

Course Information

Title: Statistical Computing

Course #: BANA 5143 (undergrad credit) & BANA 6043 (grad credit)

Sections: 001 & 002

Credit Hours: 2

Term: Spring 2019

Course Time: 1:00-4:50 PM Saturdays

Instructor Information

Instructor Name: Matt Risley

Email: rileymy@ucmail.uc.edu

Teaching Assistant Name: Akshay Singhal

Email: singhaay@mail.uc.edu

Office Hours: 12:00-1:00PM Saturdays

Communication Policy:

Students are encouraged to contact us at any time via email with any questions, concerns, etc. Please email Akshay and copy me. Questions are a critical part of learning and we welcome them. A response will be given within 48 hours in most cases (and often sooner).

Remember that a timely response is contingent on a timely inquiry. For example, it is unlikely you will receive an email response to a question written within 24 hours of an assignment due date.

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 derived from use of statistical software such as SAS or R.

- 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

Website

- <https://mrrisley.github.io/BANA6043>

Software

- SAS OnDemand for Academics:
http://www.sas.com/govedu/edu/programs/od_academics.html
- R: <https://cran.r-project.org/>
- RStudio: <https://www.rstudio.com/>
- Microsoft SQL Server 2014 Express with Management Studio Tools (free):
<https://www.microsoft.com/en-US/download/details.aspx?id=42299>

Course Description

This is a course on the use of computer tools for data management and analysis. The focus is on a few popular data management and statistical software packages such as SQL, SAS, SPSS, S Plus, R, and JMP although others may be considered. Data management and manipulation techniques including queries in SQL will be covered. Elementary analyses may include measures of location and spread, correlation, detection of outliers, table creation, graphical displays, comparison of groups, as well as specialized analyses.

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.

Other learning materials will be provided, such as SAS Web-based Tutorials and DataCamp.

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 of academic misconduct will be reported to the Director of Graduate Affairs and the appropriate Department Chair. Proposed sanctions for academic misconduct in this course can include: (a) failure or grade reduction on the assignment, (b) failure or grade reduction on the course grade, and (c) recommended dismissal from the program.

Accessibility Resources

The University of Cincinnati is committed to providing all students with equal access to learning opportunities. [Accessibility Resources](#) is the official campus office that works to arrange for reasonable accommodations for students with identified physical, psychological, or cognitive disability (learning, ADD/ADHD, psychological, visual, hearing, physical, cognitive, medical condition, etc.). Students are encouraged to contact the Accessibility Resources Office to arrange for a confidential meeting to discuss services and accommodations. Contact should be initiated as soon as possible to allow adequate time for accommodations to be arranged.

<https://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, students can receive three free professional counseling sessions upon request through the [Counseling and Psychological Services](#) (CAPS). These sessions are not associated with student's insurance coverage. 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 or concern. 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

Title IX is a federal civil rights law that prohibits discrimination on the basis of a person's actual or perceived sex, gender, gender identity, gender expression, or sexual orientation. Title IX also addresses instances of sexual violence, dating or domestic violence, and stalking. If a student discloses a Title IX issue to me, I am required to forward that information to the Title IX Office. The Title IX Office will follow up with the student about how the University can take steps to address the impact on the student and the community. They will also inform the student of their rights and direct them to available resources. The priority is to make sure students are safe and successful here at the University of Cincinnati. Students are not required to talk to anyone in the Title IX Office. Students may also directly report any instances of sex or gender-based discrimination, harassment or violence to the Title IX office at (513) 556-3349. Students who wish to know more about their rights and resources on campus can consult the [Title IX website](#) or contact the Title IX office directly at (513) 556-3349.

[Reports may be filed](#) through the Title IX Office website.

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 instructor 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.

Grading Policy

The instructor reserves the right to alter the grading policy with advance notice to students.

Graduate Credit (BANA6043)

Students enrolled in the course for graduate credit (BANA6043) will have their grades determined under the following weighting system:

In-Class Assignments	15%
Homework	20%
Assessments	20%
Midterm	20%
Final Project	25%

The 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

Undergraduate Credit (BANA5143)

Students enrolled in the course for undergraduate credit (BANA5143) will have their grades determined under two weighting systems: (1) the weighting system for graduate students as defined above, and (2) a weighting system that reduces weights for timed, in-class assessments. Both of these weighting systems are shown below. **The student will receive the course grade from the weighting system that maximizes their grade for the course.**

Weighting System 1

In-Class Assignments	15%
Homework	20%
Assessments	20%
Midterm	20%
Final Project	25%

Weighting System 2

In-Class Assignments	20%
Homework	30%
Assessments	10%
Midterm	15%
Final Project	25%

The course grade, determined by the maximum score under the two weighting schemas 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

In addition, students enrolled for undergraduate credit will receive the following modifications to the coursework, consistent with differentiated expectations for undergraduate and graduate coursework:

1. **A differentiated Midterm examination.** Undergraduate students will receive a Midterm that focuses on general concepts in the course more than the specifics and nuances of software and syntax.
2. **A differentiated Final Project.** Undergraduate students will produce a final project on a smaller scale than those of graduate students. For example, undergraduate students are only required to examine a relationship between two variables whereas graduate students are required to examine relationships among more than two variables.

Assignments and Academic Integrity

Unless otherwise noted, work turned-in for a grade for this course is an individual effort only.

This means that you cannot consult other students, instructors, or persons for assistance in completing the work. You may only ask questions of and receive assistance from the instructor or teaching assistant. Instances of cooperation that are not permitted will be pursued as instances of academic misconduct (i.e., cheating).

Description of Coursework

- In-Class Assignments
 - This portion of your grade will be determined by assignments that we complete together during class time.
 - In-class assignments are due by the start of the following week's class.
- Homework
 - There will be a number of homework assignments that students will be expected to complete outside of class time. Homework assignments are due by the start of the next week's class.
- Assessments
 - 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
 - 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 Project
 - Students will complete a final project due by the end of the class time in Week 7. During FLEX courses, the final class is reserved for the final exam. **We will not meet during Week 7.**
 - The project will require a 7-8 page analysis of a data set using tools learned in this course.