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**ISM 4212**  
**Database Design & Administration**  
**COURSE SYLLABUS**

Semester: Fall 2022  
Class Meeting Days: Tuesdays & Thursdays  
Class Meeting Time: 2:00 – 3:30 pm  
Class Meeting Location: BSN 120  
Instructor: Weimar Ardila Rueda  
Office Location: TBA  
Office Hours: by Appointment via MS Teams  
Email: weimar@usf.edu

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**I. Course Description**

The USF course catalog provides this brief description of ISM 4300:

*This course is an introduction to the concepts and principles of database management. It is intended to provide potential designers, users, and managers of data-base systems with an understanding of physical vs. logical representations, data modeling, implementation, and data management. Database skills are developed through both individual and team projects.”*

*“In this course, students will be introduced to the design, construction, and use of relational databases. The content of the course has been selected to provide students with the knowledge and analytical skills in this subject that are needed to successfully enter professional management information systems careers.*

**II. Course Prerequisites**

ISM 3113 Systems Analysis and Design with a minimum grade of C.

**III. Course Format**

Class meetings will be delivered through in-person sessions. However, virtual meetings via MS Teams may be scheduled upon any contingency, and students will be notified with anticipation.

**IV. Student Learning Outcomes**

Upon completion of this course students should be able to:

- recognize the role of data management in the modern business organization
- demonstrate modeling skills used to identify organizational data structures
- describe the fundamental principles of relational database technology
- employ Structured Query Language to manipulate data in relational databases
- apply database technology to typical Business Analytics needs of organizations

- identify the primary organizational responsibilities of database professionals
- summarize the major issues affecting database design and use in environments involving client/server databases, distributed databases, and data warehouses

#### V. Required Texts and/or Readings and Course Materials

- Shellman, M., Afyouni, H., Pratt, P. J., & Last, M. Z. (2021). *A Guide to SQL*. 10th Edition, Cengage.  
ISBN: 978-0-357-41974-8.

#### VI. Supplementary (Optional) Texts and Materials

- Gillenson, M. L. (2012). *Fundamentals of Database Management Systems*. 2<sup>nd</sup> Edition, Wiley.
- Atkinson, P. & Vieira, Robert. (2012). *Beginning Microsoft SQL Server 2012 Programming*. 1<sup>st</sup> Edition, Wiley.
- Coronel, Morris, & Rob. (2019). *Database Systems, Implementation, and Management*. 13<sup>th</sup> Edition, Cengage.
- Kroenke & Auer. (2015). *Database Concepts*. 7<sup>th</sup> Edition, Person.

#### VII. Communication

Communications will be handled via email and Canvas messages.

#### VIII. Grading Scale

Total%	Grade	Total%	Grade
98 – 100%	A+	78 – 79	C+
92 – 97	A	72 – 77	C
90 – 91	A-	70 – 71	C-
88 – 89	B+	68 – 69	D+
82 – 87	B	62 – 67	D
80 – 81	B-	60 - 61	D-
		< 60	F

#### IX. Grade Categories and Weights

Graded Items	Percent of Final Grade
First Day Attendance	5%
Assignments	50%
Midterm Exam	20%
Final Exam	25%

#### Assignments

Homework assignments will allow students to improve their skills and reinforce the knowledge acquired through the class lectures. The main goal is that students implement their understanding of the concepts covered during the lecture. The tentative number of homework assignments is 5, but this number may vary depending on the course progress.

### Exams

Please note exams will be delivered on the specified dates and times (in the below section). If you miss an exam, you will receive a zero on that exam – unless you have a documentable excuse such as a doctor's note. All other requirements of this course will be completed online.

### X. Course Schedule

Week	Class Meetings		Topics
1	9-Jan	11-Jan	Introduction
2	16-Jan	18-Jan	Databases Fundamentals <b>Note:</b> No class on 16-Jan
3	23-Jan	25-Jan	Data Modeling (1)
4	30-Jan	1-Feb	Data Modeling (2)
5	6-Feb	8-Feb	Logic Design
6	13-Feb	15-Feb	Normalization
7	20-Feb	22-Feb	Implementing a DB
8	27-Feb	1-Mar	Session (1): Midterm review Session (2): Midterm Exam
9	6-Mar	8-Mar	SQL (1)
	<b>13-Mar</b>	<b>15-Mar</b>	<b>Spring Break</b>
10	20-Mar	22-Mar	SQL (2)
11	27-Mar	29-Mar	SQL (3)
12	3-Apr	5-Apr	SQL (4)
13	10-Apr	12-Apr	Updating Data
14	17-Apr	19-Apr	Database Administration
15	24-Apr	26-Apr	Functions, Procedures and Triggers Final Exam review
16	1-May		Final Exam Time: 12 – 2.30 pm Date: 1-May

\* Note: The Schedule is subject to revision

### XI. Course Policies: Grades (include sections as applicable to your course)

**WARNING: There is NO extra credit. There is NO rounding. What you get is what you get. You have all the assignments before you. There is no additional work available to you if you fail to complete the actual assignments.**

The instructor will accommodate students who have to miss quizzes, assignments or tests due to medical emergencies in the immediate family or job-related situations. These are the only conditions under which accommodation will be considered in real-time during the semester. Should such situations arise, the student must provide necessary documentation before the missed deliverable can be rescheduled. Specifically, Bulls games are no grounds for make-ups.

Academic accommodations for disabilities in consultation with the Office of Students with Disabilities Services will be provided following university procedures.

**Late submissions are not accepted and receives a zero grade.**

## **XII. Course Policies: Technology and Media (include sections as applicable to your course)**

**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 consult the Canvas help guides or investigate online training. You may also contact USF's IT department at (813) 974-1222 or [help@usf.edu](mailto:help@usf.edu).

**Recordings:** Some lectures, content and class materials will be made available in a recorded format via Canvas. We may also record group sessions where student's voices and video will be included in class recordings. It is the student's responsibility to make sure the privacy of their surroundings and background is maintained.

**Laptop Usage:** This is a technology class and I encourage to use of computer technology for class related activities. Students are allowed and encouraged to use devices for recording class sessions for personal use.

**Phone Usage:** Please turn phones off and have them put away during any class related meetings or sessions.

## **XIII. Course Policies: Student Expectations**

### **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](mailto: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.

Students are expected to adhere to the overall class calendar and to complete work or assignments by the due dates posted in Canvas. It will be difficult to perform at a high level if you do not regularly attend discussion group meetings and actively participate. If you need to miss a group meeting, please send a communication to your team with a copy to the professor in advance. If you will be late with a submission, it's always good to let your professor know in advance.

### **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.

## **XIV. 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](mailto: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**

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.](#)

**XV. Important Dates to Remember**

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