonor, Andy, Managing Risk in Information Systems, Jones and Bartlett, 2022, 9781284183719

COURSE TOPICS: This course will cover the following content areas:

- System administration
- Information Security model
- Asset identification
- Threats and vulnerabilities
- Encryption controls
- Identity & Access management
- Hardware and software controls
- Shell scripting
- Incident handling
- Incident analysis
- Security policies

COURSE OBJECTIVES:

- 1. To introduce the importance of information security and related business concern.
- 2. To make students aware of the major categories of information security threats.
- 3. To make students aware of the common information security controls.
- 4. To enable students to implement the basic information security controls.
- 5. To introduce students to the important legal provisions regarding information security.
- 6. To make students aware of the methodological implications for information security arising from these legal provisions.
- 7. To provide students with an understanding of the standard methodologies for complying with legal requirements for IT general controls.
- 8. To provide basic understanding of IT risk management in organizations.

STUDENT LEARNING OUTCOMES:

Upon completion of this course, students will be able to:

- 1. Students will demonstrate an understanding of security concerns and issues in organizations.
- 2. Students will have the ability to identify major categories of information security threats.
- 3. Students will have the ability to apply various kinds of controls to counter common threats.
- 4. Students will have the ability to apply best practices related to IT controls to comply with legal requirements.
- 5. Students will have the ability to provide solutions to mitigate IT risks.

COURSE POLICIES: Technology and Media

Canvas: This course will be offered via USF's learning management system (LMS), Canvas. If you need help learning how to perform various tasks related to this course or other courses being offered in Canvas, please view the following videos or consult the Canvas help guides. You may also contact USF's IT department at (813) 974-1222 or help@usf.edu. The course will include recorded lectures, reading assignments, tests (midterm and Final), quizzes, discussions and homework (posted on CANVAS).

COURSE LOGISTICS:

- 1. Students may form groups of three students each to complete projects.
- 2. Use the phrase "ISM4323" in the subject line of your email (no spaces) to help me filter emails.

- 3. In all deliverables and communication, please include the names of ALL students involved. This is needed for allocating grades correctly. You will lose credit for not doing so.
- 4. Readings and assignment deliverables are always scheduled on the Friday of the week.
- 5. Deliverables are due by the end of day on the due date (usually this means 11:55pm).
- 6. We will try to manage class time so that as much of the hands-on activity is performed in class as possible.
- 7. Assignments for each chapter have 5 components questions, example case, critical thinking, hands-on activities and design case. Critical thinking and example case are worth 0.5% each, the other activities are worth 1% of the credit for the course. These assignments can take time, please plan your time accordingly.
- 8. The design case is your opportunity to conduct industry research. This is your opportunity to discover issues, concerns, products and solutions not discussed in class and apply them within a coherent framework to solve customer concerns.
- 9. I will do my best to try and teach you something useful, not merely certify what you already know. This impacts exam preparation too. For example, you should not expect a shortlist of questions to prepare.
- 10. Subject to availability of time, select groups will be invited to present their designs in class on the last day.

GRADING POLICIES

- **Makeup Exam Policy**: There will be no make-ups for the midterm, or the final exam. Make up opportunities will only be provided for job-related situations and for medical emergencies in the immediate family.
- Late Submission Policy: All assigned work are expected to be turned in on time, by 11:59 p.m. of the due date. Late assignments will not be accepted unless prior permission has been granted by your Instructor. It is okay for students to work ahead and complete all assignments, labs and tests if they desire, but no makeups or extra credit will be offered.
- Exam Retention Policy: After exams are graded, the instructor will review the examination with the class and collect all exams. The exams will be retained for one semester following the current one, and then they will be destroyed.

GRADING SCALE

USF policy requires that all students receive a graded assignment or examination prior to the semester's drop/withdraw date (please refer to important dates on page 1 of this syllabus). Student performance for this course will be evaluated based on tests, assignments, and quizzes, as detailed below. Below is a summary for the determination of the final grade and an explanation for each component:

Deliverables	Unit weight	Total weight
Assignments (total 4)	10%	40%
Quizzes (total 12)	2%	24%
Midterm Exam	15%	15%
Final Exam	15%	15%
Discussions	6%	6%
Total	100%	

