

IDS 2935: The Narrative of Numbers

Quest 1

I. General Information

Class Meetings

- Spring 2024
- In-person, 35 students
- Tuesday Period 5-6 in AND 19 & Thursdays Period 6 in MAEB 229

Instructor

- John Streese
- LIT (Little Hall) 324
- Office hours: Monday and Thursday 11:45-12:35; Wednesday 12:50-1:40
- jstreese@ufl.edu

Instructor

- Dr. Angela Brown
- Turlington Hall, 2215M
- Office hours: Wednesday's from 10am to 1pm via Zoom @ <https://ufl.zoom.us/j/2107651605>
I'm available to meet in-person upon request
- walther@ufl.edu

Course Description

The world of numbers and the world of narratives are often seen as separate ways in which to examine a life; the life of numbers is logical and objective, and the world of stories is emotional and subjective. This Quest course finds both perspectives essential to understanding a life and asks, "how do numbers impact the stories we tell about our cultural and social lives?" Using mathematical logic, basic statistics and deductive and inductive reasoning, students consider how algorithms impact online communication and how statistical reasoning contributes to Big Data; concomitantly, students will learn Humanistic theories and themes to analyze the stories told and managed by numbers, including the history of numerology, the stories told (and untold) with social media algorithms, and the process of storytelling with Big Data. At the end of the course, students will collect, aggregate, and visualize their own data to tell a unique story about the numbers shaping their own communities.

Quest and General Education Credit

This course accomplishes the [Quest](#) and [General Education](#) objectives of the subject areas listed above. A minimum grade of C is required for Quest and General Education credit.

Courses intended to satisfy Quest and General Education requirements cannot be taken S-U.

- Quest 1
- Primary Designation: Humanities
- Writing Requirement (2000 words)

Required Readings and Works

Recommended Writing Manual:

- Bullock, Richard, Michal Bordy, and Francine Weinberg. *The Little Seagull Handbook*, 3rd ed. New York: W.W. Norton & Co., 2017. Digital.

Materials and Supplies Fees: n/a

All readings will be provided open access via Canvas site

II. Graded Work

Description of Graded Work

Assignment	Description	Points	Due Date
Personal Reflection: Understanding the Self Through Numbers (Humanities) Satisfies Writing Requirement	Using basic tenets of numerology, students will identify and analyze their lives in a personal reflection	1,000 words (200 pts)	Due 2/1
Discussion Posts (Humanities)	Students will complete discussion posts to demonstrate knowledge of readings and Humanistic concepts in class, as well as help prepare major assignments.	100 words minimum ea. response) 40 pts each (200 pts)	Due Week 2, 8, 13, 14, and 16

Math Activities (Mathematics)	12 worksheets will be provided which review basic mathematical concepts covered in the lecture given immediately beforehand. Students will work on these worksheets together in groups during the last half of class.	(Two worksheet grades are dropped) 12 x 20 pts each (240 pts)	By the end of the class the worksheet is assigned.
Data Visualization Conference	Students will meet with instructors to discuss the rough draft of their data visualization projects	(60 pts)	Due Week 15
Data Visualization Project & Analytical Essay (Humanities & Mathematics) Satisfies Writing Requirement	Students will collect, aggregate, and visualize data on a community topic for a public audience, and then students will compose a thesis-driven analytical essay that argues for the primary narrative of the data. Students will consider the impacts of this narrative on the public.	1,000 words (300 pts)	Due Week 15

Grading Scale

For information on how UF assigns grade points, visit: <https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/>

A	94 – 100%		C	74 – 76%
A-	90 – 93%		C-	70 – 73%
B+	87 – 89%		D+	67 – 69%
B	84 – 86%		D	64 – 66%
B-	80 – 83%		D-	60 – 63%
C+	77 – 79%		E	<60

Grading Rubric(s)

