



ISM4323

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

COURSE SYLLABUS

Last Updated: 1/1/2023

Instructor: Dr. Rouzbeh Behnia

Office Location: Sarasota Campus – C266

Office Hours: Online (Teams) and in-person (with appointment at CIS2055) - M 1pm – 3pm

Phone Number: 941-359-4605

Email: behnia@usf.edu

Semester: Spring 2023

Class Meeting Days: MW


Class Meeting Time: 9:30am-10:45am

Class Meeting Location: BSN 120

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.


COURSE PREREQUISITES: ISM3011


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.

COURSE LOGISTICS:

1. Please only use your USF email to email me and use "ISM4323" in the subject line of your email (no spaces) to help me filter emails.
2. Deliverables are due by the end of day on the due date (11:59 pm).
3. We will try to manage class time so that as much of the hands-on activity is performed in class as possible.
4. Assignments for each chapter often have 5 components – questions, example case, critical thinking, hands-on activities and design case. These assignments can take time, please plan your time accordingly.
5. 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.
6. I will do my best to try and teach you something useful, not merely certify what you already know.

GRADING POLICIES

- **Makeup Exam Policy:** Make up opportunities will only be provided with a valid reason, for instance, medical related emergencies.
- **Late Submission Policy:** All assigned work are expected to be turned in on time, by 11:59 p.m. of the due date. Late submissions will only be accepted with a valid reason. 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.

A+ = 97-100; A=94-96; A- =90-93; B+ = 87-89; B=84-86; B- = 80-83;
C+=77-79; C = 74-76; C - + 70-73; D = 60- 69; F = 59 or below

GRADE CATEGORIES AND WEIGHTS

Deliverables	Unit weight	Total weight
Class participation/discussion	5%	5%
Assignments (3 total)	15%	45%
Quizzes (5 total)	4%	20%
Midterm Exam	15%	15%
Final Exam	15%	15%
Total		100%

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>

2021 FALL COVID-19 MITIGATION EXPECTATIONS

All students and instructors are expected to wear face coverings, at all times, during in-person classes. Per guidance from the CDC and Board of Governors, ***we expect that all members of our community will wear a mask on campus, vaccinated or unvaccinated.*** This is especially

important while indoors, in crowded outdoor settings, if you have a weakened immune system or an underlying medical condition. Masks will be made available to anyone who needs one.

USF strongly urges all community members to get fully vaccinated. Vaccines are our most reliable means of preventing the spread of COVID-19. The vaccine is free, readily available, and all of USF's faculty, staff, and students are of age to be eligible for the vaccine; therefore, if someone chooses not to be vaccinated, they are assuming significant risk, including isolation and quarantine. Vaccines are also the most reliable way to ensure that students do not face any disruption to their studies or social activities, and faculty and staff do not face disruption to their teaching, research, or university work.

It is critically important that individuals who feel unwell stay home and contact Student Health Services or their primary care provider for medical advice. Report all possible exposures to assessCOVID@usf.edu.

Students in in-person classes may be assigned to the same seat for the duration of the Fall semester. This can assist with exposure assessments should they be necessary.

A student who will be absent from an in-person class (due to isolation, quarantine or other reason) must notify the instructor immediately for guidance on academic continuity and student learning.

Instructors may schedule remote office hours during the Fall 2021 semester.

In-person classes may be asked (by USF leadership or the COVID-19 team) to transition to temporary remote instruction at any point in the Fall semester.

