

Course Syllabus and Schedule for ISM 3400 2020 Spring Semester

General Information	
Course Number/CRN	ISM 3400/CRN 13335
Course Title	Datawarehouse and Business Intelligence
Semester/Year	Spring/2020
Offering College/Department	Lutgert College of Business (LCOB)/Information Systems and Operations Management (ISOM)
Credit Hours	3
Meeting Times/Location	Class meets every TUESDAY and THURSDAY from 6:00pm to 7:15pm Class meets in room LH2210
Is this a DL Course?	No. This is an on-campus course
Method of Delivery	Lectures, in-class demonstrations, hands-on exercises, and assignments. The objective is to get all the students to obtain a grounded and detailed understanding of data warehousing, business intelligence and some exemplar associated tools.
Course URL	http://canvas.fgcu.edu
Prerequisites	ISM 3011 for level Undergraduate with minimum grade of C
Instructor Information	
Instructor	Peter Meso, PhD. The instructor of this course has a Ph.D. in Business Administration, specializing in Information Systems. Dr Meso is an Associate professor of IS in the ISOM department at LCOB.
Office Location	Lutgert Hall 3349
Phone Number	239-590-7489
E-Mail Address	pmeso@fgcu.edu
Office Hours	On-site (at my office): Tuesdays and Thursdays - 4:30-6:00 pm, Wednesdays 3:00-5:00 pm, or by appointment. (virtual meetings could be scheduled during these times as well)
<p>Important Note: All faculty members are required to use Canvas to confirm a student's attendance for each course by the end of the first week of classes. Failure to do so will result in a delay in the disbursement of your financial aid. The confirmation of attendance is required for all students, not only those receiving financial aid. Every student must complete a mandatory activity in Canvas during the first week, which is the "Introduce Yourself" discussion forum in this course.</p>	
Course Information	
Description	<p>ISM 3400 Datawarehouse and Business Intelligence - 3 credits(s)</p> <p>This course prepares business students to be able to use a variety of tools and technologies used in business intelligence for strategic and operational decision making. Those tools and technologies include data warehouse, OLAP, data mining, and visual presentations</p> <p>Prerequisite(s) ISM 3011 for level Undergraduate with minimum grade of C</p>
Required Materials	<p>Required Textbooks:</p> <p>Author: Sharda, Delen & Turban Title: Business Intelligence Analytics, and Data Science, Publisher: Pearson Edition: ISBN13: 9780134633282</p>

	<p>Required Software:</p> <ol style="list-style-type: none"> 1. RapidMiner Studio (EDUCATIONAL PROGRAM EDITION). Available from https://rapidminer.com/educational-program/. This is Free for students when you create your account using your FGCU email credentials. 2. Microsoft SQL Server (Minimum requirement is Express Edition) Available at FGCU VLAB (http://aets.fgcu.edu/vlab.asp). a. Microsoft SQL Server (Minimum requirement is Express Edition) is also available at <ol style="list-style-type: none"> i. FGCU Microsoft DreamSpark website. This is free. http://e5.onthehub.com/WebStore/ProductsByMajorVersionList.aspx?ws=3646cc65-bf9b-e011-969d-0030487d8897&vsro=8&JSEnabled=1 (We will send you a login info during the 2nd week of the semester). This is free. ii. SQL Server Express and SQL Server Management Studio Express edition are available at the Microsoft website for free. 3. SAS software for visual analytics (web-based access to this will be provided by the Department. Instructor will provide you with the access details in class). 4. Microsoft Visio 2016, which is available through FGCU Microsoft DreamSpark website (http://e5.onthehub.com/WebStore/ProductsByMajorVersionList.aspx?ws=3646cc65-bf9be011-969d-0030487d8897&vsro=8&JSEnabled=1). This is free. 5. VMWare Horizon Client to access FGCU Virtual Lab. This is free. http://aets.fgcu.edu/vlab.asp. 6. Microsoft Office (especially Word and Excel), which is available through FGCU Microsoft DreamSpark website (http://e5.onthehub.com/WebStore/ProductsByMajorVersionList.aspx?ws=3646cc65-bf9be011-969d-0030487d8897&vsro=8&JSEnabled=1). This is free. 7. CANVAS, the learning management system used at FGCU. All students have a CANVAS account. <p>Recommended personal IT resources: A personal computer, a Web Browser and a reliable Internet Connection (for those that choose to access the course resources while off campus). If you do not have internet access at home (or do not have a personal computer), you can access the course technology at one of the community FCGU computing labs. NOTE: some of the course software will/may not operate effectively on a MAC platform.</p>
Attendance Policy	Attendance is strongly suggested but is NOT part of the course grade.
Grading Policy	<p>Graded Learning Activities/Assignments in this course are:</p> <ul style="list-style-type: none"> - Exam 1 : 15 points - Exam 2 : 15 points - Best 5 of 6 Individual Homework Assignments (6 points each):..... 30 points - labs & discussions:..... 40 points <p>NOTE: Some exams may have multiple parts: e.g. a conceptual knowledge (concepts and terminology) part; a hands-on (modeling or development) part; and a Tools usage or administration part.</p> <p>Grading Policy: A: 90 points or above B+: Less than 90 points – 87 points B: Less than 87 points – 80 points C+: Less than 80 points – 77 points C: Less than 77 points – 70 points D+: Less than 70 points – 67 points D: Less than 67 points – 60 points F: Less than 60 points</p>

