Associate Professor Norm Lewis, Ph.D.
Office: Weimer 3052
Office hours: 11:45 a.m. to 1:40 p.m. (periods 5-6) on Wednesday and Friday
Phone: 352-392-5137 (I respond within 24 hours Monday through Friday)
E-mail: nplewis@ufl.edu (I respond within 24 hours Monday through Friday)
About me: See my website or follow me (@bikeprof) on Twitter

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

ABOUT THE COURSE

Course Purpose
To enable you to work professionally as a data journalist who acquires, cleans and analyzes data using spreadsheets and SQL databases.

Course Description
This course focuses on the numbers side of data journalism. You will learn how to find data to tell stories and how to find stories in data. No experience in spreadsheets or databases presumed. Pre-requisite: Journalism 3101 (reporting) or permission of instructor.

About Data Courses
This course pairs with JOU 4930 Dataviz & Mapping (offered spring) as a code-free approach to the numerical side of data. Professor Mindy McAdams offers a two-course sequence in coding: JOU 3363, Intro to Web Apps, and JOU 4364, Advanced Web Apps.

Course Structure
The classroom is for skill acquisition (so don’t skip!) using the Mac lab computers. Weekly homework assignments reinforce those skills. The two exams seek to mimic the workplace under deadline pressure: open-book, timed exercises of the type data journalists do daily. Finally, your project lets you apply data skills to do meaningful journalism.

Course Outcomes
By the end of the semester, you should be able to:
- Discover stories in data by detecting meaningful patterns.
- Evaluate the reliability and limitations of data sources.
- Acquire data by scraping websites and PDFs without customized programming.
- Clean inconsistent data so it can be categorized and analyzed accurately.
- Write SQL queries to sort, filter and join data.
In Lieu of a Textbook, Join IRE

For just $25, the student rate, join Investigative Reporters and Editors (IRE) for one year and get free software. Plus, you get access to story tip sheets, data sets, and advice. IRE is host for NICAR (National Institute for Computer-Assisted Reporting), whose annual conference in March attracts about 1,000 data journalists.

Join. It’s the best money you will spend in college.

A Highly Recommended Textbook


This is an excellent reference text by a master practitioner and data teacher. Because you won’t be tested on the book and can pass the course without it, the book is not required. But buy it anyway. You’ll be glad you did.

ASSIGNMENTS AND GRADING

### Tentative Schedule

<table>
<thead>
<tr>
<th>Class</th>
<th>Date</th>
<th>Topic</th>
<th>Subject</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Aug. 24</td>
<td>Data Intro</td>
<td>Best practices in data; spreadsheet navigation; Importing data; creating spreadsheets</td>
</tr>
<tr>
<td>2</td>
<td>Aug. 31</td>
<td>Formulas</td>
<td>Formulas; functions; basic and nested sorts; percent change; percent of whole; averages; rates</td>
</tr>
<tr>
<td>3</td>
<td>Sept. 7</td>
<td>Grouping</td>
<td>Grouping data with filters; pivot tables</td>
</tr>
<tr>
<td>4</td>
<td>Sept. 14</td>
<td>Text Functions</td>
<td>Text and string functions to standardize data; parse data into discrete fields; combine fields; repair addresses</td>
</tr>
<tr>
<td>5</td>
<td>Sept. 21</td>
<td>Cleaning</td>
<td>Cleaning: Using Excel and Open Refine to fix inconsistencies in data</td>
</tr>
<tr>
<td>7</td>
<td>Oct. 5</td>
<td>Stats</td>
<td>Applied stats in Excel to assess variance and correlations in data; determine if differences are meaningful</td>
</tr>
<tr>
<td>8</td>
<td>Oct. 12</td>
<td>Stories</td>
<td>Plan your story projects</td>
</tr>
<tr>
<td>9</td>
<td>Oct. 19</td>
<td>Exam 1</td>
<td>In class</td>
</tr>
<tr>
<td>10</td>
<td>Oct. 26</td>
<td>SQL Basics</td>
<td>Basics of databases and simple queries using Access</td>
</tr>
<tr>
<td>11</td>
<td>Nov. 2</td>
<td>SQL Aggregate</td>
<td>Aggregate and intermediate queries using Access</td>
</tr>
<tr>
<td>12</td>
<td>Nov. 9</td>
<td>SQL Joining</td>
<td>Joining separate data sets using Access; campaign finance data;</td>
</tr>
<tr>
<td>13</td>
<td>Nov. 16</td>
<td>SQLite</td>
<td>SQL queries through Firefox add-on, free for any computer (Access unavailable for Macs)</td>
</tr>
<tr>
<td></td>
<td>Nov. 23</td>
<td></td>
<td>(no class; Thanksgiving)</td>
</tr>
<tr>
<td>14</td>
<td>Nov. 30</td>
<td>Exam 2</td>
<td>In class</td>
</tr>
</tbody>
</table>
Grade Allocation
Homework (low score drops) ..................... 40%
Exam 1 .................................................. 20%
Exam 2 .................................................. 20%
Story project published or broadcast ........ 20%

Homework
Ten assignments are expected. The low score will be dropped. Deadlines firm.

Exams
Each exam will be given in class. You can use your notes. A makeup exam is possible only if (a) the absence is covered by UF policy, (b) you contact me at least 30 minutes before class begins (phone preferred), and (c) you promptly provide written documentation.

Published Story
This is a substantial story, perhaps 500 words, using data you acquire and analyze to tell a story that is published or broadcast by the last day of the semester, Dec. 6. The core requirement is that you have done something original in finding or analyzing data.

Examples include: determining whether the UF football coach deserved to be fired by quantifying recruiting classes, determining whether college campuses are safe, and evaluating local voting trends over 20 years.

Most students publish their work on one of the college’s news outlets (WUFT TV, radio and website) or the Alligator. Equally suitable are non-partisan, professional news organizations such as the Gainesville Sun or WCJB-TV.

For grading, email me a link to the published story and attach the spreadsheet you used, along with a data dictionary that explains what you did with the data.

Grading Scale

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percent Range</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>B+</td>
<td>89-87%</td>
<td>C+</td>
</tr>
<tr>
<td>A</td>
<td>100-93%</td>
<td>B</td>
</tr>
<tr>
<td>A-</td>
<td>92-90%</td>
<td>B-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>C-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>D-</td>
</tr>
</tbody>
</table>

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.

OTHER IMPORTANT DETAILS

Academic Integrity
UF 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.

**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 evaluations are open. Summary results are available to you and the public.

Evaluations help my boss evaluate my performance and enable me to improve my teaching and this course for future students. So what you have to say matters.

**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 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 Learningsupport@ufl.edu or reach the website.
- 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 Library Support.
- General study skills and tutoring available from the Teaching Center, Broward Hall, 392-2010 or 392-6420.
- Have a complaint? See the UF Complaints Policy for links and directions.