

MMC 2450 Data Literacy for Communicators

Fall 2020 | Class 18074, Section 07H3 | Online 100% | 1 credit



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Office: Virtual in fall 2020 (normally, Weimer 3052)

Office hours: Wednesdays 4:00 to 6:00 pm via Zoom

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Office hours are times devoted to being available via Zoom for one-on-one sessions. However, I am happy to meet with you at any mutually agreeable time to review any questions you may have, or to go over your quiz or exam answers with you.

ABOUT THE COURSE

Course Description

This course grounds you in numeracy so you can correctly interpret and communicate numbers. The only pre-requisite is sophomore standing. It is open to any major.

Course Structure

This course is 100 percent online, through Canvas. All instruction is in videos, with no outside readings or textbook. All assessments are multiple-choice questions for quizzes and two exams. All are proctored with Honorlock, whose videos I watch to detect cheating.

This course is fully asynchronous. It has deadlines so you can pace yourself and keep up with the material. However, you can work ahead or even complete the course in a few days. Because of that work-ahead feature, no allowances are made for deadline extensions unless extenuating circumstances arise in accordance with UF policies.

Objectives

By the end of the course, you should be able to:

- Communicate numerical information correctly to a general audience.
- Appraise the validity of statements employing numbers.
- Apply average and percentage to everyday life.
- Determine when numbers require normalization.
- Critique and summarize public opinion surveys.
- Distinguish between random events and meaningful patterns.
- Evaluate assertions about causation, evidence, theory and risk.
- Interpret tables, charts and data visualizations.
- Simplify and contextualize large or complicated numbers.
- Identify cognitive biases that shape interpretation of numbers.
- Use a spreadsheet to calculate, filter and sort numbers.

Required Textbook

None.

Materials and Supplies Fee

None, to my knowledge.

ASSIGNMENTS AND GRADING**Deadlines (All modules can be completed ahead of deadline*)**

	Deadline	Theme	Key Topics	Assessment
1	11:59 pm Sat, Sept. 5	Introduction	How data literacy differs from math; three course principles	(none)
2	11:59 pm Sat, Sept. 12	Data Logic	Distinguish among terms such as error and theory; identify factors affecting comparisons	Q1 Data Logic
3	11:59 pm Sat, Sept. 19	Average	Calculate and apply mean, median, and mode while avoiding common errors	Q2 Average
4	11:59 pm Sat, Sept. 26	Percent	Calculate and apply percentages and percentiles while avoiding common errors	Q3 Percent
5	11:59 pm Sat, Oct. 3	Simplify	Simplify and contextualize large numbers in terms of individuals, time, area, and volume	Q4 Simplify
6	11:59 pm Sat, Oct. 10	Surveys	How to interpret surveys and polls, identify ways results can differ, and detect errors	Q5 Surveys
7	11:59 pm Sat, Oct. 17	Sheets	Use Google Sheets to calculate average, percentage, total, and rate, and sort and filter	Q6 Sheets
8	11:59 pm Sat, Oct. 24	Midterm Review	Review course so far Take midterm: 50 random questions	Midterm
9	11:59 pm Sat, Oct. 31	Probability	Calculate three types of probability to avoid common misinterpretations; two types of risk	Q7 Probability
10	11:59 pm Sat, Nov. 7	Number Biases	How anchoring bias, availability heuristic, price bias, and relativity trap skew numbers	Q8 Number Biases
11	11:59 pm Sat, Nov. 14	Correlation	Discern between causation and correlation; four types of variables; experiment types	Q9 Correlation
12	11:59 pm Sat, Nov. 21	Visuals	Read tables, charts, and maps to avoid abuse and misinterpretations; hurricane maps	Q10 Visuals
13	11:59 pm Sat, Nov. 28	Number Abuse	Skepticism vs. cynicism; dubious data vs. empiricism; cherry-picking; interpreting rates	Q11 Number Abuse
14	11:59 pm Sat, Dec. 5	Writing	Best ways to write about numbers, including simplification and rounding	Q12 Writing
15	11:59 pm Wed, Dec. 9*	Final Review	Review second half of course (revisit Midterm review on your own); take a cumulative quiz	Q13 Review
16	11:59 pm Tue, Dec. 15*	Final	Final: 50 random questions; cumulative	Final Exam

*You can work ahead and complete the course in a few days. No need to wait until the deadline and risk having computer glitches cause a zero for a quiz. Also, deadlines are Saturday night, **except for the final two weeks**. This is because the fall semester was delayed a week. The final exam was the date chosen by UF had this class met in person.

