BSDS 100: Course Information *Spring 2021*

Course Title: Introduction to Data Science with R
Course Number: BSDS 100
Lecture Time: MWF 10:35- 11:35am Pacific
Zoom Link: See Canvas

Instructor: Michael Ruddy
    Contact: mgruddy@ncsu.edu · https://mgruddy.wixsite.com/home
    Office Hours: TBD

Required Materials (all free):

- *Software*: Students are expected to install and be able to use RStudio and Jupyter Notebook to follow lectures and complete assignments in this course.

- *Textbook*: The textbook for this course is *R for Data Science* by Hadley Wickham and Garret Grolemund. It is a free online textbook available at http://r4ds.had.co.nz/index.html

- *Canvas*: Students should be familiar with the Canvas page for this course and be able to use the Discussion board. The Canvas forum should be your first stop for questions about assignment problems (or anything about the material) for two reasons: (1) The answer to your question is likely valuable for the rest of the class and (2) your classmates might be able to answer your question more quickly than I can.

Assessment

Letter grades are determined by the following table. Satisfactory/Unsatisfactory grading and Audit grading will be in accordance with University policy. Students should **not** expect rounding or curves.

A+	100 - 98	A	97.99 - 93	A-	92.99 - 90
B+	89.99 - 87	B	86.99 - 83	B-	82.99 - 80
C+	79.99 - 77	C	76.99 - 73	C-	72.99 - 70
D+	69.99 - 67	D	66.99 - 63	D-	62.99 - 60
		F	< 60		

10% Participation: You are expected to attend class when possible, participate in the Canvas forum, and work in groups for Case Studies assignments and the Final Project. You are also expect to follow the Code of Conduct (below).

50% Assignments: You will be assigned a computational assignment to be submitted with Jupyter Notebook regularly throughout the course.

20% Case Studies: You will be assigned applied case studies throughout the class that are to be completed as a group.

20% Final Project: The final project will be a computational case study that brings together the techniques learned throughout the semester. The description for this project will be provided towards the mid point of the semester.

Participation

While I hope everyone is able to attend each class session, in this online and "study-from-home" setting, unexpected events, technical difficulties, and difficult schedules are unavoidable. In an effort to make it possible for each student to participate in the course in the way that is most beneficial to them, I am assigning *attendance points* to each of the following tasks. There is no explicit number for how many attendance points will grant full credit, but if you attend (or watch and reflect on) 90% of classes and participate in each Case Study day you will earn full credit. You may earn extra credit for going above and beyond this as well.

- **Attending a class session: 1 Point.** This requires being present for the majority of the class session.

- **Asking a question during class: 1 Point.** You may only receive one of these per week and it must be a thoughtful question about the course material.

- **Reflection on a class session: 1 Point.** This can only be earned if you did not attend class. If you decide to instead watch the recorded lecture, you can receive an attendance point for filling out a reflection survey and submitting it to me within a week of the class date. See Canvas or the GitHub page for the reflection survey.

- **Canvas Post: 3 Points.** This consists of a Canvas post asking a reasonable question about the material on an assignment or a good answer to such a question. This can be earned a maximum of once per week.

- **Case Study Dates:** There are six class sessions where you will complete or present case studies assignments in groups. Each day is worth **5 Points**. If you are unable to attend any of these dates, you must give prior notice and we can work out a way for you to complete the assignment and earn the 5 Attendance points.

Assignments

All assignments (unless otherwise specified) must be submitted using Jupyter Notebook and by the designated due date.

- **Late Policy:** You are give exactly one "no questions asked" one-week extension on any assignment. This must be communicated prior to or on the due date of the particular assignment and the assignment must indicate this. Late assignments receive a 10%

penalty for each day they are late. For example, if you turn in an assignment on February 5 that was due on February 2 and score a 90% on the assignment you will receive a score of 90% * (.7) = 63%.

- **Academic Integrity:** Students are encouraged to ask questions on Canvas and work with each other outside of class. However, you are not allowed to copy and paste code and claim it as your own. Never copy and paste your classmates' code, and if you use code you found on the internet **always** cite the source and give a brief explanation of what it does. On each assignment you must pledge that the work is your own and detail any outside help you received. Failure to do so and/or violating this pledge may result in an academic honesty violation.

Case Studies

- These are group assignments that are to be started in-class on three designated days of the semester (see below). All group members are given the same score, provided they all contribute a relatively equal amount to the assignment. You are expected to be an active, inclusive, and respectful group member and will be scored accordingly. Groups will turn in a single Jupyter Notebook file and present a portion of it to the rest of the class on the due date.

Final Project

- The final project has three major components: (1) forming a group with a clear topic by the specified dates, (2) a 15 minutes presentation of your project (with each group member participating), and (3) an organized Jupyter notebook where all executable code can be found presented neatly.