STUDENT EXPECTATIONS

- **Attendance Policy**: There is no live lecture attendance requirement. Everything will be placed on Canyas.
- Course Hero/Chegg Policy: The <u>USF Policy on Academic Integrity</u> specifies that students may not use websites that enable cheating, such as by uploading or downloading material for this purpose. This does apply specifically to Chegg.com and CourseHero.com any use of these websites (including uploading proprietary materials) constitutes a violation of the academic integrity policy.
- End of Semester Student Evaluations: All classes at USF make use of an online system for students to provide feedback to the University regarding the course. These surveys will be made available at the end of the semester, and the University will notify you by email when the response window opens. Your participation is expected and valued.
- **Turnitin.com:** In this course, turnitin.com will be utilized. Turnitin is an automated system which instructors may use to quickly and easily compare each student's assignment with billions of web sites, as well as an enormous database of student papers that grows with each submission. Accordingly, you will be expected to submit all assignments in both hard copy and electronic format. After the assignment is processed, as instructor I receive a report from turnitin.com that states if and how another author's work was used in the assignment. For a more detailed look at this process visit http://www.turnitin.com. Essays are due at turnitin.com the same day as in class.
- Note to Students: All students must review the syllabus and the requirements, including the online terms and video testing requirements, to determine if they wish to remain in the course. Enrollment in the course is an agreement to abide by and accept all terms. Any student may elect to drop or withdraw from this course before the end of the drop/add period.
- Honorlock for the Exams: Online exams and quizzes within this course will require online proctoring. Therefore, students will be required to have a webcam (USB or internal) with a microphone when taking an exam or quiz. Students understand that this remote recording device is purchased and controlled by the student and that recordings from any private residence must be done with the permission of any person residing in the residence. To avoid any concerns in this regard, students should select private spaces for the testing. Students with concerns may discuss location of an appropriate space for the recordings with their instructor or advisor. Students must ensure that any recordings do not invade any third-party privacy rights and accept all responsibility and liability for violations of any third-party privacy concerns. Students are strictly responsible for ensuring that they take all exams using a reliable computer and high-speed internet connection. Setup information will be provided prior to taking the proctored exam. To use Honorlock, students are required to download and install the Honorlock Google Chrome extension. For additional information please visit the USF online proctoring student FAO and Honorlock student resources.

STANDARD UNIVERSITY POLICIES

Policies about disability access, religious observances, academic grievances, academic integrity and misconduct, academic continuity, food insecurity, and sexual harassment are governed by a central set of policies that apply to all classes at USF. These may be accessed at: https://www.usf.edu/provost/faculty/core-syllabus-policy-statements.aspx

WEB PORTAL INFORMATION

Every newly enrolled USF student receives an official USF e-mail account. Students receive official USF correspondence and Canvas course information via that address. The web portal is accessed at http://my.usf.edu.

GENERAL INSTRUCTION FOR STUDENTS

• Academic Support Services:

The Information Commons provides students with individual and group study spaces, computers, printers, and various media equipment for temporary use. The Information Commons is staffed by librarians, learning support faculty, tutors, and technology and elearning specialists. Students challenged by the rigors of academic writing, mathematics, or other course content are urged to contact their professors early in the semester to chart out a plan for academic success, and/or regularly use the tutoring services provided by Learning Support Services (http://www.usfsm.edu/academics/academic-resources/information-commons/tutoring.aspx) which are provided at no cost to students.

• Career Success Center:

Students can explore careers through activities such as job shadowing, mentoring, and internships. Whether students will be pursuing graduate school or seeking employment, Career Services can help develop a plan to reach their next destination. Students can prepare professional documents, practice for the interview and attend employer or graduate school information sessions. Access these resources or schedule an appointment with career advisors at www.usfsm.edu/career-services.

LEARNING SUPPORT and CAMPUS OFFICES

Tampa	Tutoring Hub: The Tutoring Hub offers free tutoring in <u>several subjects</u> to USF					
Campus	undergraduates. Appointments are recommended, but not required. For more					
Cumpus	information, email asctampa@usf.edu					
	Writing Studio: The Writing Studio is a free resource for USF undergraduate and					
	graduate students. At the Writing Studio, a trained writing consultant will work					
	individually with you, at any point in the writing process from brainstorming to					
	editing. Appointments are recommended, but not required. For more information or					
	to make an appointment, email <u>writingstudio@usf.edu</u>					
	Counseling Center: The Counseling Center promotes the wellbeing of the campus					
	community by providing culturally sensitive counseling, consultation, prevention,					
	and training that enhances student academic and personal success. Contact					
	information is available online.					
	Center for Victim Advocacy: The Center for Victim Advocacy empowers					
	survivors of crime, violence, or abuse by promoting the restoration of decision					
	making, by advocating for their rights, and by offering support and resources.					
	Contact information is available online.					
St. Petersburg	Student Success Center: The Student Success Center provides free tutoring and					
Campus	writing consultations. Contact information is available online.					
_	Wellness Center: The Wellness Center provides counseling and medical services,					
	as well as prevention programs and victim advocacy. Contact information is					
	available <u>online</u> .					
Sarasota-	Tutoring and Writing Support: Learning Support Services provides free tutoring					
Manatee	and writing consultations for a variety of courses and subjects such as, Accounting,					
Campus	Biology, Chemistry, Finance, Math & Statistics, Physics, and Spanish. Make an					
	appointment online.					
	Counseling and Wellness Center: The Counseling and Wellness Center is a					
	confidential resource where you can talk about incidents of discrimination and					
	harassment, including sexual harassment, gender-based crimes, sexual assault,					
	stalking, and domestic/relationship violence. Call 941-487-4254					
	Victim Advocate: A Victim Advocate is available 24/7 by calling (941) 504-8599.					
	For assistance leave a message with your phone number and your call will be					
	returned as soon as possible. The Victim Advocate is available to assist victims of					