Grading Categories

The course has only quizzes and exams, which together total 200 points.

Category	Points	Percent of Grade
Weekly quizzes (best 10 out of 13 count)	100	50%
Midterm exam	50	25%
Final exam	50	25%

Grading Scale

	Percent		Percent		Percent		Percent
		B+	89-87%	C+	79-77%	D+	69-67%
A	100-93%	B	86-83%	C	76-73%	D	66-63%
A-	92-90%	B-	82-80%	C-	72-70%	D-	62-60%

Scores are rounded to the nearest whole point: 89.4 rounds down to 89 (B+) while 89.5 rounds up to 90 (A-). The [UF grading policy](#) details how GPA is computed.

About Quizzes and Exams

- Each correct answer for a quiz or an exam is worth 1 point.
- Each quiz has 10 questions drawn at random from question banks. After week 1, 7 are from that module and 3 are from previous modules (cumulative).
- Each exam has 50 questions.
- You will have an average of 2 minutes on each question for quizzes and exams.
- All questions are multiple-choice, with four answer options each.
- For each question, select the *best* answer (not just a “right” answer).
- Notes are not permitted for quizzes or exams.
- A dedicated calculator (not a phone) is encouraged for quizzes and exams.
- Canvas will display a score but not the correct answer. I’m happy to review any quiz or exam questions with you by Zoom.
- Of the 13 quizzes, the 10 best scores count and the low 3 drop.

About Honorlock

All quizzes and exams trigger Honorlock. This proctoring service is a lock-down browser with a video recording feature. I watch the videos to monitor compliance. The first practice quiz, in the introduction module, uses Honorlock so you can become familiar with it.

Quiz and Exam Honesty Requirements

Violations can result in a failing grade and referral to the dean of students.

- Only you can take quizzes or exams.
- You must be alone in a quiet room.
- Only your computer is allowed. No other electronic devices (phone, etc.) allowed.
- No notes, electronic or paper, are permitted.
- No videos can be accessed.
- Blank scratch paper is encouraged. Please show both sides to the video screen.
- A dedicated calculator (not a phone) such as a cheap solar model is encouraged.

Exceptions

Because everything in the course can be done early, allowances for missing deadlines are unneeded. All schedule conflicts such as religious observances or intercollegiate sporting events can be resolved by taking the quiz or exam early. Therefore, the only exception should be unforeseen and chronic events covered by UF policy.

My Two Strongest Recommendations

1. Do first two weeks at once, so that you are always a week ahead. The first week is an introduction, with just a practice quiz. The three videos take only 20 minutes. You easily can combine that with the Data Logic module.
2. If you have any questions or concerns, call, email, Zoom, etc., sooner rather than later. The most frustrating thing as a professor is when a student who is struggling waits too long to ask for help. Ask sooner. I'm here to help. Really.

Online Assistance

If you encounter technology difficulties, contact the UF Computing Help Desk [website](#), or phone 24/7 at 352-392-4357, or email helpdesk@ufl.edu.

FAQs**Q. What's the general routine for the course?**

A. 1. Watch videos. 2. Take practice quiz. 3. Take graded quiz.

Q. Isn't there anything else, like discussion posts or a written report?

A. No. Only 13 quizzes and 2 exams.

Q. How long are the videos?

A. The mean of the 64 videos is 7 minutes, 45 seconds. A typical module has 5 videos.

Q. Do I get any practice quizzes?

A. Yes: one for each module. These are ungraded. You can take them as often as you like.

Q. What if I mess up a quiz? Can I retake it?

A. No. That's why the three low quiz scores drop.

Q. If I bomb the midterm, can I do something for extra credit?

A. Sorry, but no extra credit is possible in this course.

Q. That sounds scary. What if I do bad on the exam?

A. The quizzes prepare you for each exam. Each exam is exactly like the quizzes, only with new questions. If you do well on the quizzes, you likely will do well on the exams. If you have been struggling with the quizzes, you may wish to alter your study habits or ask me for further clarification about anything that is confusing.

Q. Can I really do the course all at once?

A. Yes.

Q. I work better if I wait until the deadline. What happens if my computer dies then?

A. That can be one of the three dropped quizzes. Then, change your “deadline” to be earlier, so you can allow for inevitable technical glitches. Better yet, be a week ahead from the start.

