Decision Processes for Business Continuity and Disaster Recovery (BCDR)
ISM 6577.021 / ISM 6577.350

Course Information

Course Title: Information Security and IT Risk Management
Course Subject # / Section:
- ISM 6577 / 021
- ISM 6577 / 350

Course Semester: Spring 2023
Course Credit Hours: 3
Course Duration: 8 Weeks (3/6/23-5/4/23)
Course Occurrence: Weekly (Asynchronous)
Course Meeting Times: Asynchronous (Online)
Course Meeting Location: Off Campus (Online)

Instructor Information

Name: Dr. Marcus L. Green
Office: CIS 2070-A
Weekly Office Hours: Virtual via Microsoft Teams; posted via announcement on Canvas
Office Hours (virtual): By appointment only; meetings will occur using Microsoft Teams
Phone: (o) 813-974-6754
E-mail: mlg5@usf.edu

Course Description and Objectives

Course Description

Introduction to decision making and risk assessment skills to plan for and respond effectively to disasters affecting our information systems and critical infrastructures with the goal of maintaining business continuity.

Course Objectives

The goal of the course is to introduce decision making and risk assessment skills to respond effectively to disasters affecting our critical infrastructure. The course is open to students in all majors. Course objectives will be accomplished through two categories of information – (1) helping students develop quantitative skills and frameworks to make decisions and assess risks and (2) apply these skills in the service of protecting critical infrastructure. The course will include class discussions and presentations to prepare students to develop a business continuity and disaster recovery plan for a selected organization.

Specifically, the course objectives are:

1.   To introduce basic data analysis, probability, and statistical analysis.
2.   To introduce important decision-making frameworks.
3.   To introduce risk assessment frameworks.
4.   To make students aware of common decision impediments while analyzing risks.
5.   To enable students to plan and develop business continuity plans for critical infrastructures.
6.   To enable students to plan and develop disaster recovery plans for critical infrastructures.

Learning Objectives

Upon completion of the course students will demonstrate the ability to:

1. Students will demonstrate an understanding of basic data analysis, probability, and statistical analysis.
2. Students will demonstrate an understanding of common decision-making frameworks.
3. Students will demonstrate an understanding of common risk-assessment frameworks.
4. Students will demonstrate an understanding of how to plan for business continuity.
5. Students will demonstrate an understanding of how to plan for disaster recovery.

Course Material, Literature, and Software

Textbooks

Howard Raiffa, Ralph L. Keeney, John S. Hammond, John Hammond, Ralph Keeney, *Smart Choices: A Practical Guide to Making Better Decisions*, (2015) Harvard Business Review Press ISBN-13: 978-1-63369-105-6, ISBN: 1-63369-105-5

David C. Skinner, *Introduction to Decision Analysis* (3rd Edition), (Mar 9, 2009), ISBN-10: 0964793865, Probabilistic Publishing

Susan Snedaker, *Business Continuity & Disaster Recovery Planning for IT Professionals* (2nd Ed.), (Oct. 8, 2013), Syngress, ISBN-10: 0124105262

Course Logistics and Communications

- All email communication sent to me will be through **Canvas messaging** (email). This allows me to repository all communications through canvas as opposed to my normal email. Using Canvas messaging also automatically adds our course information to all communications, which allows me to quickly identify both student and course enrolled.
- For all deliverables requiring email communication, it is required to use **Canvas messaging** (email); **You will lose credit for not doing so**.
- For questions about the course content or any assignment, please utilize scheduled office hours, or call for an appointment. You can also contact me via email.
- All work should be completed using professional standards. Assignments will be submitted via Canvas and submitted to Turnitin. Please ensure that you cite any material referenced appropriately. If you have any question, please do not hesitate to ask for clarification or assistance.