COURSE POLICIES: STUDENT EXPECTATIONS

- **Health and Wellness:** Example statement supporting student health and wellbeing.
Your health is a priority at the University of South Florida. We encourage members of our community to look out for each another and to reach out for help if someone is in need. If you or someone you know is in distress, please make a referral at www.usf.edu/sos so that the Student Outreach & Support can contact and provide helpful resources to the student in distress. A 24-hour licensed mental healthcare professional, offered through the counseling center, is available by phone at 813-974-2831, option 3. Please remember that asking for help is a sign of strength. In case of emergency, please dial 9-1-1.
- **Attendance Policy:** Attendance is expected for all classes. I will certainly accommodate excused absences by making arrangements with students ahead of time (when possible) or by providing a reasonable amount of time to make up missed works.
- **Course Hero/Chegg Policy:** The [USF Policy on Academic Integrity](#) 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.
- **Title IX Policy:** Title IX provides federal protections for discrimination based on sex, which includes discrimination based on pregnancy, sexual harassment, and interpersonal violence. In an effort to provide support and equal access, USF has designated all faculty (TA, Adjunct, etc.) as Responsible Employees, who are required to report any disclosures of sexual harassment, sexual violence, relationship violence or stalking. The Title IX Office makes every effort, when safe to do so, to reach out and provide resources and accommodations, and to discuss possible options for resolution. Anyone wishing to make a Title IX report or seeking accommodations may do so online, in person, via phone, or email to the Title IX Office. For information about Title IX or for a full list of resources please visit: <https://www.usf.edu/title-ix/gethelp/resources.aspx>. If you are unsure what to do, please contact Victim Advocacy – a confidential resource that can review all your options – at 813-974-5756 or va@admin.usf.edu.
- **Campus Free Expression:** The following statement was crafted as a suggested statement to include for courses that engage in discussions and instruction which students may find uncomfortable, unwelcome, disagreeable, or even offensive. These discussions are intended to be objective. [Additional guidance related to HB 7 "Individual Freedom Act" can be found online.](#)
Suggested Statement: *It is fundamental to the University of South Florida's mission to support an environment where divergent ideas, theories, and philosophies can be openly exchanged and critically evaluated. Consistent with these principles, this course may involve discussion of ideas that you find uncomfortable, disagreeable, or even offensive.*
In the instructional setting, ideas are intended to be presented in an objective manner and not as an endorsement of what you should personally believe. Objective means that the idea(s) presented can be tested by critical peer review and rigorous debate, and that the idea(s) is supported by credible research.
Not all ideas can be supported by objective methods or criteria. Regardless, you may decide that certain ideas are worthy of your personal belief. In this course, however, you may be asked to engage with complex ideas and to demonstrate an understanding of the ideas. Understanding an idea does not mean that you are required to believe it or agree with it.
- **Professionalism Policy:** Per university policy and classroom etiquette; mobile phones, iPods, etc. **must be silenced** during all classroom and lab lectures. Those not heeding this

rule will be asked to leave the classroom/lab immediately so as to not disrupt the learning environment. Please arrive on time for all class meetings.

GENERAL INSTRUCTION FOR STUDENTS

- **Academic Support Services:** [The Information Commons](http://www.usfsm.edu/academics/academic-resources/information-commons/tutoring.aspx) 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 e-learning 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 Campus	<p>Tutoring Hub: The Tutoring Hub offers free tutoring in several subjects to USF undergraduates. Appointments are recommended, but not required. For more information, email asctampa@usf.edu</p> <p>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 writingstudio@usf.edu</p> <p>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.</p> <p>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</p>
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	information is available online .
St. Petersburg Campus	<p>Student Success Center: The Student Success Center provides free tutoring and writing consultations. Contact information is available online.</p> <p>Wellness Center: The Wellness Center provides counseling and medical services, as well as prevention programs and victim advocacy. Contact information is available online.</p>
Sarasota-Manatee Campus	<p>Tutoring and Writing Support: Learning Support Services provides free tutoring and writing consultations for a variety of courses and subjects such as, Accounting, Biology, Chemistry, Finance, Math & Statistics, Physics, and Spanish. Make an appointment online.</p> <p>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</p> <p>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.</p>

COURSE FAQ

How to communicate with me? Please email me directly (from your USF email) or message me through Canvas.

How NOT to communicate with me?

1. Please do not use non-USF emails to email me.
2. Please do not send you assignments, projects, quizzes through email. Everything should be submitted through Canvas.

How to succeed in this course? Successful students in this class complete all readings BEFORE coming to class. Our in-class time is designed to further and deepen the knowledge, concepts, and skills from the readings – not just repeat the information.

COURSE SCHEDULE:

Modules	Topic	Reading	Assessments	Deadlines
1 1/9	Introduction to information security	Chapter 1		
2 1/16	System administration – part 1, 2	Chapter 2		
3 1/23	System administration – part 1, 2	Chapter 3	Quiz 1	
4 1/30	Basic information Security model	Chapter 4		

5 2/6	Asset identification	Chapter 5		Assignment 1 - due
6 2/13	Threats and vulnerabilities	Chapter 6	Quiz 2	
7 2/20	Encryption controls <i>Midterm Exam</i>	Chapter 7	Midterm Exam	
8 2/27	Identity & Access management	Chapter 8		
9 3/6	Hardware and software controls	Chapter 9	Quiz 3	Assignment 2 - due
3/13	Spring break			
10 3/20	Shell scripting	Chapter 10		
11 3/27	Shell scripting	Chapter 10	Quiz 4	
12 4/3	Incident handling	Chapter 11		
13 4/10	Incident analysis	Chapter 12	Quiz 5	Assignment 3 - due
14 4/17	Policies	Chapter 13		
15 4/24 Test-free	IT Risk Analysis and Risk Management	Chapter 14		
	<i>Final Exam</i>			