

Database Management and Analysis

ISM3212

Section # 2857

Online Instruction

0630 Spring 2024

Assigned Campus for Course Materials Purchase: Clearwater

View <u>How to Be a Successful Student</u> which provides details about success factors and links to the most current version of fluid information, such as the academic calendar.

WELCOME

Welcome to ISM3212 Database Management and Analysis.

INSTRUCTOR

Name: Jay Dugan

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Office and Online Hours: By appointment only

Office Location: Virtual

Instructor Webpage: Professor Dugan's Home Page

ACADEMIC DEPARTMENT

CCIT Dean: Norene Kemp

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COURSE INFORMATION

Course Description

This is a foundation course in which students will extend knowledge beyond the physical storage of data to the modeling of the environment that will ultimately become a database. The focus is on the logical design of that environment. Topics covered will include the architecture and components of a database, entity-relationship modeling, enhanced entity-relationship modeling, and the relational data model. Additional coverage will encompass database normalization to include functional dependencies and the transition of the model from logical to physical form.

Course Goals

- 1. The student will implement techniques for creating a scalable, high-performance database environment.
- 2. The student will describe the principles of database design.
- 3. The student apply data modeling tools and techniques.
- 4. The student develop a secure disaster recovery plan.
- 5. The student will define emerging database concepts and issues.

Course Objectives

- 1. The student will implement techniques for creating a scalable, high-performance database environment by:
 - a. defining basic database terminology.
 - b. explaining the advantages and disadvantages of database processing.
 - c. defining the relational database model.
 - d. evaluating sample data from existing databases.
 - e. defining the importance of using a database index.
- 2. The student will describe the principles of database design by:
 - a. defining the elements and functions of the Entity-Relation data Model.
 - b. discussing the rules and importance of normalizing a database.
 - c. identifying when to de-normalize a database.
 - d. identifying the advantages and disadvantages of different types of databases.
 - e. explaining the importance of database structure integrity.
- 3. The student apply data modeling tools and techniques by:

- a. performing queries for data using SQL and QBE.
- b. assessing the validity and rationale for data requirements.
- c. discussing alternative data forms for information solutions.
- d. reviewing data models forms for consistency.
- 4. The student develop a secure disaster recovery plan by:
 - a. defining the differences between backup and journaling.
 - b. analyzing the techniques of various disaster backup plans.
 - c. identifying techniques of various disaster recovery plans.
- 5. The student will define emerging database concepts and issues by:
 - a. summarizing the steps and concepts of setting up data warehousing.
 - b. identifying the various techniques of data mining.
 - c. applying the characteristics of database management for the Internet.

Prerequisites

Admission to: TMGT-BAS with a minimum grade of C

Availability of Course Content

Modules will be open at the beginning of each week with assignments due at the end of each week. Due dates are firm and at the discretion of each instructor. This is not a self-paced course, therefore working ahead is not allowed.

REQUIRED TEXTBOOK & OTHER RESOURCE INFORMATION

Required Textbook: CONCEPTS OF DATABASE MANAGEMENT, Friedrichsen, Ruffolo, Monk, Starks, Pratt, Last, 10th Edition (e-text)

Publisher Information: Cengage Learning

ISBN: 978-0357706176

When purchasing the required materials from the SPC Bookstore website, it is imperative that you select the appropriate campus to which the course section is assigned even if it is an online class. The Bookstore website does not allow for a global search across all campuses. You may receive a message that "Course Materials are Not Available" if the correct campus is not selected. If you are unsure which campus your course section is assigned to please ask your instructor. To see an example of a website search, please CLICK HERE.

View the textbook sites:

- Pay for Your Textbooks
- SPC Bookstore
- Find Course Materials

If you have any questions regarding the course textbook, contact the SPC bookstore Monday-Thursday, 10am-4pm at 727-940-9019.

LEARNER SUPPORT

Answers to questions regarding accommodations may be found at the <u>Accessibility Services</u> site. If you are in need of accommodations, please contact a campus <u>Accessibility Services Coordinator</u>. If you need a Sign Language Interpreter, complete the <u>Interpreter/Captionist Request Form</u>.

Titans Care

As an SPC student it's vital that you know Titans Care. You can access resources through SPC's <u>Student Assistance Program (SAP)</u>, a collaborative resource for students with mental health or general life issues. SAP provides help and education in suicide prevention, mental health, substance abuse awareness and more. It is SPC's belief that supporting mental wellness is everyone's charge, and that one loss as a result of substance abuse, mental illness, or suicide is one too many. If you or a loved one are considering suicide, please call the National Suicide Prevention Lifeline at 1-800-273-8255.