- To improve the efficiency and effectiveness in delivering course content, each student will be responsible for all items contained or emails sent via Canvas.
- Late Assignments: There are no make-ups for course deliverables. Assignments turned in late will be assessed a penalty: a half-letter grade if it is one day late, or a full-letter grade for 2-7 days late. Assignments will not be accepted if overdue by more than seven days. Deliverables are due by the end of day on the due date (usually this means Sunday 11:55pm).
- Re-grade Policy - All tests and other graded material may be submitted for re-evaluation of the grade by the instructor. To request a re-grade, you must submit a written request within one week of the date the test or assignment was returned. The written request must include a cover sheet that explains (1) The specific test questions or aspects of the assignment that you want re-evaluated and (2) Why the original grade is in error and should be reconsidered.
- In the event of an emergency, USF may opt to continue delivery of instruction through methods that include but are not limited to: Canvas, MS Teams, Skype, and email messaging and/or an alternate schedule. It's the responsibility of the student to monitor Canvas for each class for course specific communication, and the main USF, College, and department websites, emails, and MoBull messages for important general information.

Course Grading and Assignment Policies

Grading Scale

Letter grades will be awarded according to the percentage scale below.

Total%	Grade	Total%	Grade	Total%	Grade	Total%	Grade
≥ 97	A+ (max 10% of class)*	≥ 87	B+	≥ 77	C+	≥ 67	D+
≥ 94	A	≥ 84	B	≥ 74	C	≥ 64	D
≥ 90	A-	≥ 80	B-	≥ 70	C-	≤ 60	F

Top 10% At instructor's discretion

Grade Categories and Weights

Activity	Unit Weight	Total Weight
Assessments (x5)	10%	50%
Assignments (x2)	10%	20%
Discussion	10%	10%
BC/DR Review Assignment	20%	20%

Course Assignments Details/Requirements:

Course assignments consist of 3 projects: mid-term project, regression analysis project, and ANOVA project. The projects are worth a maximum of 200 points, 100 points, and 50 points. Students can begin the projects at their own convenience but must turn-in the projects according to the above matrix. At the start of the course, students are provided with documents containing project completion instructions. The mid-term project focuses

on all subjects taught during the course from weeks 1-5. The regression project focuses on regression analysis. And finally, the ANOVA project focuses on ANOVA concepts.

Students have the option of either completing the projects alone or in groups of up to three. Regardless of completion team-status, each student must submit a project via Canvas. The submission document will reflect if the student completed the project in a group, along with the other group members.

Should you wish to discuss the grading and points awarded for any assignment your professor is happy to accommodate you. However, you must do so within two weeks of the graded assignment being returned to you via Canvas. If you do not discuss such with your professor within the two-week window the professor will assume you are satisfied with the grading of the assignment and will consider the points awarded to be final. After the two-week window no discussions of points awarded on an assignment will be entertained.

Course Schedule

Week	Topic	Source	Due/Deadline
1	Syllabus, Defining Decision Problems	Smart Choices, Chapters 1 - 6	ProACT Assignment Sunday 11:55 pm Wk 1
2	Evaluating Choices	Smart Choices, Chapters 7 - 10	Assessment 1 Sunday 11:55 pm Wk 2
3	Decision Analysis	Dec. Analysis, Chapters 2, 4	Assessment 2 Sunday 11:55 pm Wk 3
4	Decision Modeling & Probability	Dec. Analysis, Chapters 7 - 8	Assessment 3 Sunday 11:55 pm Wk 4
5	Simulation, Uncertainty and Risk	Dec. Analysis, Chapters 9 - 11	Simulation Assignment Sunday 11:55 pm Wk 5
6	BCDR Overview	BCDR, Chapters 1, 4	Assessment 4 Sunday 11:55 pm Wk 6
7	Risk Assessment and Mitigation Strategies	BCDR, Chapters 5 - 6	NYBOT Discussion Sunday 11:55 pm Wk 7
8	BCDR Plan Testing and Maintenance	BCDR, Chapters 7 - 9	Assessment 5 DR Plan Review Friday 11:55 pm Wk 7 (Last Day of Class)

**In the interests of the class, deviations may be made in the coverage of topics as outlined in the tentative course calendar. However, to help plan your calendars for the rest of the semester, assessment and deadline dates will be non-negotiable after the first day of class.
**All deliverables are due at the end of day (11:55 PM) Sunday except as noted on course outline.

