



Special Skills in Mass Communication.

Advanced Data Reporting

Associate Professor Ryan Thornburg

Maymester 2020: May 13 – 29

Online. Synchronous Sessions may be held as needed from 9 a.m. - 12:15 p.m., M-F

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Contact Info Available on Sakai Course Site: <https://sakai.unc.edu/portal/site/mejo390.mm20>

PRE-REQUISITES: None

COURSE DESCRIPTION: Students will learn how to find and tell news stories with data using the R statistical programming language. This class is designed for students with experience and interest in professional news reporting.

OBJECTIVES:

- Load, manipulate and analyze public data using the R statistical programming language and RStudio IDE software
- Visualizing data using static and interactive maps and charts
- Develop a strategy for identifying, finding and acquiring data used by local, state and federal government agencies on a specific news reporting beat
- Using data in the process of fact-checking and verification
- Use data to find sources and anecdotes
- Develop and propose a newsworthy story idea using data

ATTENDANCE POLICY:

The University attendance policy is listed [here](#) for reference.

Students are expected to attend all synchronous class sessions and/or view all recorded lectures.

Quizzes on lecture material will be given to ensure attendance.

REQUIRED MATERIALS:

- Practical R for Mass Communication and Journalism, by Sharon Machlis.
 - VitalSource version: <https://bookshelf.vitalsource.com/books/9780429681752>
 - Limited Web version: <http://www.machlis.com/R4Journalists/index.html>
- Investigative Reporters Handbook, 5th Edition, by Brant Houston & IRE.
 - VitalSource version: <https://bookshelf.vitalsource.com/books/9781319079659>
- RStudio Cloud account (<https://rstudio.cloud>)
- Zoom, logged in with a UNC account: <https://software.sites.unc.edu/zoom/>
- Other readings as assigned on Sakai
- Computer with either Windows 10 or macOS 10.14 or higher
- Internet access

RECOMMENDED MATERIALS

- Student membership to Investigative Reporters and Editors (<https://www.ire.org/membersonly/join/register>)
- RStudio Desktop, version 1.2, installed on laptop
- R software, version 3.6.3, installed on laptop
- Microsoft Teams app on laptop and/or phone

COMMUNITY STANDARDS FOR ONLINE VIDEO CLASS SESSIONS:

- Students are expected to be online and ready to begin class prior to the start of each session.
- Students should begin sessions with video on if possible. They may turn video off when not speaking or participating in small group discussions.
- When speaking or participating in small group discussions, students will have their video on unless bandwidth limitations do not allow.
- Students should keep their audio muted when not speaking.
- The instructor will record all sessions and make them available online for enrolled students to view later. At the end of the semester, the instructor will delete any online and offline copies of these videos to which he has access.
- The audio and visual content of online class sessions are intended for use only by enrolled students and only during the session for which they are enrolled. Students will not do anything that would make audio or visual content from class sessions available to anyone not enrolled in the class. At the end of the course, students are expected to delete any copies of audio or visual content from class sessions that they have made.



GRADING:

The Spring 2020 Emergency Grading Accommodation has been extended through the Summer 2020 terms. For more details see <https://www.unc.edu/posts/2020/04/02/summer-school-remote/> and <https://registrar.unc.edu/>.

Grading scale

A = 93-100%,

A- = 90-92%,

B+ = 87-89%,

B = 83-86%,

B- = 80-82%,

C+ = 77-79%,

C = 73-76%,

C- = 70-72%,

D+ = 67-69%

D = 60-66%,

F = 59% or below

Grading rubric

Chapter Lab Assignments: 25%

Quizzes (textbook, other readings, lectures): 25%

Data Beat Report (May 25): 25%

Final Project/Story Pitch (May 30): 25%

In-Class Exercises: 10%

Late Assignments

Because of the compressed schedule of Maymester courses, it is especially critical that students turn in assignments on time. Assignments that are not submitted by deadline may not receive timely feedback. All assignments not submitted completely and correctly by deadline will receive a 10% deduction in grade. Assignments not submitted by 12:15 p.m. ET on Thursday, May 28 will receive 0 points.



HONOR CODE:

The Honor Code (<https://catalog.unc.edu/policies-procedures/honor-code/>) forms a bond of trust among students, faculty, and administrators. The University of North Carolina at Chapel Hill operates under a system of self-governance, as students are responsible for governing themselves. As such, our University is transformed into a powerful community of inquiry and learning. The Honor Code embodies the ideals of academic honesty, integrity, and responsible citizenship, and governs the performance of all academic work a student conducts at the University. Acceptance of an offer of admission to Carolina presupposes a commitment to the principles embodied in our century-old tradition of honor and integrity.

