

# ISM 4547 SYLLABUS Excel with Data Modeling for Business Analytics

Sections 020, 3 Credit Hours Spring 2023

Instructor: Barb Warner

Flipped/Hybrid Format: Tues/Thurs 5-6:15pm, Online / MS Teams / BSN 123

Email: <u>bwarner@usf.edu</u> or Canvas email

Office hours: Tues/Thurs noon-2pm via Teams (beginning 1/17/22). Additional hours by appointment, Office: CIS2007

#### I. Welcome!

Welcome to ISM 4547! This may be another unusual semester for all of us and I want to assure you that USF and the Muma College of Business priorities are the health and well-being of students, faculty, and staff. Keeping this in mind, we will be approaching the semester armed with data, flexibility, patience and care.

## II. Course Description:

This project-based course provides students with an opportunity to explore business analytics using advanced Excel techniques, incorporating data modeling. **Prerequisites:** CGS2100 and ISM3011

#### III. Course Objectives

Using projects and discussions this course is intended to emphasize the role of business analysts and data scientists in organizations and how creative use of strong technical skills can lead to career advancement in any field. Students should be comfortable using Excel coming into the class to get the most out of the course activities.

## IV. **Learning Outcomes.** Upon completion of the course, students should be able to:

- Design Excel applications that will effectively analyze data to solve business problems
- Employ macros and VBA to automate Excel applications
- Use data modeling to integrate with external data sources
- Demonstrate visualization techniques with internal and external sources to make data more understandable
- Use spreadsheet tools to perform optimization and statistical modeling
- Work with large worksheets / data sets using analytics tools

#### V. Course Structure & Format:

This is a hybrid, flipped, project-based course, meaning that we'll do preparation and skills practice online / at home most Tuesdays to introduce new skills. I'll have in-class sessions on Thursdays for face-to-face help. I try to provide all the tools and resources needed for this class, but you are ultimately responsible for taking advantage of these resources for a successful learning experience.

- Tuesdays (online)—I'll provide video demos to introduce or reinforce new skills and there will be an 'Exploration Exercise'
  (EE) assigned.
- Thursday (face-to-face) will be a workday. I'll be in the class to answer any questions you may have.
- **Sunday** is the due date for the EEs. LinkedIn activities and module projects.

#### VI. Covid-19 Procedures

All students must comply with university policies and posted signs regarding COVID-19 mitigation measures. Details are available on the University's Core Syllabus Policy Statements page: <a href="https://www.usf.edu/provost/faculty/core-syllabus-policy-statements.aspx">https://www.usf.edu/provost/faculty/core-syllabus-policy-statements.aspx</a>.

MS teams will be used and links will be posted on Canvas where appropriate. Note that recorded Teams sessions may include student voice and video. It is the student's responsibility to make sure the privacy of their surroundings is maintained.

#### VII. Course Materials:

• **Texts:** Our eText, Microsoft Excel 2019 Bible 1st Edition by Michael Alexander, ISBN: 9781119514787, is available (for free!) from the USF library. I've also put the library pdf(s) in our Canvas course. You can also purchase it online or at the

bookstore, if you want a physical copy. Note: This book is for Windows but please use it even if you have a Mac and we'll adjust, as the Mac text is quite different.

- Software: You can download a free copy of Microsoft Office 2016 from portal.office.com/home
- **Laptop or desktop:** required. Laptop required if you plan to work on-campus. Please do not plan to use a Chromebook for this class. A Windows laptop is best, a Mac can be used with some adjustments on your part.

# VIII. Course Schedule:

Weeks 1 – 5	Module 1 – Review, Formulas, Charts – Activities & Assignments				
1/9 – 2/12	<ul> <li>Attend class on Tuesday, 1/10 in BSN 123 or be dropped from the class (USF policy)</li> <li>Monday, 1/16, USF closed for MLK Day</li> </ul>				
	<ul> <li>Exploration Exercises &amp; LinkedIn assignments due weekly, uploaded to Canvas, by Sunday 11:59pm</li> </ul>				
	Sunday, 2/12 – Module 1 Assignment(s) Due, uploaded to Canvas by 11:59:00pm				
Weeks 6 - 9	Module 2 – Optimization & Statistical Modeling – Activities & Assignments				
2/13 – 3/12	<ul> <li>Exploration Exercises &amp; LinkedIn assignments due weekly, uploaded to Canvas, by Sunday 11:59pm</li> </ul>				
	• Sunday, 3/12 – Module 2 Assignment(s) Due, uploaded to Canvas by 11:59:00pm				
Weeks 10 - 14	Module 3 – Macros & VBA – Activities & Assignments				
3/13 – 4/16	• Week 10 – spring break, 3/13 – 3/19				
	<ul> <li>Exploration Exercises &amp; LinkedIn assignments due weekly, uploaded to Canvas, by Sunday 11:59pm</li> </ul>				
	• Saturday, 3/25 – Last day to drop with a 'W', no refund & no academic penalty				
	Sunday, 4/16— Module 3 Assignment(s) Due, uploaded to Canvas by 11:59:00pm				
Weeks 15 -17	Module 4 –Finishing up				
4/17 – 5/4	Exploration Exercises & LinkedIn assignments due weekly, uploaded to Canvas, by Sunday     11:59pm				
	<ul> <li>Online Presentations</li> <li>Thursday, 5/4 – Ending Survey Due (complete this via Canvas – not Oasis)</li> </ul>				

This schedule is not set in stone, but I will try to keep changes to a minimum and give as much notice as possible.