View the <u>Learning Resources</u> site.

View the **Learning Center Tutoring Schedules**.

View the <u>Student Services</u> site.

IMPORTANT DATES

Course Dates: Enter course beginning and ending dates here OR View the <u>Academic Calendar</u>.

Drop Date: Enter Drop date here OR View the Academic Calendar.

Withdrawal Date: Enter Withdrawal date here OR View the <u>Academic Calendar</u>.

Proctored Testing Dates: <u>Proctored Testing with Honorlock</u>

Financial Aid Dates: View the Financial Aid Dates.

ATTENDANCE

View the college-wide attendance policy included in How to Be a Successful Student.

The policy notes that each instructor is to exercise professional judgment and define "active participation" in class (and therefore "attendance"), and publish that definition in each syllabus.

The attendance policy for this course is detailed below:

In blended class sections, attendance is made up of both in-class and online components. Students must meet the attendance requirements for each one to be considered present for the week. The attendance components are defined below:

- In-class: arriving on time, participating with group discussion, and remaining until dismissed by the instructor at each meeting. The roll is taken at every class meeting. More than one missed class will likely have a negative effect on your final grade.
- Online: Attendance is determined by completion of the majority of assignments each week.

For online class sections, attendance and participation are determined by active interaction in the weekly discussion forums and submission of assignments. With the exception of class meetings online students must meet the same requirements for attendance as students in blended sections.

In addition to regular attendance, active participation is also monitored. Failure to complete at least 50% of the work each week will be deemed as lack of active participation in the course. If you are not routinely completing

discussion forums, quizzes, and lab assignments you risk being dropped from the course for lack of active participation. If you miss more than three classes overall you may also risk withdrawal for lack of active participation, regardless of your current course grade. Students that are withdrawn from class will no longer have access to the MyCourses content for the class.

*If you are late to a blended class meeting and the class is already underway, confirm that the instructor has updated your attendance for the day to a tardy. More than one extreme tardy may have a detrimental effect on your final grade.

GRADING

The grading scale will be based upon your performance on a cumulative average of the following assignments and assessments:

Category	Points
Discussion Forums	175
JC Consulting Case Assessments	225
Pitt Fitness Case/Sports Physical Therapy Case Critical Thinking Questions	585
Text Module (Chapter) Quizzes	360
Total	1345

How to check your Grades and review feedback:

- Checking Your Grades
- Reviewing Dropbox Submissions
- Checking Discussion Grades and Feedback
- Reviewing Quiz Submissions

Grading Scale

A = 90-100%

B = 80-89%

C = 70-79%

D = 60-69%

F = 0-59%

ASSIGNMENTS

WEEKLY ASSIGNMENTS

Weekly activities are presented in various forms throughout the class. **Unless otherwise indicated, all assignments** are due no later than the Due Date and Time as indicated by the instructor.

• **Discussion Posts** are to be completed weekly to insure your active status in the course (due dates are not negotiable).

Late assignments will not be accepted and no extra credit will be assigned.

STUDENTS' EXPECTATIONS AND INSTRUCTOR'S EXPECTATIONS

All college-wide policies and expectations are included in the Syllabus Addendum at http://www.spcollege.edu/addendum/

Required Interaction

Assignments will be graded weekly at which time any instructor feedback will be available. Please allow 24 hours for instructors to respond to emails and phone calls regarding questions about content or other concerns.

Participation, Conduct, and Netiquette

SPC has outlined expectations for student behavior and interaction for online discussions, email, and other forms of communication. View the Student Expectations in <u>How to Be a Successful Student</u>.

We will be using the SPC MyCourses Learning Management System throughout this course. You will be using the system to submit assignments electronically, take quizzes, post to discussion forums, and for communication.

It will be the student's responsibility to complete and submit all weekly assignments prior to the deadline. There will be no extensions.

Please use proper "net etiquette" when posting to the discussion board.

Academic Honesty

View the <u>Academic Honesty Policy</u>.

In addition to the Academic Honesty Policy as indicated at the link above, please understand that use and distribution of answer/solution keys for the textbook and third party applications used in this course to complete assignments will constitute a violation of the policy regardless of how they are obtained or accessed.

Copyright

Copyrighted material within this course, or posted on this course website, is used in compliance with United States Copyright Law. Under that law you may use the material for educational purposes related to the learning outcomes of this course. You may not further download, copy, alter, or distribute the material unless in accordance with copyright law or with permission of the copyright holder. For more information on copyright visit: Copyright.gov.

