Course Information

Title: Data Management
Course #: IS6030
Sections: 003 & 004
Credit Hours: 2
Term: Fall 2018 (Second Half)
Course Time: 1:00-4:50 PM Saturdays

Instructor Information

Names: Matt Risley
Email: rileymy@ucmail.uc.edu
Office Hours: By Appointment
Communication Policy: Students are encouraged to contact me at any time via email with any questions, concerns, etc. Questions are a critical part of learning and I welcome them. A response will be given within 48 hours except on weekends (and often sooner). Keep in mind that I also have a day job (for example, emailing me at 10:00 PM the day before an assignment is due will not get a response).

Link to Pace

This course aligns with PACE, the Lindner College of Business platform for developing the *total* business professional.

P – Professionalism

- Enhance oral & written **communication**, express ideas clearly, logically and persuasively.
- Develop and practice **teamwork** skills through group projects and exercises. We will regularly work together in class to complete tasks and learn from one another's questions.
- Practice professional habits of punctuality, preparation, respect and participation.

A – Academics

- Develop foundational knowledge of core **business functions** and their interactions within firms. Many functions and strategy decisions within a corporation rely on data and analysis, with SQL querying representing a key step in the data retrieval process.
- Begin applying functional and cross-functional knowledge **to critically analyze business problems**. This course will marry programming with other functional knowledges, including finance and economics.

C – Character

- Learn and apply **leadership** techniques for project management (plan, brief, execute, debrief). This course has many concrete deliverables that will require project management skills.

- Build an understanding and initial skills of **managing diversity**, including understanding cultural differences, and challenges and opportunities of global business.
- Understand importance of **ethics and social responsibility** in business and personal settings. Data analytics always intersects with ethics. Conclusions drawn from data are as much a question of what you include as to what you exclude, both of which can dramatically alter those conclusions.

E – Engagement
- Build understanding of importance and practices of **networking** through interactions with business professionals and guest speakers.
- Develop awareness and appreciation of **involvement** in social organizations, community service, and professional group opportunities. This course will refer to online programming content, most of the which is created and maintained by the coding community.

Course Materials
Required Text
- *T-SQL Fundamentals*, 3rd ed., by Itzik Ben-Gan. ISBN-13: 978-1509302000

Website
- https://mrrisley.github.io/MRRisley

Software
- Microsoft SQL Server 2014 Express with Management Studio Tools (free): https://www.microsoft.com/en-US/download/details.aspx?id=42299
- R (open source): https://cran.r-project.org/
- Tableau (more to come)

Course Description
This course provides an introduction to the use and design of databases to store, manipulate and query data. The course introduces the structured query language (SQL) used to manage data. Students who complete this course should understand how to use SQL for basic data manipulation and queries. This course is intended for users of existing databases to extract needed information and should not be taken by MSIS students or those students who wish to learn detailed database design techniques.

Instructional Methods
The following course utilizes the Blackboard (Bb) Learning Management System to provide student-centered online learning that will enhance the teaching and learning process. Bb will primarily be utilized for assignment turn-in, grades, and announcements. For a guide to Bb, see https://kb.uc.edu/kbarticles/blackboard-landing.aspx.

Lecture materials will be available online through the instructor's website: https://mrrisley.github.io/MRRisley.

Course Communication
University policy requires that the email set up in Blackboard is the primary means of communication. It is advisable that you use your UC email for this purpose and that you check it

often. If you choose to change your email in Blackboard to a non-UC email it is your responsibility to ensure you check it frequently. Please see the attached Student Email Policy for more information:
http://www.uc.edu/content/dam/uc/infosec/docs/general/Policy_StudentEmail.pdf.

Course Policies

Course Structure

Changes to the syllabus, due dates, course requirements or grading requirements will be made as far in advance as possible. Due dates will be clearly marked in Blackboard and communicated in class. All assignments will be submitted via Blackboard.

Academic Integrity

As with all Lindner College of Business efforts, in this course you will be held to the highest ethical standards, critical to building character. Ensuring your integrity is vital and ultimately is your responsibility. To help ensure the alignments of incentives, the Lindner College of Business has implemented a "Two Strikes Policy" regarding Academic Integrity that supplements the UC Student Code of Conduct (see: http://www.uc.edu/conduct/Code_of_Conduct.html)

- All academic programs at the Lindner College of Business use this "Two Strikes Policy"; Any student who has been found responsible for two cases of academic misconduct may be dismissed from the College.
- All cases of academic misconduct (e.g., copying other students assignments, failure to adequately cite or reference, cheating, plagiarism, falsification, etc.) will be formally reported by faculty; and
- Students will be afforded due process for allegations as outlined in the policy.

Any instance or suspicion of academic misconduct will be reported to the Dean of the Lindner College of Business, and appropriate grade reductions for academic misconduct will be applied.