Disaster Recovery Plan Assignment

1. Review The Executive Summary (pages ES-1 & ES-2), and Chapters 1 and 2 (pages 1-13) [Note: in Acrobat these are pages 11-25] of the *Contingency Planning Guide for Information Technology Systems* from the National Institute of Standards and Technology, 2010. http://dx.doi.org/10.6028/NIST.SP.800-34r1
2. Review the *KPMG Checklist for Business Recovery*, in particular the list under "Technology/Management" On Canvas

Read the material on contingency planning and disaster recovery plans as well as your textbooks to prepare yourself for this assignment.

Deliverables: Paper not to exceed 3000 words. Please cite any material using MLA style if necessary.

- Part 1: Describe the process (steps) you would use in any organization to develop a Business Continuity and Disaster Recovery plan

- Part 2: Critically review the DR plan attached here: TXA&MITDisasterRecoveryPlan.pdf .Suggest ways to improve, note any missing elements, and provide any other suggestions you have for the development team.

Online Proctoring of Quizzes

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.

Online exams and quizzes within this course may 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 FAQ and Honorlock student resources.

The following items are **NOT PERMITTED** within quizzes or exams.

- Referencing any external resources (physical or digital) during the exam other than book and notes.
- Receiving any form of assistance while taking the exam either in person or through a digital platform
- Using any devices during the exam such as a cell phone
- Attempting to duplicate, copy, or take screenshots of exam questions or answers
- Leaving the computer during the exam
- Manipulating and/or covering the camera during the exam

Violation of these rules will be considered cheating, subject to the sanctions outlined within the USF Policy on Academic Integrity Policy including an F on the assignment or an F in the course.

Extra Credit Policy

There are no opportunities for extra credit in this course. Students' focus should be on the primary work in the course.

Medical Issues

There are certainly cases in which a student legitimately cannot complete course assignments for valid medical reasons. To be excused from course work in such cases requires students to furnish a standard note from a health care professional stating care is being sought for an ailment or condition which can impede a student's ability to complete course work. Without such a note an excuse from course work cannot be granted.

Grades of "Incomplete"

An Incomplete grade ("I") is exceptional and granted at the instructor's discretion only when students are unable to complete course requirements due to illness or other circumstances beyond their control. The course instructor and student must complete and sign the "I" Grade Contract Form that describes the work to be completed, the date it is due, and the grade the student would earn factoring in a zero for all incomplete assignments. The due date can be negotiated and extended by student/instructor as long as it does not exceed two semesters for undergraduate courses and one semester for graduate courses from the original date grades were due for that course. An "I" grade not cleared within the two semesters for undergraduate courses and one semester for graduate courses (including summer semester) will revert to the grade noted on the contract.

Academic Integrity and Academic Misconduct

Academic integrity is the foundation of the University of South Florida System's commitment to the academic honesty and personal integrity of its university community. Academic integrity is grounded in certain fundamental values, which include honesty, respect, and fairness. Broadly defined, academic honesty is the completion of all academic endeavors and claims of scholarly knowledge as representative of one's own efforts. The final decision on an academic integrity violation and related academic sanction at any USF System institution shall affect and be applied to the academic status of the student throughout the USF System, unless otherwise determined by the independently accredited institution. The process for faculty reporting of academic misconduct, as well as the student's options for appeal, are outlined in detail in USF System Regulation 3.027.

In our course assignments, the professor has several methods for penalizing those who engage in academic misconduct. Among these methods the professor can 1) award 0 points for an assignment on which a student has engaged in misconduct, 2) award an F in the entire course, or 3) award a special FF grade in the course. An FF appears permanently on the student's transcript as a special designation showing the student failed the course for reasons of academic misconduct. The FF includes expulsion from the University.

