

Management Science and Information Systems Course Number: 29:623:220 Course Title: Management Information Systems

COURSE DESCRIPTION

This introductory level course provides students the opportunity to develop the basic computer skills needed for the business-computing world. In this course, we will start by introducing the background of the computer and its components, such as its hardware devices, software programs, communication packages and data processing trends. This course also consists of learn-by-doing lab sessions with several projects in the areas of MS office products. All these topics are related to the commercial world.

COURSE MATERIALS

1. Microsoft Office Excel 2016 Complete: In Practice by Randy Nordell Spiral, 704 Pages, Published 2016 by McGraw-Hill/Irwin ISBN-10: 0-07-748691-9 ISBN-13: 978-0-07-748691-4

2. Microsoft Access SQL Comprehensive: Version Paperback by Dr. Pindaro Epaminonda Demertzoglou ISBN-13:978-0-9883300-0-9 or ISBN-10:0988330008

LEARNING GOALS AND OBJECTIVES

- The design of this course is to help students develop skills and knowledge in the following area(s)
- 1. Understand how to use basic SQL statements to query the database
- 2. Understand how to use Solver and other sophisticated Excel tools to solve what-if analysis problems
- 3. Understand how MIS is needed to solve the business intelligent related questions
- 4. Use Market Basket analysis as a data mining tool to find out consumer purchasing patterns
- 5. Learn how to use VLOOKUP and HLOOKUP for data retrieval
- 6. Learn how to use Pivot table and Pivot chart to display report using drill-down and roll-up methods
- 7. Understand the relational database and practice the concept using Microsoft Access
- 8. Using Nested IF statement to make a business decision such as loan approval and car payment process
- 9. Understand basic HTML, and apply that concept to the web projects
- Students develop these skills and knowledge through the following course activities and assignments:
- Web Project

- Group Excel Projects
- Access and SQL projects
- Lab exercises

ACADEMIC INTEGRITY

I do NOT *tolerate cheating*. Students are responsible for understanding the RU Academic Integrity Policy (http://academicintegrity.rutgers.edu/)

I will strongly enforce this Policy and pursue *all* violations. On all examinations and assignments, students must sign the RU Honor Pledge, which states, "On my honor, I have neither received nor given any unauthorized assistance on this examination or assignment." I will screen all written assignments through *SafeAssign* or *Turnitin*, plagiarism detection services that compare the work against a large database of past work. Don't let cheating destroy your hard-earned opportunity to learn. See business.rutgers.edu/ai for more details.

Policy: NO chatting, NO restroom break, NO internet access including gmail, gchat.etc, no class related powerpoint slides, or data files, no sharing of your knowledge with your neighbors or other students during test time. (Talking is strictly prohibited)

You will receive not only zero on that test, but your file will also be submitted to the dean's office for the consideration of dropping from the University.

Don't let cheating destroy your hard-earned opportunity to learn. See <u>business.rutgers.edu/ai</u> for more details.

ATTENDANCE AND PREPARATION POLICY

- Expect me to attend all class sessions. I expect the same of you. If I am to be absent, my department chair or I will send you notice via email and Canvas as far in advance as possible. If you are to be absent, report your absence in advance at https://sims.rutgers.edu/ssra/. If your absence is due to religious observance, a Rutgers-approved activity, illness, or family emergency/death and you seek makeup work, also send [me/TA] an email with full details and supporting documentation [within 2 days of your first absence].

If you are absent more than 3 weeks of classes, your attendance category of the grade will be zero.

- For weather emergencies, consult the campus home page. If the campus is open, class will be held.
- Expect me to arrive on time for each class session. I expect the same of you.
- Expect me to remain for the entirety of each class session. I expect the same of you
- Expect me to prepare properly for each class session. I expect the same of you. Complete all background reading and assignments. You cannot learn if you are not prepared.
- Expect me to participate fully in each class session. I expect the same of you. Stay focused and involved. You cannot learn if you are not paying attention.

CLASSROOM CONDUCT

I expect you participate fully during the 1 hour and 20 minutes' lecture/labs. No youtube or facebook, texting, or dozing off during the class/lab.

However, during the lab exercises time, you are allowed and encouraged to speak to your group or neighbors to help each other understand the topics better.

Other than the lab time, no chatting is allowed. If you have any concerns or not clear with the topics, I will be more than happy to answer them. But I will not tolerate if you are chatting with your neighbors and then miss the topics that I just delivered. The key is to have mutual respect during the lecture time.

EXAM DATES AND POLICIES

There are 3 exams in this course. The only time I would allow a makeup test is if students have the proof of the doctor's note. NO makeup is given for all quizzes.