SEEKING HELP:

If you need individual assistance, it is your responsibility to meet with the instructor. If you are serious about wanting to improve your performance in the course, the time to seek help is as soon as you are aware of the problem – whether the problem is difficulty with course material, a disability, or an illness.

DIVERSITY:

The University's policy on Prohibiting Harassment and Discrimination is outlined on the Equal Opportunity and Compliance Office's webpage (<https://eoc.unc.edu/our-policies/ppdhrm/>). UNC is committed to providing an inclusive and welcoming environment for all members of our community and does not discriminate in offering access to its educational programs and activities on the basis of age, gender, race, color, national origin, religion, creed, disability, veteran's status, sexual orientation, gender identity, or gender expression.

SPECIAL ACCOMMODATIONS:

If you require special accommodations to attend or participate in this course, please let the instructor know as soon as possible. If you need information about disabilities visit the Accessibility Resources & Services site at <https://ars.unc.edu/>.



ACCREDITATION:

*Please look at the list of competencies [here](#) and choose those that best fit your class.

The Hussman School of Journalism and Media's accrediting body outlines a number of values you should be aware of and competencies you should be able to demonstrate by the time you graduate from our program. Learn more about them here: <http://hussman.unc.edu/accreditation>. No single course could possibly give you all of these values and competencies; but collectively, our classes are designed to build your abilities in each of these areas. The values and competencies associated with this course include being able to:

- Demonstrate an understanding of gender, race ethnicity, sexual orientations and, as appropriate, other forms of diversity in domestic society in relation to mass communications;
- Understand concepts and apply theories in the use and presentation of images and information;
- Demonstrate an understanding of professional ethical principles and work ethically in pursuit of truth, accuracy, fairness and diversity;
- Think critically, creatively and independently;
- Conduct research and evaluate information by methods appropriate to the communications, professions in which they work;
- Write correctly and clearly in forms and styles appropriate for the communications professions, audiences and purposes they serve;
- Critically evaluate their own work and that of others for accuracy and fairness, clarity, appropriate style and grammatical correctness;
- Apply tools and technologies appropriate for the communications professions.

WEEKLY CLASS SCHEDULE:

Class No.	Date	Topics Covered	Readings/Assignments
1	Wednesday, May 13	Introduction & Software Setup	<ul style="list-style-type: none"> • Read: Practical R, Chapter 2 • HW: Chapter 2 Lab
2	Thursday, May 14	Acquiring & Loading Data	<ul style="list-style-type: none"> • Class Workshop: Practical R, Chapter 3 • Read: Practical R, Chapter 4 • HW: Chapter 4 Lab
3	Friday, May 15	Finding the right data with filters	<ul style="list-style-type: none"> • Read: Practical R, Chapter 5 • HW: Chapter 5 Lab
4	Monday, May 18	Visualizing data with ggplot	<ul style="list-style-type: none"> • Read: Data visualization best practices • Read: IRE Handbook
5	Tuesday, May 19	Joining and merging data from different sources	<ul style="list-style-type: none"> • Read: Practical R, Chapter 6 • HW: Chapter 6 Lab
6	Wednesday, May 20	Reshaping, grouping and descriptive statistics	<ul style="list-style-type: none"> • Read: Practical R, Chapter 7 • HW: Chapter 7 Lab
7	Thursday, May 21	More data visualization	<ul style="list-style-type: none"> • Read: Practical R, Chapter 8 • HW: Chapter 8 Lab
8	Friday, May 22	Finding the right data on your beat	<ul style="list-style-type: none"> • Read: IRE Handbook • HW: Data Beat Report
9	Monday, May 25	Share data beat reports; more visualization	<ul style="list-style-type: none"> • Read: Practical R, Chapter 9 • HW: Chapter 9 Lab
10	Tuesday, May 26	Working with temporal data	<ul style="list-style-type: none"> • Read: Practical R, Chapter 13 • HW: Chapter 13 Lab
11	Wednesday, May 27	Working with geographic data	<ul style="list-style-type: none"> • Read: Practical R, Chapter 11 • HW: Chapter 11 Lab
12	Thursday, May 28	LDOC. Final project workshops; publishing data	<ul style="list-style-type: none"> • Final Story pitches
13	Friday, May 29	Present final reports; Cumulative Quiz	

FINAL EXAM:

Students will spend 6-8 minutes each presenting their final reports in small groups via Zoom between 9 a.m. and 12:15 p.m. on Friday, May 29.