Writing Assessment Rubric and Statements

	SATISFACTORY (Y)	UNSATISFACTORY (N)
CONTENT	Papers exhibit at least some evidence of ideas that respond to the topic with complexity, critically evaluating and synthesizing sources, and provide at least an adequate discussion with basic understanding of sources.	Papers either include a central idea(s) that is unclear or off-topic or provide only minimal or inadequate discussion of ideas. Papers may also lack sufficient or appropriate sources.
ORGANIZATION AND COHERENCE	Documents and paragraphs exhibit at least some identifiable structure for topics, including a clear thesis statement but may require readers to work to follow progression of ideas.	Documents and paragraphs lack clearly identifiable organization, may lack any coherent sense of logic in associating and organizing ideas, and may also lack transitions and coherence to guide the reader.
ARGUMENT AND SUPPORT	Documents use persuasive and confident presentation of ideas, strongly supported with evidence. At the weak end of the Satisfactory range, documents may provide only generalized discussion of ideas or may provide adequate discussion but rely on weak support for arguments.	Documents make only weak generalizations, providing little or no support, as in summaries or narratives that fail to provide critical analysis.
STYLE	Documents use a writing style with word choice appropriate to the context, genre, and discipline. Sentences should display complexity and logical sentence structure. At a minimum, documents will display a less precise use of vocabulary and an uneven use of sentence structure or a writing style that occasionally veers away from word choice or tone appropriate to the context, genre, and discipline.	Documents rely on word usage that is inappropriate for the context, genre, or discipline. Sentences may be overly long or short with awkward construction. Documents may also use words incorrectly.
MECHANICS	Papers will feature correct or error-free presentation of ideas. At the weak end of the Satisfactory range, papers may contain some spelling, punctuation, or grammatical errors that remain unobtrusive so they do not muddy the paper's argument or points.	Papers contain so many mechanical or grammatical errors that they impede the reader's understanding or severely undermine the writer's credibility.

- The Writing Requirement (WR) ensures students both maintain their fluency in writing and use writing as a tool to facilitate learning.

- The instructor will evaluate and provide feedback before the end of the course on all of the student's written assignments with respect to grammar, punctuation, clarity, coherence, and organization.
- WR course grades have two components. To receive writing requirement credit, a student must receive a grade of C or higher and a satisfactory completion of the writing component of the course.

III. Annotated Weekly Schedule

Note to students: classes include a mix of lecture, class discussion, and group activities. Please read all assigned materials before the class period on the day it's assigned so you are prepared to participate in class discussions and group activities. An update and accurate schedule is included on our Canvas site under "Course Schedule"

Week 1 Tuesday 1/9

- Course Introduction: syllabus, assignments, policies, and ice breakers

Thursday 1/11

- "[On the Humanities](#)" (6 minutes)
- In-class discussion-- why are we here in this Quest course? Why consider math and numbers within a Humanities context?

Week 2 Tuesday 1/16

- Watch Modern Intuitionist's "[Pythagorean Numerology: 4 principles that just might change your life](#)" (20 minutes)
- Take the [Enneagram Test](#) (\$12) to determine your Enneagram number
 - If you'd prefer to take a free version, then take both of these tests to get an accurate result: [enneagramtest.com](#) and [Truity.com](#)

Thursday 1/18

- "[How Lottery Winners Picked their Winning Lotto Numbers](#)" (7 minutes)
- "[Mathematician Breaks down the best ways to win the Lottery](#)" (8 minutes)
- **Assignment: Introductory Discussion (#1)**

Week 3 Tuesday 1/23

- Watch Black Mirror, "Nosedive" in class
- Read Wong, et. al., "[We're Just Data](#)" (2 hours)

Thursday 1/25

- "[Credit Scoring is Pseudoscience](#)" (1 hour)

Week 4

Tuesday 1/30

- Read Ted Chiang, "[Division by Zero](#)" (2 hours)

Thursday 2/1

- In-class writing workshop-- writing a reflection
- **Assignment: Numerology Reflection DUE**

Week 5

- **Topic: Mathematical trends in social media.**
- **Summary:** This week, we look at the progression of social media over the years. Specifically, we discuss any common mathematical trends that seem to emerge commonly between different social media platforms.
- **Reading:** (<https://online.maryville.edu/blog/evolution-social-media/>) (25 mins)
- **Assignment: Math Worksheets 1 and 2.**

Week 6

- **Topic: Algorithms**
- **Summary:** We define an algorithm and work through examples of how algorithms work from a mathematical perspective. We then look at their relevance to social media. We have a few activities that are more data science inspired on learning about algorithms and some of the data structures involved.
- **Reading:** <https://bigthink.com/the-present/social-media-algorithms-manipulate-you/> (15 mins)
- **Assignment: Math Worksheets 3 and 4.**