Q. How much are the quizzes worth?

A. Each is worth 10 points. The best 10 count. The low three scores drop.

Q. Can I use a calculator during quizzes and exams?

A. Yes: A dedicated calculator such as a cheap solar model is sufficient.

Q. If my calculator is missing, can I use my phone?

A. No. Use of the phone during a quiz or an exam is academic misconduct.

Q. Can I use note paper?

A. Yes, if blank on both sides. Show both sides to the video camera when Honorlock is recording so I will know it’s blank.

Q. Can we have a cheat sheet for the exams?

A. No.

Q. When will I know how I did on the quiz or exam?

A. Canvas will record your score immediately.

Q. Canvas won’t show me the answers. How do I know what questions I missed?

A. I’m happy to review those answers with you during office hours or at a time that is mutually agreeable. In fact, I encourage it.

Q. I watched the videos but still got questions wrong. Why?

A. Let’s discuss. Your observations could help improve the instructional videos. On the other hand, historically the No. 1 reason is concentration. Having Facebook and messaging apps going while watching videos is, shall we say, disadvantageous to learning.

Q. I did that! I turned off Facebook and still did bad. What else can I do?

A. If you really want to engage the brain, don’t just watch. Take notes. Research shows the physical act of writing improves retention. Call it the “Hamilton” Effect: If you put a pencil to your temple, it connects to your brain.

Q. Anything else I can do?

A. After note-taking, the next best thing is to write sample multiple-choice questions. The act of thinking about the material deeply enough to create quiz questions helps learning.

OTHER IMPORTANT DETAILS

Academic Integrity

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://sccr.dso.ufl.edu/process/student-conduct-code>) specifies a number of behaviors that are in violation of this code and the possible sanctions. Also, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with me.

When I discover cheating, my default policy is to fail all involved for the entire course and report the details to the Dean of Students Office.

A word to the wise: My academic research involves plagiarism. I take ethical violations seriously.

A word to the even more wise: Those who study for this course pass. Those who cheat never pass. You do the math.

Diversity

The College of Journalism and Communications embraces an intellectual community enriched and enhanced by diversity along several dimensions, including race, ethnicity and national origins, gender and gender identity, sexuality, class, and religion. Each course is expected to help foster an understanding of the diversity of peoples and cultures and of the significance and impact of mass communications in a global society. To that end:

1. Please let me know if you find any material in the course violates that expectation.
2. Please alert me if you have a name or preferred pronouns that differ from the class roll information, which is my only source of information about you.
3. If you have any concerns involving diversity in this course that you feel uncomfortable discussing with me, I encourage you to contact Professor Joanna Hernandez, CJC director of inclusion and diversity, at jhernandez@jou.ufl.edu.

Course Evaluations

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at <https://gatorevals.ua.ufl.edu/students/>. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at <https://gatorevals.ua.ufl.edu/public-results/>.

Students with Disabilities

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the Disability Resource Center by visiting disability.ufl.edu/students/get-started. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

Health and Wellness

U Matter, We Care: If you or someone you know is in distress, please contact umatter@ufl.edu, 352-392-1575, or visit U Matter, We Care [website](#) to refer or report a concern and a team member will reach out to the student in distress.

Counseling and Wellness Center: Visit the Counseling and Wellness Center [website](#) or call 352-392-1575 for information on crisis services as well as non-crisis services.

Student Health Care Center: Call 352-392-1161 for 24/7 information to help you find the care you need, or visit the Student Health Care Center [website](#).

University Police Department: Visit UF Police Department [website](#) or call 352-392-1111 (or 911 for emergencies).

UF Health Shands Emergency Room / Trauma Center: For immediate medical care call 352-733-0111 or go to the emergency room at 1515 SW Archer Road, Gainesville. Visit the UF Health Emergency Room and Trauma Center [website](#).

Academic Resources

E-learning technical support: Contact the UF Computing Help Desk [website](#), or phone 24/7 at 352-392-4357, or email helpdesk@ufl.edu.

Career Connections Center: Career assistance and counseling services. Visit the [website](#). Reitz Union Suite 1300, 352-392-1601.

Library Support: Various ways to receive assistance with respect to using the libraries or finding resources. Visit the [website](#).

Teaching Center: General study skills and tutoring. Visit the [website](#). Broward Hall, 352-392-2010 or to make an appointment 352- 392-6420.

Online Student Complaints: View the Distance Learning Student Complaint Process [website](#).