During exams, the following rules apply:

- If you have a disability that influences testing procedures, provide me an official letter from the Office of Disability Services at the start of the semester.
- No cell phones or other electronics are allowed in the testing room.
- You must show a valid Rutgers photo ID to enter the room and to turn in the exam.
- Alternate seating; do not sit next to another student or in your usual seat.
- Use the bathroom prior to the exam start; bathroom breaks, if essential, will be escorted.

GRADING POLICY

- 1. Class Attendance and Participation 15%
- 2. Homework (3) plus quiz (2) 15%
- 3. Test 1 (10%), Test 2 (15%) 25%
- 4. Final Exam 30%
- 5. Individual Final Web Project (See the last page of this syllabus) 15%

Note: All email correspondents need to include section number and/or class time on the subject line. 5 points will be removed if not provided

Grading standard: (No rounding up or down)

A 90-100 B Plus 86-89.99 B 80-85.99 C Plus 76-79.99 C 70-75.99 D 60-69.99

F 59.99 and below

Note for group project: If you did not show up to present along with your group members on the group project presentation date, your group project grade is zero. You will need to convince your group members (all of them) to allow you to present to me as a group again so that you will have the same grade as your group members who showed up today. However, for the "make-up" group project presentation, if

I asked random questions to random members in the group and that member could not answer my questions, all group members will be getting lower score than what I posted right after the presentation date. All members need to vote for the missing member to present again using my office time. If one of the group members voted "NO", then the missing member will maintain zero score.

COURSE SCHEDULE

Lecture Syllabus

Week #1 Course Overview, Content and Administration HTML

Week #2 HTML continued Overview of Database

Week #3: Overview of Database

Reading Assignment:

Watch video: "Using MIS Ch. 5-Database Processing (Module 1)"

Watch video: "Overview of database" (Module 2A)

Overview of Database continued

HW1-HTML Due

Week #4: Quiz 1

covering HTML and basic database concepts (Online)

Reading Assignment:

Watch video: "Using MIS Ch. 1-Why MIS, MIS and You" (Module 1)

Watch video: "Access Related" (Module 2B)

What is the purpose of a database? Using MIS Ch. 5-Database Processing SQL basics (DDL) SQL basics (DML)

Reading Assignment:

Watch video: "Using MIS Ch. 1-Why MIS, MIS and You" (Module 1

Week #5: Using MIS Ch. 1-Why MIS, MIS and You

Reading Assignment:

Watch video: Using MIS Ch. 4-Hardware, Software, and Mobile Systems

Watch video: "DDL and DML" (Module 2C)

Assign SQL (HW2)

Using MIS Ch. 4-Hardware, Software, and Mobile Systems Reading Assignment:

Watch the video clips from canvas.rutgers.edu "Modules" Module 3

Week #6: Excel Chapter 01 – Creating and Editing Workbooks

Excel Chapter 02 – Absolute, Mixed and Relative References

Flash Fill, Assign HW3-Expense Report

Reading Assignment:

Watch the video clips from canvas.rutgers.edu "Modules" Module 3

Week #7: Excel Chapter 04 –Nested IF Statement

What-If Analysis Goal Seek (Ch. 4)

HW2 (SQL) Due

Scenario Manager, Solver (Ch. 8)

Reading Assignment:

Watch the video clips from canvas.rutgers.edu "Modules" Module 3

Week #8 Test #1: covering "Using MIS" Powerpoint Ch. 1, 4, 5, Excel Ch. 1 to 2, SOL book Ch. 1 and 2, and html

PV, FV, NPV on Chapter 6

Creating Tables, Sorting and Filtering, and Using Conditional Formatting

Ch 6-Index, Match

Chapter 7-Data Validation

Week #9 HW3 (Excel Expenses) Due

Watch the video clips from canvas.rutgers.edu "Modules" Module 4

Protect workbook on Chapter 7

VLookup, Hlookup (Ch. 2)

One-Variable and Two-Variable Data Table on Chapter 8

Sample Publisher file for Individual Web Project discussion

Week #10: Ch 6-SUMIFS, COUNTIFS, AVERAGEIFS

Quiz 2 covering topics after test 1

Reading Assignment:

Watch the video clips from canvas.rutgers.edu "Modules" Module 4

Week #11 Recording and Editing Macros

Test 2 review

Reading Assignment:

Watch the video clips from canvas.rutgers.edu "Modules" Module 5

Week #12 **No Class,** study day for Test #2

Test #2 covering Excel Chapter 4 to 9 and VLookup, Hlookup

Week #13 (No Classes)

Week #14 Using MIS Ch. 8-Social Media Information Systems

Using MIS Ch. 9-Business Intelligent Systems

Final Exam Review

Week #15 No class, work on the final individual web project

Final Individual Web Project due - No Class

Week #16

University Calendar Reading Day-No Class

Week #17 (On Campus) Final Exam (All Topics)

Individual Final Web Project

The final individual web project is for you to create at least six web pages to showcase your product/service of the company that you want to create for your future personal company to make money. This web project has nothing to do with the company that you are currently working for, it is for you to create your own company (make believe) in order to create income for you. You don't need to host your website, just a few pages that you put together and send them to my e-mail at clintakoon@gmail.com via zip folder or burn them into CD. The due date is going to be on the last lecture date. The grade will be judged based on the following criteria:

1. Creativity (25%), 2. Layout with pictures (20%), 3. Contents (35%), 4. User Friendly (20%) You can use any software tool that you like. I have heard good comments about Microsoft's publisher software. You can download it for free by going to http://office.microsoft.com then type publisher under search box, it then will lead you to a page where you can click on publisher home page. Then the page follow that will give you a link to click on for free trial download.