	<p>No extra credit or additional assignments: Please be aware that FINAL GRADES FOR THIS COURSE ARE FINAL. No extra credit or additional assignments are available at the end of the course.</p> <p>Grading and Feedback: The instructor will try to grade assignments and provide feedback within one week although it is not guaranteed. - Detailed grading criteria for homework assignments will be specified in each assignment’s detailed instructions (usually as a rubric).</p> <p>Turnitin.com: Students who take this class must prepare electronic copies of most or all assignments. Some of them will be assessed via Turnitin.com for the detection of plagiarism. The University expects that all students will be evaluated and graded on their own work. If you use language, data or ideas from other sources, published or unpublished, you must take care to acknowledge and properly cite those sources. Failure to do so constitutes plagiarism. Papers that are submitted to Turnitin.com become part of the Turnitin.com student paper database solely for the purpose of detecting plagiarism.</p> <p>“Credit hour” statement (developed by the LCOB): For each credit of a class, you should expect to spend one hour in class and an average of 2 hours preparing outside of class each week. Therefore, since this is a 3-credit class, you should plan to devote an average of nine hours a week to this class. Although, depending on your background and study habits, you may not need to spend this many hours, NOTE that you may not be able to finish homework assignments in 1 hour. Therefore plan to begin work on your homework assignments at least several days before the designated due dates.</p>
<p>Policy regarding missed exams and assignment completion deadlines</p>	<ul style="list-style-type: none"> • Per policy, no make-ups for missed exams are administered (except for authorized and excused absences specified in the university catalog). A student who seeks an authorized or excused absence must submit documentation (such as a physician’s note) to the instructor in a timely manner. See the university catalog for more information. • No late assignments will be accepted for any reasons except the authorized and excused absences specified in the university catalog. A student who seeks an authorized or excused absence must submit documentation (such as a physician’s note) to the instructor in a timely manner. See the university catalog for more information. • Unfortunately, "dropped by the University for not paying the full tuition" is not an authorized and excused absence as specified in the university catalog. • An emergency situation such as unavailability of or inaccessibility to CANVAS due to network problems will be considered by the instructor on a case by case basis. <u>Students must submit documentation (such as a screenshot of error messages) to the instructor in a timely manner.</u>
<p>Statement on e-mail usage in Eagle Mail and CANVAS email</p>	<p>In addition to CANVAS and software applications listed earlier, we will use FGCU Eagle Mail as another communication method. Students are expected to check Canvas mail and Eagle Mail on a daily basis.</p>
<p>Last Day to withdraw</p>	<p>Be aware that Friday, March 27 is the last day to withdraw from class without academic penalty.</p>
<p>Disclaimer</p>	<p>Assignments, schedules & due dates, instructions, and other course information presented in Canvas are integral components of the course material and are hereby incorporated as part of this syllabus.</p> <p>The instructor reserves the right to change, modify, alter, or transform any part of this syllabus, provided only that notice thereof is given to or at any party or parties that are thereby affected, subject to the rules and regulations of Florida Gulf Coast University.</p>
<p>University Statements</p>	
<p>Academic Behavior Standards and Academic Dishonesty</p>	

All students are expected to demonstrate honesty in their academic pursuits. The university policies regarding issues of honesty can be found in the FGCU Student Guidebook under the Student Code of Conduct and Policies and Procedures sections. All students are expected to study this document which outlines their responsibilities and consequences for violations of the policy. The FGCU Student Guidebook is available online at <http://studentservices.fgcu.edu/judicialaffairs/new.html>.

