COSC 311: Introduction to Data Visualization and Interpretation
Course Syllabus

Lecturer: Dr. Joseph Anderson

Office: 128 Henson Hall

Office Hours: M 10am-12pm, W 10-11am ThF 8-9am. Or by appointment.

Email: jtanderson@salisbury.edu

Lecture: TuTh 11am - 12:15pm, HS 107

Lab: F 11-11:50am, HS 143

Course Webpage: `http://faculty.salisbury.edu/~jtanderson/cosc311/fa21/index.html`

Textbook:

1. Grus, Joel. *Data Science from Scratch: First Principles with Python.* ISBN: 978-1492041139.

2. Tufte, Edward R. *The Visual Display of Quantitative Information.* Second ed. ISBN: 978-0961392147.

Prerequisites: Grade of "C" or better in: COSC 120, MATH 210, MATH 306

Course Summary: Provides a foundation in the area of data science based on data curation and statistical analysis. Learn data analysis concepts and techniques that facilitate making decisions from a rich data set. Investigate data concepts, metadata creation and interpretation, machine learning, and basics of information visualization. Learn fundamentals about data standards and methods for organizing, curating, preserving data for reuse, drawing conclusions and making decisions from data. Understand how to use data analysis tools for data manipulation, analysis and visualization. Includes discussions on diverse issues around data, including technologies, behaviors, organizations, policies and society. Four hours per week.

Course Policies

Grading: The final grade will be calculated from two midterm exams (25% total), the course final (20%), labs (25%), and projects (30%). A 100 point scale will be used on all graded work, however it is at the discretion of the lecturer to apply any curve to the grading scale (typically to the benefit of the students). Final grades are at the discretion of the lecturer. **NOTE: You must pass the final exam in order to pass the course.**

   Students have one week from the day an assignment or exam is returned in class to raise questions about its grade. After one week has passed, you may still ask for technical clarification, but a grade change will not be accommodated. This is to ensure that students take timely responsibility for their work and to be confident in the grade they have received.

Projects and Labs: Projects, Labs, and other assignments will be announced in class and posted on the course webpage. All written homework assignments are due at the start of class (or earlier if you know you will be unable to attend). Written homework may be accepted until 11:59pm on the day it is due, but at a 50% reduced score if it is turned in after class. All digital homework (programs, projects, etc.) will be due through the canvas system by midnight. All other late homework will not be accepted and will receive a score of 0.

Programming projects which are turned in but which do not compile/run will receive a grade of zero.

Each student is required to attend weekly lab sessions, which will involve completing a lab assignment to be turned in by the end of lab. Prior to attending lab, students should read the pre-lab material and complete any pre-lab written material to be turned in at the start of the lab session.

Email: Email should primarily be used to set up a one-on-one meeting with me if my office hours conflict with your schedule. I strongly encourage you to ask questions about the syllabus and assignments during class time. For more in-depth discussions (such as guidance on assignments) please plan to meet in person. This policy is not designed to limit or inhibit communication; rather it is designed to promote student independence and meaningful interaction.

Moreover, all email communication should happen over the official SU email system. I will not answer questions from external email address (anything other than @salisbury.edu) and will instead reply to your SU inbox.

You may also contact the course lecturer via Zoom, where similar policies apply.

Attendance: Class attendance is not required, however frequently missing class may impact your grade by up to 10%.

University Course-Related Policies: Salisbury University expects that all students have read and understand all of the Course-Related University Policies and Resources `https://www.salisbury.edu/administration/academic-affairs/course-related-policies-and-resources.aspx` and thereby agree to honor these standards. Important course-related policies and resources includes, but are not limited to:

- COVID related return to campus information

- Course registration add/drop/withdraw period

- Academic misconduct policy,

- University resources such as the SU Libraries, Disability Resource Center, Center for Student Achievement and University Writing Center.

The Henson School of Science considers academic misconduct as a serious offense and ALL incidences are subject to disciplinary action including, but not limited to, separation from the University.