

# Scientific Writing in Data Science I (Fall 2024, DATA 606)

### Schedule

Tuesday and Thursday 12:30PM to 2:00PM ISC 1291

#### Instructor

Dr. **Dan** Runfola danr@wm.edu ISC 1269 Office Hours: By appointment 757.221.1970

Please let me know if you have any documented disabilities that may impact your performance in this class.

Course Description: This course will teach foundational practices of scientific writing specifically tailored to the Data Science domain, with a concentrated focus on conducting a comprehensive literature review and crafting a preliminary quantitative analysis. Students will acquire the skills necessary to navigate academic databases, critically evaluate and synthesize existing research, and effectively present quantitative data. Through a combination of lectures, workshops, and peer reviews, students will learn to articulate research gaps, present data with clarity, and lay the groundwork for their future research endeavors. Topics will span from ethical considerations in citation to the utilization of statistical tools for data interpretation, culminating in the ability to formulate portions of a dissertation prospectus.

**Prerequisite(s):** Prerequisites for this course include a solid background in statistical analysis, proficiency in research methodologies, and a basic understanding of data science concepts. It is normally taken in the Fall of your second year.

Credit Hours: 3

#### Materials:

A free SciClone account is needed in order to access the William and Mary High Performance Cluster (HPC). Registration can be started at https://hpc.wm.edu/acctreq/.

You must bring a laptop to class each day unless otherwise noted.

### Grade Distribution:

Peer Review	45.0%
Midterm Report	15.0%
Final Project	40.0%

#### Letter Grade Distribution:

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>= 93.00
               Α
                     73.00 - 76.99
                                    C
                     70.00 - 72.99
                                    C-
90.00 - 92.99
              Α-
87.00 - 89.99
              B+
                     67.00 - 69.99
                                    D+
83.00 - 86.99
              В
                     63.00 - 66.99
                                    \mathbf{D}
80.00 - 82.99
              В-
                     60.00 - 62.99
                                    D-
                                    F
77.00 - 79.99
               C+
                     <=59.99
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**Attendance:** This class does not have an attendance policy. However, it will be difficult to learn enough to pass the class without regular participation, as the majority of course content relevant to tests and assignments will be covered in class.

Classroom Behavior: Please remain civil during discussions to promote the open exchange of ideas and foster a culture of open dialogue. Please bear in mind that all students are entitled to their own opinion. You are expected to listen attentively to each person speaking. Please refrain from eating during class (and, if you must, make sure it isn't loud!).

Late / Poor Performance Policy: Assignments will not be accepted late, excepting in documented circumstances (i.e., an illness with a doctor's note).

## Bi-weekly Advisor Meeting:

In addition to this course, you will work closely with your advisor to craft your dissertation prospectus. It is expected you will meet with your advisor at least once every two weeks to discuss your progress towards your prospectus, and feedback you may receive from this course.

Introduction, Literature Review and Quantitative Analysis (50%): As a part of this course, you will write and submit the introduction, literature review and quantitative analysis associated with your work. This will be worth 50% of your grade.

Feedback (50%): You will be asked to provide reviews of your peers work, and will be assessed based on the quality of these reviews. This will be worth 50% of your grade.

Important Dates: The add and drop deadline this semester is September 9th, 2024, and withdrawal deadline is October 28, 2024.

# Do not cheat!

Academic dishonesty is taken very seriously. Make sure to cite all of your work, and do not turn in work that is not yours! Cases of academic dishonesty will be evaluated and acted upon in accordance with William and Mary policies, which can be found at http://www.wm.edu/offices/deanofstudents/services/ student-

conduct
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