Web Posting Course Materials

Students are reminded that posting course materials to third-party sites such as Course Hero or Chegg represents a violation of the professor's copyright on those materials and constitutes theft of intellectual property.

Disruption to Academic Process

Disruptive students in the academic setting hinder the educational process. Disruption of the academic process is defined as the act, words, or general conduct of a student in a classroom or other academic environment which in the reasonable estimation of the instructor: (a) directs attention away from the academic matters at hand, such as noisy distractions, persistent, disrespectful or abusive interruption of lecture, exam, academic discussion, or general University operations, or (b) presents a danger to the health, safety, or well-being of self or other persons.

Student Academic Grievance Procedures

The purpose of these procedures is to provide all undergraduate and graduate students taking courses within the University of South Florida System an opportunity for objective review of facts and events pertinent to the cause of the academic grievance. An "academic grievance" is a claim that a specific academic decision or action that affects that student's academic record or status has violated published policies and procedures or has been applied to the grievant in a manner different from that used for other students.

Attendance Policy

Students are expected to exhibit professionalism through regular and on-time attendance to class lectures, whether those lectures are offered live or online. Accommodation will be made for excused absences by making arrangements with students ahead of time (when possible) or by providing a reasonable amount of time to make up missed work.

Group Work Policy:

Group work is allowable according to the guidance provided earlier in this document.

Final Examinations Policy:

All final exams are to be scheduled in accordance with the University's final examination policy.

Course Policies: Technology and Media

Netiquette Guidelines

1.   Act professionally in the way you communicate. Treat your instructors and peers with respect, the same way you would do in a face-to-face environment. Respect other people's ideas and be constructive when explaining your views about points you may not agree with.
2.   Be sensitive. Be respectful and sensitive when sharing your ideas and opinions. There will be people in your class with different linguistic backgrounds, political and religious beliefs or other general differences.
3.   Proofread and check spelling. Doing this before sending an email or posting a thread on a discussion board will allow you to make sure your message is clear and thoughtful. Avoid the use of all capital letters, it can be perceived as if you are shouting, and it is more difficult to read.
4.   Keep your communications focused and stay on topic. Complete your ideas before changing the subject. By keeping the message on focus you allow the readers to easily get your idea or answers they are looking for.
5.   Be clear with your message. Avoid using humor or sarcasm. Since people can't see your expressions or hear your tone of voice, meaning can be misinterpreted.

Email

The primary means of communication between instructor and students between live class meetings will be email. "Blast emails" will occasionally be sent by the instructor to all students via Canvas. Students can feel free to email their instructor with questions at any time. Please anticipate a response time of 24 hours to email queries.

Laptop Usage

Laptop/Tablet usage is highly encouraged in this course given the nature of the material. Students are responsible for making certain their technology is appropriate to the needs of the program and is in good working order for class lectures and assignments.

Phone Usage:

Students are allowed to use devices for recording lectures for their personal use, though students must still adhere to classroom behavioral expectations while recording. Students attending the in-person lectures are asked to place their mobile phones on "silent" and to step outside the classroom to take any important calls. Phones may not be used during in-class assignments.

Recordings

In this class, software will be used to record live class lectures and discussions. As a student in this class, your participation in live class discussions will be recorded. These recordings will be made available only to students enrolled in the class, to assist those who cannot attend the live session or to serve as a resource for those who would like to review content that was presented. Students who prefer to participate via audio only will be allowed to disable their video camera so only audio will be captured. Please discuss this option with your instructor.

Canvas

This course will be offered via USF's learning management system (LMS), Canvas. Canvas will be used in this course to disseminate materials turn in weekly assignments and return graded assignments. 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.

Online Exam Proctoring

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. Online exams and quizzes within this course may 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 FAQ** and **Honorlock student resources**.

