

## JOU 4930 News & Numbers

Spring 2015 / Section 1G51 / Period 4 Wednesdays, Weimer 1070 / 1 credit



### Associate Professor Norman P. Lewis, Ph.D.

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Office hours: Tuesdays periods 3-4 (9:30 to 11:30 a.m.); Wednesdays periods 9-10 (4 to 6 p.m.)

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“Office hours” are times I dedicate to being in the office and are first-come, first-served. Otherwise, make an appointment or drop in.

## ABOUT THE COURSE

### Course Description

This course in numeracy for media professionals will help you avoid common mistakes involving numbers and accurately communicate data to the public.

This is a “flipped” course: You’ll receive instruction online on your own time while class time will be for applying/practicing those concepts and communicating data.

### Course Objectives

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

- Appraise the reliability and validity of data.
- Discern when data is abused or misrepresented.
- Calculate average, percent and simple probabilities.
- Distinguish between random events and meaningful patterns.
- Simplify large numbers.
- Interpret and evaluate public opinion polls.
- Evaluate assertions about causation, evidence and proof.
- Identify cognitive biases that cause people to misinterpret numbers.
- Use a spreadsheet for basic calculations and simple data visualizations.

### For Example ...

By the end of the course, you should be able to spot these mistakes made in the news:

- The unemployment rate fell by 1 percent, from 9 percent to 8 percent.
- The poll showed the incumbent likely to win, 52 percent to 48 percent.
- Coaches agree the ball should go to the player with the hot hand.
- The president said his tax cut would save the average family \$1,015 a year.
- A study showed eating red meat increases your death risk by 20 percent.

**Required Textbooks**

- “Damned Lies and Statistics,” updated edition, by Joel Best. University of California Press, 2012. ISBN: 978-0520274709 (online links to [Amazon](#) and [Barnes & Noble](#))
- “Numbers in the Newsroom,” second edition, by Sarah Cohen. Investigative Reporters and Editors, 2014. ISBN: 0-9766037-1-3 (2014 edition available online only from [IRE](#))

**Permissible Calculators**

You may use a calculator in class for quizzes and tests. It must be a dedicated calculator; no smartphones allowed. Also, the calculator cannot have memory or be programmable, so that graphing calculator from calculus is verboten. OK are solar-powered devices or business/scientific calculators. Bottom line: If the calculator display shows only one row of numbers, it’s acceptable.

**ASSIGNMENTS AND GRADING****Tentative Schedule**

Date	Subject	Assignment
January 7	1. Introduction	
January 14	2. Data Reliability	Read Best, intro thru ch. 3
January 21	3. Data Abuse	Read Best, ch. 4 thru end; read Cohen ch. 1
January 28	4. Percent	Watch instructional video(s); read Cohen ch. 2
February 4	5. Average	Watch instructional video(s)
February 11	6. Simplifying Large Numbers	Watch instructional video(s); read Cohen ch. 4
February 18	7. Probability and Risk	Watch instructional video(s); read Cohen ch. 7
February 25	Exam 1	
March 4	(No class; spring break)	
March 11	8. Polling	Watch instructional video(s); read Cohen ch. 5
March 18	9. Causation, Evidence & Truth	Watch instructional video(s); read Cohen ch. 6
March 25	10. Number Biases	Watch instructional video(s)
April 1	11. Spreadsheets 1: Formulas	Watch instructional video(s)
April 8	12. Spreadsheets 2: Filters	Watch instructional video(s)
April 15	13. Spreadsheets 3: Data viz	Watch instructional video(s); read Cohen ch. 3
April 22	Exam 2	

**Quizzes (25%)**

Most weeks, a quiz will be given in class. Permissible calculators (see section above) are allowed. Quizzes could be at the beginning (so be on time) or the end – or both. The two low scores will be dropped to allow for absences for whatever reason, whether “approved” or not.

**Homework (20%)**

Period homework assignments will be given to further practice and apply the concepts discussed in class. The two low scores will be dropped to allow for off weeks or for when life gets in the way; no extensions can be granted.

**Exam 1 (25%)**

Exam 1 will cover everything in class up until that point. Permissible calculators (see section above) are allowed. It will mostly be multiple-choice questions; some questions will require that you write out a sentence as you would for an audience. See the Attendance section below for what to do if an illness or emergency arises.

**Exam 2 (30%)**

Exam 2 will cover everything in the semester. About two-thirds will be from the second half of class. Permissible calculators (see section above) are allowed. It will mostly be multiple-choice questions; some questions will require that you write out a sentence as you would for an audience. See the Attendance section below for what to do if an illness or emergency arises.

**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.

**THE FINE PRINT****Attendance**

Attendance is expected. Course requirements for attendance, make-up exams, assignments and other work are consistent with UF [policy](#). Makeup exams can be accommodated if and only if (a) the absence is covered by UF policy, (b) you call me at least 30 minutes before class begins, and (c) you promptly provide written documentation for the absence.

**Academic Integrity**

University of Florida students pledge to abide by an [honor code](#) that prohibits academic dishonesty such as fabrication, plagiarism and cheating. You have an affirmative obligation to understand what constitutes academic dishonesty. You also must report to appropriate personnel any condition that facilitates academic misconduct. If you have any questions or concerns, please contact 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.

**Students with Disabilities**

Students with disabilities requesting accommodations should first register with the [Disability Resource Center](#) (352-392-8565) by providing appropriate documentation. Once registered, students will receive an accommodation letter, which must be presented to me when requesting accommodation. Such requests should be made as early in the semester as possible.

### **Help With Coping**

The UF [Counseling and Wellness Center](#) is a terrific, free resource for any student who could use help managing stress or coping with life. The center, at 3190 Radio Road on campus, is open for appointments and emergency walk-ins from 8 a.m. to 5 p.m. Monday through Friday. To make an appointment or receive after-hours assistance, call 352-392-1575.

The UF Police can be reached at 392-1111 or, in an emergency, by dialing 911.

### **Course Evaluations**

Students are expected to provide feedback on the quality of instruction in this course by completing online [evaluations](#). You will be notified by email when the evaluations are open, typically in the last two or three weeks of the semester. Summary [results](#) are available to you and the public.