DSBA 6010: Analytical Storytelling
Fall 2020
Doug Hague

Credits, Days/Time, Location:
3 Graduate Credits
Wednesday 5:15-8:00 pm online in Zoom until Oct 1st. In 606 CCB thereafter.

Faculty Information:
Doug Hague
Email: dhague@uncc.edu
Office: Bioinformatics 215
Office Phone: 704-687-5666
Office Hours: Monday: 4:00-6:00 at TBD or by appointment

Mehmet Karakus
Email: mkaraus@uncc.edu

This syllabus contains the policies and expectations I have established for Analytical Storytelling. Please read the entire syllabus carefully before continuing in this course. These policies and expectations are intended to create a productive learning atmosphere for all students. Unless you are prepared to abide by these policies and expectations, you risk losing the opportunity to participate further in the course.

Description:
This is a topics course, covering advanced topics in Data Science.

The Data Science cycle includes many phases, including problem definition, data acquisition, data engineering, analysis, reporting, interpreting, visualization, and presentation of the results of analysis/insights derived. The Analytical Storytelling course covers the last two steps in this sequence. However, these steps are not simple. It is often the difference between successful and unsuccessful projects. Therefore, this class will be more comprehensive than the usual courses on storytelling that mostly focus on the best visual presentation of the results obtained through the analysis. It will focus on data/analysis interpretation, visualization, presentation, speaking, and situation awareness.

Prerequisites: Consent of the Instructor
Course Objectives:
Students in this course will learn how to interpret data and results of analysis, select appropriate data and analysis presentation formats and visualizations, make effective presentations, speak effectively, behave in front of the audience, and understand group dynamics.

Teaching Strategies:
Materials presented in this course will be covered through lectures, homework, in-class exercises and student presentations, and role playing.

Required Books:
Storytelling with Data: Let’s Practice, Knaflic 2020

Exceptional Presenter: A Proven Formula to Open Up and Own the Room, Koegel, 2007

Reference Books (not required):

Data Points: Visualization that Means Something, Yau, Wiley, 2013

Even a Geek Can Speak: Low-Tech Presentation Skills for High-Tech People, Asher, Persuasive Speaker Press, 2001

The Exceptional Presenter Goes Virtual: Take Command of Your Message, Create and “in-Person” Experience and Captivate Any Remote Audience, Koegel, Greenleaf Group Press, 2010

Institutions:
http://www.storytellingwithdata.com/
http://www.frameworksinstitute.org/
https://www.perceptualedge.com/

Evaluation Methods:
Homework: 15%
Discussion 10%
In Class Assignments: 25%
Project: 50%

Grade Scale:
A = 90-100%
B = 80 - 90%
C = 70 - 80%
D = 60 - 70%
F = below 60
Graduate Version: A, B, C, U

Topical Outline of Course Content
1. Introduction to Analytical Storytelling
2. Developing Your Story
3. Effective Visuals
4. Effective Visuals: Clutter
5. Cognitive Aspects of Visualization
6. Delivering Presentations
7. Midterm student presentations
8. Developing an Analytical Story
9. Remote Presentations
10. Putting it Together
11. Case Study
12. Influencing through Storytelling
13. Final Project Presentations

Course Policies

Syllabus Changes:
The standards and requirements set forth in this syllabus may be modified at any time by the course instructor. Notice of such changes to this syllabus posted on the course Canvas website.

Attendance:
Students are expected to attend all class meetings and to arrive before the class starts. Class topics are integrated, with each week building on prior weeks. Failure to attend or to arrive on time can adversely affect both individual performance, ability to contribute to the group project, and the earned letter grade. If a student misses a class due to work or other reasons, it is their responsibility to get notes from peers; instructors do not hold extra repeat class sessions.

In Class Participation grades will be 0 for classes that are missed.

Students are encouraged to work directly with their instructors regarding class absences for medical appointments, military/court orders, and/or personal and family emergencies, such as a death in the immediate family, where a student is able to provide an instructor with appropriate supporting documentation of the absence. The final decision for approval of absences and missed work or make-up work is determined by the instructor.
The Office of Student Assistance and Support Services (SASS) can provide notification to faculty of emergency situations, when a student is unable to do so and when the office has been made aware of such emergencies. In such situations, the SASS office may also be able to assist with verification of such emergencies, once a student is able to return to classes. The SASS office does not provide verification of absences for car trouble, weather issues, personal
activities, work, weddings, vacations, or University-sponsored events. Absences related to such activities should be discussed directly with the faculty member.

Should a student need assistance from the SASS office in verifying an emergency situation, they can submit an online request form and attach supporting documentation. Please note that students are not required to go through the SASS office at any time regarding absence verification, and the SASS office does not have the authority to excuse absences, allow for make-up work, or provide other academic accommodations.

In cases of absence due to pregnancy or parenting (pregnancy, childbirth, false pregnancy, termination of pregnancy, or recovery from any of these conditions), students should contact the Title IX Office to obtain absence verification by completing the form at http://bit.ly/332eaGd.

**Grade Discussions:**
The instructor will discuss grades only in person (and not via telephone or e-mail) and only with the student (not with parents, spouses, etc). Office hours are listed in the syllabus.

**Electronic Devices:**
Students are not allowed to use any electronic devices during the class, unless otherwise instructed by the instructor.