Disability

Students with disabilities who need academic accommodations or other specialized services while attending the University of Cincinnati will receive reasonable accommodations to meet their individual needs as well as advocacy assistance on disability-related issues. Students requiring special accommodation must register with the Disability Services Office.
http://www.uc.edu/aess/disability.html

Counseling Services, Clifton Campus

Students have access to counseling and mental health care through the University Health Services (UHS), which can provide both psychotherapy and psychiatric services. In addition, Counseling and Psychological Services (CAPS) can provide professional counseling upon request; students may receive five free counseling sessions through CAPS without insurance. Students are encouraged to seek assistance for anxiety, depression, trauma/assault, adjustment to college life, interpersonal/relational difficulty, sexuality, family conflict, grief and loss, disordered eating and body image, alcohol and substance abuse, anger management, identity development and issues related to diversity, concerns associated with sexual orientation and spirituality concerns, as well as any other issue of concerns. After hours, students may call UHS at 513-556-2564 or CAPS Cares at 513-556-0648. For urgent physician consultation after-hours students may call 513-584-7777.

Title IX is a federal civil rights law that prohibits discrimination on the basis of your actual or perceived sex, gender, gender identity, gender expression, or sexual orientation. Title IX also covers sexual violence, dating or domestic violence, and stalking. If you disclose a Title IX issue to me, I am required forward that information to the Title IX Office. They will follow up with you about how the University can take steps to address the impact on you and the community and make you aware of your rights and resources. Their priority is to make sure you are safe and successful here. You are not required to talk with the Title IX Office. If you would like to make a report of sex or gender-based discrimination, harassment or violence, or if you would like to know more about your rights and resources on campus, you can consult the website www.uc.edu/titleix or contact the office at 556-3349.

Missed and/or Late Assignments and Assessments

Missing and/or late assignments and assessments are only permitted with 24 hour prior notice to the due date. If missing and/or late assignments become a chronic issue within the class, the instructors reserves the right to alter the policy on missing and/or late assignments and assessments, including penalties for missing and/or late assignments. The instructor also reserves the right to mark missing and/or late assignments or assessments as a "zero" at the time of grading, which is never within 24 hours of the due date.

Grading Policy

Your course grade will be determined under the following weighting system. The instructor reserves the right to alter the grading policy with advance notice to students.

Participation/Attendance	15%
Homework	20%
Assessments	20%
Midterm	20%
Final	25%

Your course grade, determined by the weighting schema above, will be scaled as follows:

A	93-100
A-	90-92
B+	87-89
B	84-86
B-	80-83
C	70-79
D	60-69
F	< 60

Description of Assignments

- Participation/Attendance
  - Students are expected to attend class regularly and participate in the lecture. The best way to learn the nuances of programming is through asking questions.
  - There will be a number of in-class assignments throughout the course. We will complete them together as a class. In-class assignments assigned during one

week are due prior to the start of the following week's class. These contribute to the participation portion of your grade.

- Homework
  - o There will be a number of homework assignments that students will be expected to complete outside of class time, although there will be opportunities to work on them at the end of class. Students are expected to complete these assignments **independently**. You may ask for help from other students or the instructors, but the final product must ultimately reflect your own work. Homework assignments are due prior to the start of the next week's class.
- Assessments
  - o At the beginning of each class, there will typically be a short assessment covering material in the prior class. These are meant to serve as a checkpoint for progress in the course, the student's understanding of the material presented thus far, and possible areas where more instruction is required.
- Midterm
  - o The midterm will be given during the fourth week of class and will be a written assessment. The midterm will be cumulative to that point in the class, covering all material presented in the prior three weeks.
- Final
  - o The final will be given during Week 6 and will be take-home, due by Week 7 at by our final scheduled class date, which is reserved for the final exam. Students will be asked to solve problems using VBA. The scope of the final is cumulative, and successful completion will require understanding of all material presented in the course. Students are welcome to use any resources available to them **except other students**. The final is an **individual** assessment.

Course Schedule

The instructors reserve the right to alter the course schedule, as necessary.

Class	Topics	Assessments	Deliverables
Week 1	-Introduction to Programming and SQL		
Week 2	-Single-Table Queries	Assessment #1	Homework #1 In-Class Assignment #1
Week 3	-Joins	Assessment #2	Homework #2 In-Class Assignment #2
Week 4	-Subqueries	Midterm	In-Class Assignment #3
Week 5	-Miscellaneous: Temp Tables, Set Statements, Procedures	Assessment #3	Homework #3 In-Class Assignment #4
Week 6	-Accessing databases in R and Tableau	Assessment #4	Homework #4 In-Class Assignment #5
Week 7			Final In-Class Assignment #6