TURNITIN

The instructor of this course may require use of Turnitin.com as a tool to promote learning. The tool flags similarity and mechanical issues in written work that merit review. Use of the service enables students and faculty to identify areas that can be strengthened through improved paraphrasing, integration of sources, or proper citation. Submitted papers remain as source documents in the Turnitin database solely for the purpose of detecting originality. Students retain full copyright to their works. Review the <u>Turnitin Usage Agreement</u>. Students who do

not wish to submit work through Turnitin must notify their instructor via course email within the first seven days of the course. In lieu of Turnitin use, faculty may require a student to submit copies of sources, preliminary drafts, a research journal, or an annotated bibliography.

View the Reviewing a TurnItIn/Originality Report tutorial.

STUDENT SURVEY OF INSTRUCTION

The Student Survey of Instruction is administered in courses each semester. It is designed to improve the quality of instruction at St. Petersburg College. All student responses are confidential and anonymous and will be used solely for the purpose of performance improvement.

TECHNOLOGY

Minimum Technology Requirements

View the **Technical Requirements for MyCourses**.

SPC offers Microsoft Office software to current students at no additional cost. The software is available for both Windows and Mac computers. View the How to Download Microsoft Office 2016 tutorial.

DISCIPLINE-SPECIFIC TECHNOLOGY INFORMATION

REQUIRED MINIMUM COMPUTER HARDWARE AND SOFTWARE SPECIFICATIONS FOR CCIT ONLINE/BLENDED CLASSES

Item	Recommended Minimum Technology Requirements for CCIT Programs
Processor	Dual-core processor (Intel or AMD) or better (MUST BE CAPABLE OF VIRTUALIZATION)
Memory	4 GB (or higher)
Disk Storage	Adequate free space for storage of class files
Video Card	256 MB (or higher)
Monitor/Speakers	15" or larger Flat LCD Panel
Media Drive	16x DVD +/- RW
Operating System	Windows 7 (or higher)
Network Interface	High Speed Broadband Internet Connection (Cable or DSL)

Software	 Microsoft Office Suite 2013 or later with the following: Word Excel Access PowerPoint
Access requirements	Reliable and daily access to a personal computer (PC) from day 1 of class as below: • Ability to download/upload documents and files • Browsers: • Internet Explorer (version 11 or higher) • Firefox (version 31.0 or higher • Google Chrome 36.0

These are the minimum suggested technology requirements necessary to complete the programs within CCIT. All students and instructors are required to have access to a personal computer, personal high speed access to the Internet, and a college provided email account. The "minimum requirements" pertain to Windows Operating System compatible personal computers. These minimum requirements are a general recommendation for all CCIT courses. Some courses may have additional software and hardware requirements in order for students to be successful.

NOTE: Mac computers are not acceptable for most of the courses and may cause the student undue frustrations. Instructors do not support issues with Mac computers.

Minimum Technical Skills

Specify the minimum technical skills expected of the learner: general and course-specific learners must have to succeed in the course.

Students should know how to navigate the course and use the course tools. Dropbox-style assignments may require attachments in either Microsoft Word (.doc or .docx) or Rich Text Format (.rtf), so that they can be properly evaluated. If an attachment cannot be opened by the instructor, students will be required to re-format and resubmit an assignment so that it can be evaluated and returned with feedback.

MyCourses tutorials are available to students new to this LMS and are located at the beginning of the course. Most features on MyCourses are accessible on mobile devices, although it is recommended that you use a computer for quizzes, tests, and essay assignments.

Technical Support

Technical support is available via the SPC Technical Support Center.

Accessibility of Technology

- MyCourses (Brightspace by Desire2Learn) Accessibility
- Turnitin Accessibility
- Honorlock Accessibility
- Google (YouTube) Accessibility
- Ensemble Accessibility

- Cengage Accessibility
- McGraw-Hill Accessibility
- Pearson Accessibility
- Microsoft

Privacy

- MyCourses (Brightspace by Desire2Learn) Privacy
- Turnitin Privacy
- Honorlock Privacy
- YouTube Privacy
- Ensemble Privacy
- Cengage Privacy
- McGraw-Hill Privacy
- Pearson Privacy
- Microsoft

Instructional Continuity Plan

To be prepared in the event of weather or other emergency disruptions, review the <u>Emergency Preparedness</u> <u>Procedures for Students</u>.

SYLLABUS QUIZ

Once you have reviewed the syllabus and assignment checklist, please complete the <u>Syllabus Quiz</u> to gain access to the content for the first module.