# IX. Evaluation:

Assignments	Grading Scale			9	Notes
<ul><li>50% - Module projects</li></ul>	A+	99-100	C+	77-79.99%	All projects will be submitted via Canvas (not
<ul> <li>45% - Exploration Exercises</li> </ul>	Α	94-98.99%	С	74-76.99%	<ul> <li>email).</li> <li>In an effort to get your grades to you as soon as possible, I'll often start reviewing projects as soon as they are submitted to Canvas.</li> </ul>
(EEs) –assigned most weeks,	A-	90-93.99%	C-	70-73.99%	
lowest grade dropped	B+	87-89.99%	D+	67-69.99%	
	В	0+ 00:5570   D	Please don't submit your project unless it's		
<ul><li>5% - Participation (engagement, presentation</li></ul>	B-	80-83.99%	D-	60-63.99%	ready for grading.  Please check your project files after they are
reviews, ending survey)			F	Below 60%	submitted to Canvas to confirm what you uploaded.
<ul><li>Extra Credit may be available</li></ul>					Once graded, you won't be able to modify /
& added to your Module					resubmit.
Project grades (usually 20 pts max)					

## X. Course Policies:

Assignments:

- Exploration Exercises are introduced on Tuesdays, help is available on Thursdays and are due by the following Sunday, submitted via Canvas.
- Module projects are also submitted to Canvas, due on Sundays, the due dates are listed above.
- Canvas: Announcements, assignments, online materials, and grades are all on Canvas. Check it frequently (it is your friend). Be sure that you have set up Canvas to forward email and announcements to the email account you most use. If you are new to Canvas, there are free classes available through academic computing or stop by during office hours with questions.
- Email: Please send email to bwarner@usf.edu or via Canvas email.
- Re-grade Policy: Re-grade requests should be emailed to me within two weeks from the date your grade was posted and before the end of the semester. To do this, download and review a copy of your submitted project from Canvas and then email me with a description of what was graded incorrectly and why it's incorrect. I will do a re-grade but will re-grade the whole project and any grading mistakes or omissions (positive or negative) will be corrected.
- **Due dates / late dates**: Projects are submitted via Canvas and should be submitted by the due date, Eastern Standard Time. Please don't wait until the last hour to submit, as often that leads to late submissions. Work can be submitted late with a penalty of 5% per day up to 2 weeks late. Late work will automatically receive a zero grade in Canvas until the work has been reviewed and graded.
- Illness: If you are excused from work/school for a period of time, please contact me as soon as possible so I will know about your situation. A note from a local doctor or clinic will be required for late submissions. The note should include dates excused from work and school. If you think you have Covid, please get a Covid test from the University (schedule online, no cost) and send the results to me and we can go from there. Usually there is a 5-day extension on any work due during that time.
- **Project Support**: I am available for project help during Thursday class time and scheduled office hours. Be sure to give yourself enough time so you can receive assistance when needed. While I'm also available for help via email, email support is limited as it's often harder to adequately respond to project questions via email. Weekend email responses are not guaranteed. Start early, submit early.

## • Submitting Projects:

- No email submissions. All work must be submitted via Canvas.
- o **Procrastination**: Please don't wait until the last minute to submit projects and note that Canvas is the official time clock (work due by 11:59:00 EST). If you submit close to the deadline and your project takes a few extra minutes to upload it will be considered late. Start early, submit early.
- Check your Uploads Required: Once you submit a project to Canvas, look at the submission information on the right side of your screen and 1) download a copy of your project file(s) FROM Canvas to another folder on your computer.
   2) Open these files, be sure they're complete, the right project, etc. and then 3) save this copy. This is your back up copy and the creation and last modified dates will be retained as long you don't open them again
- Oops! Work submitted to Canvas incorrectly that cannot be opened or graded for any reason is considered late and may or may not be accepted later. Check your uploads to avoid this.
- 'Technology problems', including bad files, bad file names, not knowing how to upload to Canvas correctly (not checking an upload), locked files, lost work, slow or bad Internet connection, power losses, etc. are not valid excuses for late/missing work they are just part of using computers . Ask questions, get help, do your work early and check that assignments are submitted correctly so the inevitable computer problems will not lead to missed points.
- Extra Credit / Curves / Grades. Extra credit may be available during the semester. Any extra points will help if you are 'close' to the next grade level and usually the place of any curve or any 'rounding' in the class. Activities will be described in on Canvas. Any integrity violations involving extra credit will result in the loss of all extra credit points. \*\*Most students do very well in this class, however if this is one of your last classes needed to graduate or to keep a scholarship, be sure to monitor your grades.
- Course Courtesy. Please see our Canvas Modules area on expectations for students and instructors, but basically please treat all with kindness and patience, respecting and tolerating different opinions as well technological abilities.