Week 7

Tuesday 2/20

- [Kyle Chayka, "The Age of Algorithmic Anxiety"](#) (45 minutes)
- Watch "[Algorithms, Filter Bubbles and Narratives: Organizing our Everyday on Social Media](#)" (watch until minute 33:00)

Thursday 2/22

- Watch Zeynep Tufekci's "[Online Social Change: Easy to Organize, Hard to win](#)" (16 minutes)

Week 8

Tuesday 2/27

- An Xiao Mina's "[Narrating Our Way to Power](#)" (25 pages) from *Memes to Movements*
- Watch Mark Anthony Neals' "[A History of Black Folk on Twitter](#)" (11 minutes)
- Introduce final data visualization project

Thursday 2/29

- Brainstorm problems/topics for Data Visualization Final Project
- **Assignment: Discussion #2: Community Problems and Data-Driven Solutions**

Week 9

- **Topic: Big Data and Regression**
- **Summary:** The use of Big Data to predict consumer behavior. A description of the ways businesses utilize big data to make predictions about their potential consumer base. We will also develop some basic statistics ideas of regression analysis and see how regression is a powerful tool for companies to make predictions.
- **Reading:** <https://iopscience.iop.org/article/10.1088/1742-6596/1544/1/012165/meta> (20 mins)
<https://hbr.org/2015/11/a-refresher-on-regression-analysis> (20 mins)
- **Assignment: Statistics Worksheets 1 and 2.**

Week 10 Spring Break: No Class!

Week 11

- **Topic: Introductory Mathematical Modeling.**
- **Summary:** We continue to build ideas of regression analysis, as well as build some other basic statistical tools for mathematics modeling. We look at a number of examples where we build graphical models using several predictive variables.
- **Reading:**
- **Assignment: Statistics Worksheets 3 and 4.**

Week 12

- **Topic:** Collecting Data
- **Summary:** This week, we discuss different methods of data collection, including the standard features and procedures for each. We also discuss some of the pitfalls that we should avoid while collecting data. Students will use at least one of these methods during their data collection in the experiential learning component project.
- **Required Readings/Work:**

<https://www.evalacademy.com/articles/sampling-bias-identifying-and-avoiding-bias-in-data-collection> (Reading time: 15 min.)

<https://safetyculture.com/topics/data-collection/data-collection-techniques/> (Reading time: 15 min.)
- **Assignment: Data Worksheets 1 and 2.**

Week 13

Topic: Data Representation

- **Summary:** We explore ways that data can be represented with the use of some basic data visualization tools. Bar graphs, line graphs and further, how this can either obscure trends or falsely claim others.

- **Reading:**

<https://www.statisticshowto.com/types-graphs/> (Reading time: 15 min.)

<https://www.datapine.com/blog/misleading-statistics-and-data/> (Reading time: 20 min.)

- **Assignment: Data Worksheets 3 and 4**
 - **Assignment: Discussion #3: Collecting Data**

Week 14

Tuesday 4/9

- Meet for student conferences

Thursday 4/11

- Meet for student conferences
- **Required Readings/Work:**
<https://authorservices.taylorandfrancis.com/blog/research-impact/presenting-your-research-effectively-and-with-confidence/> (Reading time: 20 min.)

- **Assignment: Discussion #4: Setting the Scene of your Data Story**

Week 15

Tuesday 4/16

- Present Data Visualization project

Thursday 4/18

- Present Data Visualization project
- **Required Readings/Work: Rough draft of their project.**
- **Assignment: Analytical Essay**

Week 16

- **Final in-class reflection and evaluations**
- **Assignment: Discussion #5: Reflecting on Our Data Stories**

[✖](#) delete Week 16 if your course will be taught in the spring.

IV. Student Learning Outcomes (SLOs)

At the end of this course, students will be expected to have achieved the [Quest](#) and [General Education](#) learning outcomes as follows:

Content: *Students demonstrate competence in the terminology, concepts, theories and methodologies used within the discipline(s).* Assessments: In-class math worksheets, discussion posts, experiential activity, final Data Visualization and analytical essay project.

- Employ strategies in fundamental mathematics including statistics and algebra (Math).

Assignments: In-class math worksheets and data visualization & Analytical essay final project

- Identify, describe, and explain Humanistic theories and methodologies of Publics/counterpublics, Recognition, and Digital Humanities to examine essential questions about storytelling, identity, and the examined life (Humanities).