Code of Conduct: As students will often be asked to share and discuss their work, and work on assignments with their peers, the code of conduct **MUST** be followed. Students are expected to be highly respectful of their peers and instructor during and outside of class to help foster an inclusive environment where everyone is comfortable making mistakes and contributing. I pledge to also follow this code of conduct. When working as a group, it is every group member's responsibility to make sure everyone has input and understands the answers given.

Dates
The following dates are set by USF and cannot be altered.

Monday, January 25th	First day of classes
Friday, February 12th	Census Day (Last day to withdraw with tuition reversal)
Monday, February 15th	President's Day (no class)
Monday, March 15th - Friday, March 19th	Spring Break (no class)
Friday, April 2nd	Easter Holiday (no class)
Monday, April 12th	Last day to withdraw
Wednesday, May 12th	Last day of class

The following are important dates for the Case Study and Final Project assignments.

Monday, February 22nd	In-class work on Case Study #1
Friday, February 25th	In-class present Case Study #1
Wednesday, March 31st	Form groups for Final Project w/ Broad Topic
Monday, April 5th	In-class work on Case Study #2
Friday, April 9th	In-class present Case Study #2
Wednesday, May 5th	Final Project Description due
Friday, May 7th	In-class work on Case Study #3
Wednesday, May 12th	In-class present Case Study #3
Monday, May 17th, 10am-12	Final Exam date (Project Presentations)

Other Important Information

Academic Integrity: As a Jesuit institution committed to cura personalis — the care and education of the whole person — USF has an obligation to embody and foster the values of honesty and integrity. All members of the USF academic community are responsible for maintaining the standards of honesty and integrity. Students are expected to be familiar with and uphold the University's Honor Code (https://myusf.usfca.edu/academic-integrity/honor-code)

Non-Discrimination Policy: All students are expected to adhere to the university's non-discrimination policy (seehttps://myusf.usfca.edu/human-resources/policies-procedures/non-discrimination-policy). All students should feel welcome and be comfortable giving input and listening to their peers.

Attitudes that discriminate against fellow students, however, are **not welcome** in the classroom and hinder yours and your peers educational experience. Any attitude, belief, or language that implies that one person or group of people is superior to another (including but not limited to racist, sexist, xenophobic, ableist, and/or homophobic ideology) is also not welcome. Such beliefs are destructive to our classroom community and will hinder our ability to learn from each other.

Students with Disabilities: If you are a student with a disability or disabling condition, or if you think you may have a disability, please contact USF Student Disability Services at

415 422-2613 within the first week of class, or immediately upon onset of disability, to speak witha disability specialist. if you are determined eligible for reasonable accommodations, please meet with your disability specialist so they can arrange to have your accommodation letter sent to me, and we will discuss your needs for this course. For more information, please visit: http://www.usfca.edu/sds or call 415 422-2613.

Learning & Writing Center: The Learning and Writing Center provides assistance to all USF students in pursuit of academic success. Peer tutors provide regular review and practice of course materials in the subjects of Math, Science, Business, Economics, Nursing, and Languages. https://tutortrac.usfca.edu. Students may also take advantage of writing support provided by Rhetoric and Language Department instructors and academic study skills support provided by Learning Center professional staff. For more information about these services contact the Learning & Writing Center at 415 422-6713, email: lwc@usfca.edu, website: www.usfca.edu/lwc

Counseling and Psychological Services: Lots of college students experience mental health struggles. Counseling and Psychological Services (CAPS) can help with sadness, anxiety, loneliness, college adjustment, relationship struggles, and other concerns not requiring medical intervention. For more information see https://myusf.usfca.edu/caps.

Confidentiality, Mandatory Reporting, and Sexual Assault: As an instructor, omne of my responsibilities is to help create a **safe** learning environment on our campus. I also have a mandatory reporting responsibility. I am required to share information regarding sexual misconduct or information about a crime that may have occurred on USFs campus with the University. Here are other resources:

- For information on reporting any sexual misconduct see https://myusf.usfca.edu/hps/red-folder/sexual-assault

- Students may speak to someone confidentially, or report a sexual assault confidentially by contacting Counseling and Psychologist Services at 415 422-6352

- For an off-campus resource, contact San Francisco Women Against Rape (SFWAR) 415 647-7273 (ww.sfwar.org).

Student Accounts: Students who wish to have the tuition charges reversed on their student account should withdraw from the course(s) by the end of the business day on the last day to withdraw with tuition credit (census date) for the applicable course(s) in which the student is enrolled. Please note that the last day to withdraw with tuition credit may vary by course. The last day to withdraw with tuition credit (cenesus date) is applicable only to courses which meet for the standard 15-week semester. To find what the last day to withdraw with tuition credit is for a specific course, please visit the Online Class Schedule at www.usfca.edu/schedules.

* The instructor reserves the right to make changes to the syllabus at his discretion.