# XI. Academic Integrity - Integrity does matter

Please review: http://www.ugs.usf.edu/policy/AcademicIntegrityOfStudents.pdf)

- We value learning and realize that technology allows work to be copied easily so we have a strict academic integrity policy. As part of that, we require that all projects be done individually (unless specifically noted). We have found that more individual learning occurs when students use critical thinking, problem solving skills, course / online resources and a bit of trial and error to work through these projects. The TAs and I are available for project help. To facilitate learning we try to guide you to find your own solutions, rather than just tell you an answer.
- \*\*Do not email your work to anyone else to use as a 'sample', or as a copy of the data or share in any way. Do not deny them the opportunity to experiment and learn potentially valuable career skills. Also, we use software to detect duplicated work. It is <u>your responsibility</u> to be sure your project cannot be copied or viewed by anyone else.
- If you share a computer with another person (not recommended) or use a public computer, remove any project work to a flash drive each time you are done working on the project.
- All work must be completely your own no copying, pasting, quotes just your own words/efforts. Do not use anyone else's work as a reference.
- Course Hero / Chegg Policy: Offer specifics about your policy on contract cheating, paper mills, or the use of
  websites that enable cheating. Example: 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.
- 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 specific assignments via the appropriate Canvas / TurnItIn assignment. 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 <a href="http://www.turnitin.com">http://www.turnitin.com</a>.

All that being said... copying, plagiarism or any other form of misrepresentation of one's work is considered cheating - this includes cutting/pasting from the Internet or copying anyone else's projects/assignments, or sharing solutions in any way. This applies to all course assignments. The minimum penalty for collaboration/cheating on an assignment is a zero for that assignment and a referral to the Undergraduate Studies Director and Muma College of Business Undergraduate Program Director. This is applied to all parties involved. Maximum penalties may include an F or F/F in the course (instructor's discretion). Students who have been referred for an academic integrity violation in a prior class will be subject to an F/F in this class in accordance with USF's academic integrity policies and after discussions with pertinent faculty members, and Muma College of Business Undergraduate Advising.

College of Business policies do not allow students to drop classes due to academic integrity violations.
 Students will be added back into classes in these situations.

I do not enjoy the 'academic dishonesty' part of teaching – it is emotional for all & takes A LOT of time to deal with. However, I do feel very strongly about honesty/integrity and I do uphold University/my course policies on cheating. One survey of IT professionals found that the key attribute they looked for in new hires was integrity (above technical skills). I treat academic dishonesty <u>very</u> seriously and will fail students who cheat on tests or turn in work that is not completely their own. See "Academic Dishonesty" in the Undergraduate Catalog for further discussion.

If you have questions on academic integrity issues relating individual assignments or tests – please contact me, I'll be glad to discuss this in more detail.

## **Additional USF Policies and 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
- Emergency Operations: In the event of an emergency, it may be necessary for USF to suspend normal operations. It's the responsibility of each student to monitor our Canvas site for each class for course specific communication, and the main USF, College, and department websites, emails, and MoBull messages for important general information.
- Incomplete Policy: An 'I' grade may be used for situations where a student has an unforeseeable emergency at the end of the semester (after the withdrawal date), has a C grade or better in the class and only has a small part of the course to complete. Written approved documentation is required. Incompletes can't be used if a student is busy, falls behind or is not doing well. Students doing poorly in a course should withdraw from the class or risk receiving a poor/failing grade. See our schedule for the last day to withdraw from the class.
- Religious Holy Days: Students who must miss a scheduled test due to the observation of a major religious
  observance must provide notice of the date(s) to the instructor, in writing, during the first 2 weeks of class.
  http://www.ugs.usf.edu/policy/ReligiousDays.pdf
- Students with Disabilities: Students in need of academic accommodations for a disability may consult with the office of Students with Disabilities Services to arrange appropriate accommodations. Students are required to give reasonable notice prior to requesting an accommodation.
- Disruption of the Academic Process http://www.ugs.usf.edu/policy/DisruptionOfAcademicProcess.pdf
- Use of notes and recordings: Please review the official USF policy on this for more info, but the policy states that notes, recordings, handouts and other material provided by the instructor cannot be exchanged or distributed for commercial purposes or for any purpose not related to a student's study or enrollment without written authorization of the instructor.
- Tutoring Hub For more information, email asctampa@usf.edu
- Writing Studio For more information or to make an appointment, email writingstudio@usf.edu
- 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 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.
- Class and Online Courtesy Please review the 'Getting Started' section of Canvas and note the two sections: 1) "What Can You Expect From the TAs and Me" and 2) "What the TAs and I Expect from You".
- 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.