Assignments: Discussion Posts & Data Visualization and Analytical Essay project

- Identify, describe, and explain the ethical and empirical issues related to identity formation, cultural understanding, and information access through the lens of stories shared in a variety of online genres (Quest 1).

Assignments: Discussion Posts & Data Visualization and Analytical Essay project

Critical Thinking: *Students carefully and logically analyze information from multiple perspectives and develop reasoned solutions to problems within the discipline(s).*

- Analyze how to use mathematical models to solve problems and explore data (Math).

Assignments: In-class worksheets and Data Visualization Final Project

- Evaluate the application of mathematical concepts effectively to real-world situations (Math).

Assignments: Final Data Visualization Project

- Analyze and evaluate how diverse stories circulate online in multiple genres—tweets, memes, hashtags—using close reading, critical analysis, and reflection (Humanities).

Assignments: Discussion posts

- Analyze and evaluate how technology of AI and Big Data impact essential questions about the human condition, particularly historical narratives, using critical analysis (Quest 1).

Assignments: Discussion posts

Connection: *Students connect course content with meaningful critical reflection on their intellectual, personal, and professional development at UF and beyond.*

- Reflect on the role numbers play in our everyday life by examining their pervasiveness throughout many aspects of our society (Math).

Assignments: Final Data Visualization Project & Analytical Essay

- Reflect on how numbers and data impact intellectual, personal, and professional development at UF and beyond (Quest 1)

Assignments: Numerology reflection and Discussion posts

V. Quest Learning Experiences

1. Experiential Learning Component: Data collection for Final Data Visualization Project

Students will work in small groups of 4-6 students in a data exploration project. Students will collect data in their community through surveys, interviews, or observations. This project will utilize the previous weeks' mathematical concepts of data collection and representation, including lessons on interviewing techniques, transcribing, and data aggregation. A measurable parameter will be selected and explored by the group and members of the group will work together to represent their data in the final Data Visualization Project and Analytical Essay. Students will need to be careful to avoid biases both in data collection and the representation of data. It is advised to choose a topic that everyone in the group is interested in learning more about/examining and also a topic which is immediately relevant to our daily lives. While the project will be completed in groups, students will be assessed and evaluated individually.

2. Details of Self-Reflection Component

Students will formally reflect twice throughout the course: once in the beginning in the Numerology Reflection assignment, and then in Discussion #5 at the end of the course. Students will consider how numbers shape the stories they tell about themselves and how they understand their own place in the world. Informal reflection takes place in class lectures and discussions.

VI. Required Policies

Attendance Policy

Attendance is required. If students miss more than **six periods** during the term, they will fail the entire course. Double periods count as two absences. Missing 15 minutes of any portion of class results in an absence.

The UWP exempts from this policy **only** those absences due to university-sponsored events, such as athletics and band, religious holidays, documented illness, or serious family emergencies. Absences related to university-sponsored events must be discussed with the instructor **prior** to the date that will be missed. For absences due to illness, your instructor may require a signed doctor's note.

Requirements for class attendance, make-up exams, assignments, and other work in this class are consistent with university policies that can be found at

<https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>

Please note: If students are absent, it is their responsibility to make themselves aware of all due dates. If absent due to a scheduled event, students are still responsible for turning assignments in on time.

Tardiness: If students enter class after roll has been taken, they are late, which disrupts the entire class. Missing more than 10 minutes of any portion of class will Two instances of tardiness count as one absence.

Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at:

<https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>

Students Requiring Accommodation

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center by visiting <https://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.

UF Evaluations Process

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.aa.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.aa.ufl.edu/public-results/>.

University Honesty Policy

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

Counseling and Wellness Center

Contact information for the Counseling and Wellness Center: <http://www.counseling.ufl.edu/> , 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies.

The Writing Studio

The writing studio is committed to helping University of Florida students meet their academic and professional goals by becoming better writers. Visit the writing studio online at <http://writing.ufl.edu/writing-studio/> or in 2215 Turlington Hall for one-on-one consultations and workshops.

In-Class Recordings

Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal educational use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may not publish recorded lectures without the written consent of the instructor.

A “class lecture” is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, exams), field trips, private conversations between students in the class or between a student and the faculty or lecturer during a class session.

Publication without permission of the instructor is prohibited. To “publish” means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.