crime, sexual assault, and partner violence.

COURSE FAQ

How to communicate with me? You can either (i) send me an email directly or through Canvas, or (ii) call/text me or (iii) set up an appointment to see me in my office. When emailing directly or through Canvas, please write the appropriate subject and include your name at the bottom of the email. The emails should be composed professionally and the language should be courteous and respectful.

How NOT to communicate with me?

- 1. Please do not email me from a non-USF email account.
- 2. Please do not submit deliverables to me through email. All deliverables must be submitted through Canvas.
- 3. Please do not reply to an email that I send to the entire class without changing the subject line, unless your question is about that subject. If you are using the "Reply" button as a means to get my email address in the "To" line, please change the subject line and also delete all previous text from that email, if your email pertains to something else.

How will I communicate with you? I will send announcements through Canvas. The announcements should arrive in your inbox. If you send me an email through Canvas, I will respond back through Canvas. If you send me an email directly, I will respond back to your email address. I will make every attempt to reply to your emails within 24 hours during weekdays. I cannot guarantee a response within 24 hours on weekends. Occasionally emails do tend to go to my Spam Mail folder so if you have not received my response within 24 hours, please either resend your email or call my office phone number and leave a message in case I am not in my office. I will provide feedback on your assignments through Canvas.

How to Succeed in this Class?

- Check Canvas and emails daily for announcements: I will periodically send emails and announcements. I encourage you check them daily.
- **Read the syllabus:** It is *a lot of trouble* to prepare so detailed a syllabus. You should assume I had a reason for it. I want to make sure that you understand the course structure and expectations and have your questions answered on the first week. This will help us all have a more productive semester. Please read *every word* in this syllabus by end of the first week and ask me any questions.
- Complete the reading assignments: You will get a lot more out of this class if you complete the assigned readings. In my experience, students who don't complete the reading either never complete it or try to cram it all in just before the exams. That doesn't work. Most of the time, unsatisfactory grades are due to procrastination than any other cause. Please give yourself ample time each week to complete the assigned readings for this class.
- Watch the recorded lectures/external videos: Some modules will include recorded lectures and LinkedIn Learn videos. The lectures that are prepared by me contain topics that I think are the most important in the course. Please watch them.
- **Do not procrastinate on completing assignments:** You cannot pass the course without doing at least most of the assignments. The homework assignments build upon one another. If you get behind, you will find it very difficult to catch up.
- **Complete the quizzes:** Completing the quizzes will prepare you for the exams. So, I encourage you to complete them by the due dates.
- The bottom line "Do not procrastinate."

COURSE SCHEDULE:

Modules	Topic	Reading	Assessments	Deadlines
1	Syllabus, Introduction	Chapter 1	Quiz1	
2	Introduction to information security	Instructor notes and handouts	Quiz2	
3	System administration – part 1, 2	Chapter 2	Quiz3	Assignment 1 - due
4	System administration – part 1, 2	Chapter 3	Quiz4	
5	Basic information Security model	Chapter 4	Quiz5	
6	Asset identification	Chapter 5	Quiz6	Assignment 2 - due
7	Threats and vulnerabilities Midterm Exam [15%]	Chapter 6	Midterm Exam	
8	Encryption controls	Chapter 7	Quiz7	
9	Identity & Access management	Chapter 8	Quiz8	Assignment 3 - due
10	Hardware and software controls	Chapter 9	Quiz9	
11	Shell scripting	Chapter 10	Quiz10	
12	Shell scripting	Chapter 10	Quiz11	
13	Incident handling	Chapter 11	Quiz 12	Assignment 4 - due
14	Incident analysis	Chapter 12		
15	Policies	Chapter 13 & 14		
16	Final Exam [15%]			