Sanctions for academic dishonesty may include receiving an “F” in this course – FGCU may impose additional penalties.

Any incidents of academic dishonesty may be referred to the FGCU Office of Judicial Affairs. Please look up the definition of plagiarism – it includes copying something off the Internet & submitting it as your own work.

Some examples of what is **not acceptable**:

- Working with another student & turning in the same work (e.g. spreadsheet, database, etc.)
- Emailing or posting your work to let someone else “just see how you did it”.
- Copying someone’s assignment or copying something from a book or the Internet.
- Giving or receiving help from someone (in person, online or on the phone) during an online test.
- Telling someone else what is on a test.

Examples of what is **acceptable**:

- Discussing how to approach an assignment with another student.
- Showing someone where they might have made a mistake on an assignment.
- Asking the professor for help.

University Nondiscrimination Statement

Florida Gulf Coast University is committed to ensuring equity and fairness for all University employees, students, visitors, vendors, contractors and other third parties. As such, the University prohibits discrimination on the bases of race, color, national origin, ethnicity, religion, age, disability, sex (including sexual harassment/assault), gender identity/expression, marital status, sexual orientation, veteran status or genetic predisposition with regard to admissions, employment, programs or other activities operated by the University. This prohibition extends to enforcement of Title IX of the Education Amendments of 1972. Questions or complaints should be directed to the Office of Institutional Equity and Compliance (OIEC). The OIEC’s phone number is (239)745-4366; the OIEC email address is OIEC@fgcu.edu.

Disability Accommodations Services

Florida Gulf Coast University, in accordance with the Americans with Disabilities Act and the university’s guiding principles, will provide classroom and academic accommodations to students with documented disabilities. If you need to request an accommodation in this class due to a disability, or you suspect that your academic performance is affected by a disability, please see me or contact the Office of Adaptive Services. The Office of Adaptive Services is located in the Wellness Building. The phone number is 239-590-7956 or Video Phone (VP) 239-243-9453. In addition to classroom and campus accommodations, individuals with disabilities are encouraged to create their personal emergency evacuation plan and FGCU is committed to providing information on emergency notification procedures. You can find information on the emergency exits and Areas of Rescue Assistance for each building, as well as other emergency preparedness materials on the Environmental Health and Safety and University Police Department websites. If you will need assistance in the event of an emergency due to a disability, please contact Adaptive Services for available services and information.

Counseling Services

Counseling and Psychological Services (CAPS) provides free counseling and therapy services (including psychiatry) to all FGCU students. Please walk in to the second floor Howard Hall office any week day between 8:30 and 4:30 to schedule an initial contact appointment. Visit the CAPS website at www.fgcu.edu/caps for more information. CAPS offers a 24/7 Helpline at (239) 745-3277 (EARS).

Student Observance of Religious Holidays

All students at Florida Gulf Coast University have a right to expect that the University will reasonably accommodate their religious observances, practices, and beliefs. Students, upon prior notification to their instructors, shall be excused from class or other scheduled academic activity to observe a religious holy day of their faith. Students shall be permitted a reasonable amount of time to make up the material or activities covered in their absence. Students shall not be penalized due to absence from class or other scheduled academic activity because of religious observances. Where practicable, major examinations, major assignments, and University ceremonies will not be scheduled on a major religious holy day. A student who is to be excused from class for a religious observance is not required to provide a second party certification of the reason for the absence.

How To Log Into the Course in CANVAS

- If you have not already done so, activate your FGCU EagleMail Account. Your FGCU EagleMail account MUST be activated to log in to CANVAS. If you are a first-time student, you will need your PIN and Eagle ID, both of which are assigned at registration.
 - If you don't know your PIN, you will need to go to the Registrar's Office to retrieve it.
 - To activate your account, visit <http://icarus.fgcu.edu:8080/EagleMail/UpdateAccount.jsp?mode=activate>.
- Log in to CANVAS at <http://canvas.fgcu.edu>. You need to use FGCU EagleMail account and password to log in.
 - Click "Courses".
 - Select ISM 3400