**Inclement Weather:**
University Policy states the University is open unless the Chancellor announces that the University is closed. The inclement weather hotline number to call is 704-786-2877. In the event of inclement weather, check your email and NinerAlerts. The instructors generally only cancel class if the University is closed.

**COVID-19 Protection**
It is the policy of UNC Charlotte for the Fall 2020 semester that as a condition of on-campus enrollment, all students are required to engage in safe behaviors to avoid the spread of COVID-19 in the 49er community. Such behaviors specifically include the requirement that all students properly wear CDC-compliant face coverings while in buildings including in classrooms and labs. Students are permitted to remove face coverings in classroom or lab settings only when I explicitly grant permission to do so (such as while asking a question, participating in class discussion, or giving a presentation) and while at an appropriate physical distance from others. Failure to comply with this policy in the classroom or lab may result in dismissal from the current class session. If the student refuses to leave the classroom or lab after being dismissed, the student may be referred to the Office of Student Conduct and Academic Integrity for charges under the Code of Student Responsibility.

Students are expected to attend every class and remain in class for the duration of the session when it is safe to do so in accordance with university guidance regarding COVID-19. Failure to attend class or arriving late may impact your ability to achieve course objectives which could affect your course grade. An absence, excused or unexcused, does not relieve a student of any course requirement. Regular class attendance is a student’s obligation, as is a
responsibility for all the work of class meetings, including tests and written tasks. Any unexcused absence or excessive tardiness may result in a loss of participation points.

Students are encouraged to work directly with their instructors regarding their absence(s). For absences related to COVID-19, please adhere to the following:

Do not come to class if you are sick. Please protect your health and the health of others by staying home. Contact your healthcare provider if you believe you are ill.

If you are sick: If you test positive or are evaluated by a healthcare provider for symptoms of COVID-19, complete this form to alert the University. Representatives from Emergency Management and/or the Student Health Center will follow up with you as necessary, and your instructors will be notified.

If you have been exposed to COVID-19 positive individuals and/or have been notified to self-quarantine due to exposure, complete this form to alert the University. Representatives from Emergency Management and/or the Student Health Center will follow up with you as necessary, and your instructors will be notified.

To return to class after being absent due to a COVID-19 diagnosis or due to a period of self-quarantine, students should submit an online request form to Student Assistance and Support Services (SASS). Supporting documentation can be attached directly to the request form and should be from a student's health care provider or the Student Health Center, clearly indicating the dates of absences and the date the student is able to return to class. Instructors will be notified of such absences.

If you are absent from class as a result of a COVID-19 diagnosis or quarantine, as instructor I will work with you to develop a plan to complete the course. The final decision for approval of all absences and missed work is determined by the instructor.

**Code of Student Responsibility:**
“The UNC Charlotte Code of Student Responsibility (the Code) sets forth certain rights and responsibilities in matters of student discipline. The Code defines these responsibilities and guarantees you certain rights that ensure your protection from unjust imposition of disciplinary penalties. You should familiarize yourself with the provisions and procedures of the Code” (Introductory statement from the UNC Charlotte brochure about the Code of Student Responsibility). The entire document may be found here.

**Academic Integrity:**
All students are required to read and abide by the Code of Student Academic Integrity. Violations of the Code of Student Academic Integrity, including plagiarism, will result in disciplinary action as provided in the Code. Definitions and examples of plagiarism are set forth in the Code. The Code is available from the Dean of Students Office or online.

*Faculty may ask students to produce identification at examinations and may require students to demonstrate that graded assignments completed outside of class are their own work.*
Students should select unique subject areas for the Adapting Visualizations homework. If by chance more than one student chooses the same original visualization, modified visuals shall be unique enough for the grader to easily determine that the students worked independently. Please use care in selecting visuals to ensure uniqueness from other students. Students should also not select visuals from Data Storytelling sites or books where before and after visualizations are already provided. Instructor may ask student to reattempt homework if there is any perception of violation. If a second homework is perceived to be in violation, the student will receive a 0 for that homework.

Course Credit Workload:
This 3-credit course requires 3 hours of classroom or direct faculty instruction and 6-7 hours of out-of-class student work each week for approximately 15 weeks. Out-of-class work may include but is not limited to: required reading, library research, written assignments, programming/project based assignments, and studying for quizzes and exams.

Special Needs:
If you have a documented disability and require accommodation in this course, contact Disability Services, Fretwell 230, phone: 687 4355 voice/TDD) the first week of the semester. Information about available services may be found at Office of Disability Services. Accommodations for learning will be arranged by that office and communicated to the Instructor. If you speak English as a second language, please inform the instructor.

Diversity Statement:
UNC Charlotte strives to create an academic climate in which the dignity of all individuals is respected and maintained. Therefore, we celebrate diversity that includes, but is not limited to ability/disability, age, culture, ethnicity, gender, language, race, religion, sexual orientation, and socio-economic status.
All students are required to abide by the Sexual Harassment Policy and the Standard for Responsible Use of Information Resources. Sexual harassment, as defined in the UNC Charlotte Sexual Harassment Policy, is prohibited, even when carried out through computers or other electronic communications systems, including course-based chat rooms or message boards.

Religious Accommodation:
It is the obligation of students to provide faculty with reasonable notice of the dates of religious observances on which they will be absent by submitting a Request for Religious Accommodation to their instructor prior to the census date for enrollment for a given semester. The census date for each semester (typically the tenth day of instruction) can be found in UNC Charlotte’s Academic Calendar.