DataStory Studio EDG 4930

**Instructor:**

Dr. Daniel Maxwell

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(352) 294-1034

**Teaching Assistants:**

Scott Cohen

Charlotte Bolch

**Office Hours:**

TBD

Course Description

In this studio course, students practice the art of crafting compelling data stories in the company of other apprentices and knowledgeable professionals. As a studio learning experience, each apprentice will work independently, executing a data story project of their choosing. However, students will also benefit from learning that can only occur within a community of practice. Each step of data story construction is covered during this learning experience, from specifying an initial research question to identification of appropriate dataset(s), analysis of those dataset(s) using R or Python, the creation of a storyboard, and final layout and design of a finished data story.

Although this class has no pre-requisites, an interest in and/or exposure to foundational data science concepts is helpful, though the key determinant of success in this class is a desire to learn through fearless experimentation. Or stated another way, this course is designed to appeal to self-directed and self-motivated students who wish to design a learning experience specific to their project.

Required Texts

Salkind, N. J., & Shaw, L. A. (2019) *Statistics for people who (think they) hate statistics using R. Thousand*

*Oaks,* CA: Sage Publications. ISBN 978-1544324579

Required Software

You will be required to use the free Rstudio integrated development environment (IDE). Instructions on how to install this software package are provided in Module 1: R and RStudio.

Office Hours, Tutoring, and Academic Support

I have scheduled office hours each week, but I am available at other times as well. If you would like to meet with me, just send an email with times you are available and we can set up a time to meet.

We will also have student tutors hold regular office hours each week. These hours will be posted on Canvas as soon as they are available.

Student Learning Objectives

The Student Learning Objectives (SLOs) for this course are:

1. Students will be able to navigate within the RStudio (IDE)
2. Students will be able to manage datasets using R.
3. Students will be able to create basic graphs in R.
4. Students will be able to determine which statistic is appropriate in different situations.
5. Students will be able to create and interpret graphs.
6. Students will be able to generate and interpret R output for all of the statistics described above.
7. Students will appreciate the value of data science and statistics.

Course Communication

All course-related communication and questions should be posted to the Canvas learning environment. Private questions should be sent to the instructor via Canvas -- the course management system.

Course Structure

The course has been designed to minimize lectures and to maximize your active learning of the material. Although I provide brief video lectures in Canvas, the vast majority of your time will be spent working on activities that were designed to help you develop an understanding of the material.

The DataStory Assignment

Your final DataStory is an important assignment that accounts for 25% of your final grade, or 200 points. It is important that you carefully review the DataStory grading rubric as your final grade on this assignment will be based on the criteria listed in that document. The analysis presented in this story must be yours alone and not a derivative. In other words, do not rework another story you find online or elsewhere and then present it as yours.

Be sure to reference and properly use the analytical tools documented in your Data Analysis Plan. A large part of your grade on this assignment rests on your ability to demonstrate mastery of the foundational statistical methods at the heart of your data story. Above all else, keep it simple. Keep it clear.

In order to succeed on this assignment, you’ll need to first formulate an interesting (provocative) research question. Thus timely completion of each deliverable is critical, especially the first two which set the foundation for everything that comes after. The choice of research question, data selected to answer that question, and the method of analysis is completely up to you.

Creating a compelling DataStory takes time – periods of exploration interspersed with moments of reflection – so you’ll want to budget adequate time for each assignment. Do not wait to start an assignment the night before it is due! The quality of your deliverable will suffer, as will your grade and the personal sense of pride derived from being a true professional.

