# JOU4930 Dataviz & Mapping

Spring 2017 / Section 015A / Periods 8-10 Thursdays, Weimer 1092 / 3 credits



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

Office: Weimer 3052

Office hours: 12:45 to 2:45 p.m. (periods 6-7) Wednesday and Thursday

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About me: See my <u>website</u> or follow me (@bikeprof) on <u>Twitter</u>

"Office hours" are times I dedicate to being in the office (unless called away) and are first-come, first-served. Or, make an appointment. Or, drop in if the door is open.

### **ABOUT THE COURSE**

## **Course Description**

This course covers the foundational skills required of a visual data journalist or anyone who seeks to present numbers visually. We will learn how to evaluate, analyze and present data so it can be "read" on a cellphone. Tools that do not require coding will be used such as spreadsheets, Tableau, Datawrapper and Quadrigram.

## **About Data Courses**

This course complements JOU 3305 Data Journalism and together form a two-course sequence in the numerical side of data. It can also pair well with the beginning web app coding course by Professor McAdams to form a two-course sequence in data presentation.

## **Objectives**

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

- Create a visual data story using multiple elements.
- Tell a data story in a manner that works on a cellphone.
- Scrutinize data to find insight and patterns of interest to the audience.
- Identify reliable sources of data and understand their limitations.
- Match visualization techniques to the data.
- Use color, type, shapes and other tools to foster accuracy and clarity.
- Grasp the mechanics of geospatial analysis such as projections and polygons.

#### **Required Textbook**

"The Truthful Art" by Alberto Cairo. New Riders, 2016. ISBN: 0321934075 (links to Amazon and Barnes & Noble for about \$40).

"The Curious Journalist's Guide to Data" by Jonathan Stray, Free ebook.

## **Required Laptop**

The classroom has no computers, so you need to bring your own laptop. Either Mac or Windows will do. But it needs to be a laptop, not a tablet.

### **ASSIGNMENTS AND GRADING**

#### **Tentative Schedule**

	Date	Theme	Key Topics							
1	Jan 5	Introduction	Good and bad data visuals, the visual story, data sources							
2	Jan 12	Design Principles	Color, type, salience, mobile, UX, UI							
3	Jan 19	Data Principles	Variables, measurement scales, correlation							
4	Jan 26	Data Analysis	Average, percent, rate (Excel)  Matching data to visuals (Excel, Tableau)  Evaluate and display data (Tableau)							
5	Feb 2	Visual Matching								
6	Feb 9	Visual Analysis								
7	Feb 16	Responsive Charts	Creating charts, embedding online (Datawrapper)							
8	Feb 23	Maps	Map types, projects, points, polygons, choropleth							
	Mar 2	No class (NICAR)	Take-at-home exam							
	Mar 9	No class (spring break)								
9	Mar 16	Visual Storyboarding	Planning the story; discuss your project in class							
10	Mar 23	Sketching the Story	Introduction to Quadrigram							
11	Mar 30	Animating the Story	Intermediate Quadrigram							
12	Apr 6	Refining the Story	Gaining fluency in Quadrigram							
13	Apr 13	Project presentations								

### **Grade Allocation**

Quizzes and assignments (low 1 drops)	50%
Presentation	10%
Exam	20%
Project	20%

## Quizzes and Assignments (50%)

Weekly quizzes and/or assignments are planned to reinforce learning and test assigned readings. Some of these will be in class. To accommodate conflicts in personal schedules, the low score will drop.

## Presentation (10%)

Because this is a collaborative course in which we learn from each other, each student will prepare and present to the class a 20-minute, hands-on session on some aspect of data visualization. Grading will be based on the substance of the material and on engagement.

### Exam (20%)

A take-at-home exam will be offered before spring break to give you an opportunity to apply the conceptual skills you are learning about data and presentations.

## Project (20%)

The final project, to be presented on the final week of class, will involve telling a data story visually. You will find data, analyze and evaluate it, and tell a story with at least three different visual data elements (general, charts or maps) surrounded by short paragraphs and with photographs as appropriate. Grading will be based on the story's timeliness and relevance and on how well the visualization fosters insight with clarity. Stories that earn an A will be publication-quality.

#### **Attendance**

Attendance is expected. Course requirements for attendance, make-up exams, assignments and other work are consistent with UF <u>policy</u>. One weekly quiz or assignment is dropped to accommodate conflicts in your schedule. For absences covered by UF policy, such as illness, you are responsible to alert the professor before class and provide documentation.

## **Grading Scale**

		Percent		Percent		Percent		Percent
			B+	89-87%	C+	79-77%	D+	69-67%
	Α	100-93%	В	86-83%	С	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 <u>UF grading policy</u> details how GPA is computed.

### **OTHER IMPORTANT DETAILS**

# **Academic Integrity**

UF students pledge to abide by an <a href="https://honor.code">honor.code</a> 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.

#### **Course Evaluations**

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

Please note that evaluations serve two purposes: They (1) help my boss evaluate my performance and (2) enable me to improve my teaching and this course for future students. So what you have to say really does matter.

#### Students with Disabilities

Students with disabilities requesting accommodations should first register with the <u>Disability Resource Center</u> (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 soon as possible – preferably at the start of the semester – so that I can adjust to the accommodation and therefore assist you in your learning.

#### **Health and Wellness**

Your well-being is important to the University of Florida. The U Matter, We Care initiative is committed to creating a culture of care on campus by encouraging everyone to look out for one another and to reach out for help if a person is in need.

If you or a friend is in distress, please contact umatter@ufl.edu so that the U Matter, We Care Team can reach out to the student in distress. A nighttime and weekend crisis counselor is available by calling 352-392-1575.

The U Matter, We Care team can help connect students to many other helping resources including, but not limited to, victim advocates, housing staff, and the Counseling and Wellness Center. Asking for help is a sign of strength.

In case of emergency, call 911.

### **Academic Resources**

- E-learning technical support: 352-392-4357 (select option 2) or e-mail to <a href="mailto:Learningsupport@ufl.edu">Learningsupport@ufl.edu</a> or reach the <a href="mailto:website">website</a>.
- For career advice and planning, or even help selecting a major or minor, contact the Career Resource Center in the Reitz Union, 392-1601.
- For help in finding resources, ask a UF librarian through <u>Library Support</u>.
- General study skills and tutoring available from the <u>Teaching Center</u>, Broward Hall, 392-2010 or 392-6420.
- Have a complaint? See the <u>UF Complaints Policy</u> for links and directions.