Outcome Number	Student Learning Outcomes	Evaluation & Assessment Methods
1	Recognize differences between transactional data and analytical data	Multiple choice questions of exams
2	Design a Data warehouse via dimensional modeling	Homework assignments, Project
3	Transform a conceptual dimension model into a relational data warehouse model	Homework assignments, Project and Multiple choice questions of exams
4	Recognize quality attributes of business intelligence data	Homework assignment and Multiple choice questions of exams
5	Analyze ill-designed or unstructured / raw data and use formal methods to clean, transform and load the data into a Data Warehouse of Business Intelligence Repository	Homework assignments, Project
6	Recognize roles of business Intelligence and data warehousing in an organization	Multiple choice questions of exams
7	Recognize the benefits and costs of business Intelligence	Multiple choice questions of exams
8	Recognize how to construct feasible and value-generating business intelligence questions	Homework assignments, and Project
9	Use common or leading BI tools and algorithms to analyze data, run BI queries and draw insightful inferences	Homework assignments, Project and Multiple choice questions and Problem solving questions of exams
10	Use common BI tools to develop business intelligence queries to support individual or group-based decision making	Homework assignments, Project and Multiple choice questions and Problem solving questions of exams
11	Use Productivity tools to develop high-quality written and/or oral business intelligence reports	Homework assignments, and Project
12	Implement a business intelligence or data warehouse solution	Homework assignments, and Project

ISM 3400 Tentative Schedule (Subject to Change)

		Note: Homework assignments, Exams and Project are due Monday at 2:00 PM EST (except Final exam which will be due on a Friday).
Weeks/Dates	Topics	Graded Assignments Due

Wk1 (Jan 6-11)	Syllabus, Course Introduction Ch 1 of Sharda Lab 1: Introduction to RapidMiner	Mandatory assignment – Discussion Forum: Introduce Yourself Due Jan 10 (Fri) Lab 1
Wk2 (Jan 13-18)	Ch 2 of Sharda: Data and Data Preparation. Basic Analytics Lab 2: Data Preparation	Lab 2
Wk3 (Jan 20-25)	Ch 2 of Sharda: Descriptive Analytics (Descriptive Statistics) Lab 3: Descriptive Statistics	HW 1: Basic Data prep; and analysis Due Monday Jan 20, 2:00 PM Lab 3
Wk4 (Jan 27-Feb 1)	Ch 2 of Sharda: Descriptive Analytics (Inferential Statistics) Lab 4: Inferential Statistics	Lab 4
Wk5 (Feb 3-8)	Ch 2 of Sharda: Descriptive Analytics (Data Visualization & Business Reporting) Lab 5: Data Visualization	Lab 5
Wk6 (Feb 10-15)	Chapter 3 of Sharda: Data Warehouses Lab 6: Dimension Modeling	HW 2: Descriptive and Inferential Statistics & Data Visualization (Descriptive Analytics) Due Monday Feb 10, 2:00 PM Lab 6
Wk7 (Feb 17-22)	Chapter 3 of Sharda: Data Warehouses Lab 7: Constructing a Data Warehouse	Lab 7
Wk8 (Feb 24-Feb 29)	Chapter 3 of Sharda: Data Warehouses Lab 8: SQL & Querying Data Warehouse	HW 3: Dimension Modeling and Implementation of a DW Due Monday Feb 24, 2:00 PM
(Mar 2-7)	SPRING BREAK	SPRING BREAK
Wk9 (Mar 9-14)	Ch 4 of Sharda: Predictive Analytics - Quantitative	Exam 1 (Midterm Exam): Available Monday Feb 24, 2:00 PM Due Monday Mar 9, 2:00 PM
Wk10 (Mar 16-21)	Ch 4 of Sharda: Predictive Analytics - Quantitative Lab 9: Predictive Analytics - Quantitative	Lab 9
Wk11 (Mar 23-28)	Ch 5 of Sharda: Predictive Analytics – Text Analytics	HW 5: Predictive Analytics - Quantitative Due Monday Mar 23, 2:00 PM
Wk12 (Mar 30 - Apr 4)	Ch 5 of Sharda: Predictive Analytics – Text Analytics Lab 10: Predictive Analytics – Text Mining	Lab 10
Wk13 (Apr 6-11)	Ch 7 of Sharda: Big Data Concepts & Tools	HW 6: Predictive Analytics- Text Mining Due Monday Apr 6, 2:00 PM
Wk14 (Apr 13-18)	Ch 8 of Sharda	
Wk15 (Apr 20-25)	Ch 8 of Sharda	
Wk16 (Apr 27- May 2)	Exam 3 (Final) (All covered Chapters; All Homework assignments)	Exam 2 (Final Exam): Available Friday Apr 24, 2:00 PM 6 Due Friday May 2, 2:00 PM