Warning: Do not copy and paste from other websites' contents including any description of the products because some students from previous semester got caught and got a big zero on the project.

SUPPORT SERVICES

If you need accommodation for a *disability*, obtain a Letter of Accommodation from the Office of Disability Services. The Office of Disability Services at Rutgers, The State University of New Jersey, provides student-centered and student-inclusive programming in compliance with the Americans with Disabilities Act of 1990, the Americans with Disabilities Act Amendments of 2008, Section 504 of the Rehabilitation Act of 1973, Section 508 of the Rehabilitation Act of 1998, and the New Jersey Law Against Discrimination. More information can be found at ods.rutgers.edu.

[Rutgers University-New Brunswick ODS phone (848)445-6800 or email dsoffice@echo.rutgers.edu]

[Rutgers University-Newark ODS phone (973)353-5375 or email ods@newark.rutgers.edu]

If you are *pregnant*, the Office of Title IX and ADA Compliance is available to assist with any concerns or potential accommodations related to pregnancy.

[Rutgers University-New Brunswick Title IX Coordinator phone (848)932-8200 or email jackie.moran@rutgers.edu]

[Rutgers University-Newark Office of Title IX and ADA Compliance phone (973)353-1906 or email TitleIX@newark.rutgers.edu]

If you seek *religious accommodations*, the Office of the Dean of Students is available to verify absences for religious observance, as needed.

[Rutgers University-New Brunswick Dean of Students phone (848)932-2300 or email deanofstudents@echo.rutgers.edu]

[Rutgers University-Newark Dean of Students phone (973)353-5063 or email DeanofStudents@newark.rutgers.edu]

If you have experienced any form of *gender or sex-based discrimination or harassment*, including sexual assault, sexual harassment, relationship violence, or stalking, the Office for Violence Prevention and Victim Assistance provides help and support. More information can be found at http://vpva.rutgers.edu/.

[Rutgers University-New Brunswick incident report link: http://studentconduct.rutgers.edu/concern/. You may contact the Office for Violence Prevention and Victim Assistance at (848)932-1181]

[Rutgers University-Newark incident report link:

https://cm.maxient.com/reportingform.php?RutgersUniv&layout_id=7 . You may also contact the Office of Title IX and ADA Compliance at (973)353-1906 or email at TitleIX@newark.rutgers.edu. If you wish to speak with a staff member who is confidential and does **not** have a reporting responsibility, you may contact the Office for Violence Prevention and Victim Assistance at (973)353-1918 or email run.vpva@rutgers.edu]

If students who have experienced a temporary condition or injury that is adversely affecting their ability to fully participate, you should submit a request via https://temporaryconditions.rutgers.edu.

If you are a military *veteran* or are on active military duty, you can obtain support through the Office of Veteran and Military Programs and Services. http://veterans.rutgers.edu/

If you are in need of *mental health* services, please use our readily available services.

[Rutgers University-Newark Counseling Center: http://counseling.newark.rutgers.edu/]

[Rutgers Counseling and Psychological Services—New Brunswick: http://rhscaps.rutgers.edu/]

If you are in need of *physical health* services, please use our readily available services.

[Rutgers Health Services – Newark: http://health.newark.rutgers.edu/]

[Rutgers Health Services – New Brunswick: http://health.rutgers.edu/]

If you are in need of *legal* services, please use our readily available services: http://rusls.rutgers.edu/

Students experiencing difficulty in courses due to *English as a second language (ESL)* should contact the Program in American Language Studies for supports.

[Rutgers-Newark: PALS@newark.rutgers.edu]

[Rutgers-New Brunswick: eslpals@english.rutgers.edu]

If you are in need of additional *academic assistance*, please use our readily available services.

[Rutgers University-Newark Learning Center: http://www.ncas.rutgers.edu/rlc

[Rutgers University-Newark Writing Center: http://www.ncas.rutgers.edu/writingcenter]

[Rutgers University-New Brunswick Learning Center: https://rlc.rutgers.edu/]

[Optional items that many faculty include:

- Students must sign, date, and return a statement declaring that they understand the RU Academic Integrity Policy.
- Students must sign, date, and return a statement declaring that they understand this syllabus.]