WhatsApp, GroupMe, and Student-to-Student Communication

While students may use digital communication tools (WhatsApp, Slack, GroupMe, etc.) to communicate with fellow students, it is important to remember that academic integrity policies still apply in these environments. Informing others about the contents of tests is prohibited by the official regulation, as is receiving unauthorized information about an examination. Students are expected and required to immediately report instances of such violations to the instructor.

Course Policies:

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.*

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 – almost any use of these websites (including uploading proprietary materials) constitutes a violation of the academic integrity policy.

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. Students who habitually disturb the class by talking, arriving late, etc., and have been warned may suffer a reduction in their final class grade.

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 highly encouraged and valued.

Food and Drink Policy

Please adhere to the firm policy of no beverages (other than bottled/capped water), food, tobacco products, or like items in the classroom. Your understanding of the necessity for this policy and cooperation will be greatly appreciated. This policy will be strictly enforced.

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.

Disability Access

Students with disabilities are responsible for registering with Students with Disabilities Services (SDS) to receive academic accommodations. SDS encourages students to notify

instructors of accommodation requests at least 5 business days prior to needing the accommodation. A letter from SDS must accompany this request.
Religious Observances

All students have a right to expect that the University will reasonably accommodate their religious observances, practices and beliefs. If you observe religious holidays, you should plan your allowed absences to include those dates.

Campus Free Expression

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.

Make-up Exams Policy

If a student cannot be present for an examination for a valid reason (validity to be determined by the instructor), a make-up exam will be given only if the student has notified the instructor in advance that s/he cannot be present for the exam. Make-up exams are given at the convenience of the instructor usually on Fridays at 10 am.

Rewrites Policy

Rewrites are entirely optional; however, only the formal essay may be rewritten for a revised grade. Note that an alternate grading rubric will be used for the rewrite, featuring an additional column that evaluates the changes made specifically.

Exams 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.

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Essay Commentary Policy

Commentary on essays will be delivered in written format, at the end of the essay. However, upon request, an alternate delivery method can be used. If desired, instructor comments will be made verbally and delivered to the student as an mp3 through Canvas. This approach yields far fewer written comments, but much more commentary in general is delivered, due to the speed and specificity of speech. Those requesting mp3 feedback must state so when the essay is turned in.

Learning Support and Campus Offices

Academic Accommodations

Students with disabilities are responsible for registering with Student Accessibility Services (SAS) in order to receive academic accommodations. For additional information about academic accommodations and resources, you can visit the SAS website.
SAS website for the Tampa and Sarasota-Manatee campuses.
SAS website for the St. Pete campus.

Academic Support Services

The USF Office of Student Success coordinates and promotes university-wide efforts to enhance undergraduate and graduate student success. For a comprehensive list of academic support services available to all USF students, please visit the Office of Student Success website.

Canvas Technical Support

If you have technical difficulties in Canvas, you can find access to the Canvas guides and video resources in the "Canvas Help" page on the homepage of your Canvas course. You can also contact the help desk by calling 813-974-1222 in Tampa or emailing *help@usf.edu.*
IT website for the Tampa campus.
IT website for the St. Pete campus.
IT website for the Sarasota-Manatee campus.

Center for Victim Advocacy

Example: 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.

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.
Counseling Center website for the Tampa campus.
Counseling Center website for the St. Pete campus.
Counseling Center website for the Sarasota-Manatee campus.

Tutoring

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.

[Tutoring website for the Tampa campus.](#)
[Tutoring website for the St. Pete campus.](#)
[Tutoring website for the Sarasota-Manatee campus.](#)

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.
[Writing studio website for the Tampa campus.](#)
[Writing studio website for the St. Pete campus.](#)
[Writing studio website for the Sarasota-Manatee campus.](#)

Important Dates to Remember

For important USF dates, see the [Academic Calendar](#) at
http://www.usf.edu/registrar/calendars/

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