Student Evaluation and Assessment

Your final grade will be the percent of points you receive out of the 800 points that are possible. The following grade cuts will be used:

93 to 100% = A 87 to 89.9% = B+ 77 to 79.9% = C+ 67 to 69.9% = D+

90 to 92.9% = A- 83 to 86.9% = B 73 to 76.9% = C 63 to 66.9% = D

80 to 82.9% = B- 70 to 72.9% = C- 60 to 62.9% = D-

Below 60% = F

|  |  |  |
| --- | --- | --- |
| Deliverable | Points | % Value |
| Research Statement w/Question(s) | 100 | 12.5 |
| Data Identification Statement | 50 | 6.25 |
| Learning Plan | 100 | 12.5 |
| Data Analysis Plan | 100 | 12.5 |
| Storyboard | 100 | 12.5 |
| Completed DataStory | 200 | 25 |
| Reflection Paper | 150 | 18.75 |

Academic Honesty

The time for learning from each other is during our weekly studio sessions. However, “working together” is not equivalent to “copying.” Working together means that each person is actively engaged in trying to understand the material not just “getting the right answer to turn in.” If you have any questions about what constitutes appropriate “working together” you should ask me. Of course, I expect you to uphold the honor code of the University in its entirety: “On my honor, I have neither given nor received unauthorized aid in doing this assignment.” Using another’s completed course work is unauthorized aid. I expect you to do more than simply follow rules. I expect you to act honorably in all of your exchanges with me, and I will act honorably when I interact with you.

Makeup Policy

Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at: <https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>.

Course Schedule & Assignment Due Dates

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| --- | --- | --- |
| Assignment | Points | Due Date |
| Research Statement w/Question(s) | 100 |  |
| Data Identification Statement | 50 |  |
| Personal Learning Plan | 100 |  |
| Data Analysis Plan | 100 |  |
| Storyboard | 100 |  |
| Completed DataStory | 200 |  |
| Reflection Paper | 150 |  |

Online Course Evaluations

“Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at https://evaluations.ufl.edu. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at <https://evaluations.ufl.edu/results/>.

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# Students Requiring Accommodations

Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, www.dso.ufl.edu/drc/) by providing appropriate documentation. Once registered, students will receive an accommodation letter, which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible.

# Campus Resources

Resources are available on campus for students having personal problems or lacking clear career and academic goals, which interfere with their academic performance. These resources include:

Students with Disabilities

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## Health and Wellness

* U Matter, We Care: If you or a friend is in distress, please contact umatter@ufl.edu or 352 392-1575 so that a team member can reach out to the student.
* Counseling and Wellness Center: http://www.counseling.ufl.edu/cwc/Default.aspx, 392-1575;
* Sexual Assault Recovery Services (SARS) at the Student Health Care Center, 392-1161.
* For emergencies call: University Police Department, 392-1111 (or 9-1-1 for emergencies). http://www.police.ufl.edu/

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## Academic Resources

* E-learning technical support, 352-392-4357 (select option 2) or e-mail to Learning-support@ufl.edu. https://lss.at.ufl.edu/help.shtml.
* Career Resource Center, Reitz Union, 392-1601. Career assistance and counseling. http://www.crc.ufl.edu/
* Library Support, http://cms.uflib.ufl.edu/ask. Various ways to receive assistance with respect to using the libraries or finding resources.
* Teaching Center, Broward Hall, 392-2010 or 392-6420. General study skills and tutoring. http://teachingcenter.ufl.edu/
* Writing Studio, 302 Tigert Hall, 846-1138. Help brainstorming, formatting, and writing papers. http://writing.ufl.edu/writing-studio/

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# University Honesty Policy

UF students are bound by The Honor Pledge which states, “We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: “On my honor, I have neither given nor received unauthorized aid in doing this assignment.” The Honor Code (https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

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# University of Florida Complaints Policy and Student Complaint Process

The University of Florida and most instructors believe strongly in the ability of students to express concerns regarding their experiences at the University. Most problems, questions and concerns about courses can be resolved by professionally communicating with the instructor. Please try to meet your instructor in person, make an appointment to call, or try to set up a remote meeting through Skype or other media.

If this does not help the University encourages the students who wish to file a written complaint to submit that complaint directly to the department that manages that course. If a problem really persists and cannot be resolved by communicating with the instructor and the department, contact… for

Residential Course: [https://www.dso.ufl.edu/documents/UF\_Complaints\_policy.pdf.](https://www.dso.ufl.edu/documents/UF_Complaints_policy.pdf)

Online Course:  <http://www.distance.ufl.edu/student-complaint-process>