

# ST 841 Course Syllabus

## ST 841 – Statistical Consulting

**Section 601**

**Spring 2024**

**1 Credit Hour**

### Course Description

This course will provide a discussion-based introduction to statistical consulting geared towards students preparing for research in the PhD program. Students in this course will participate in regularly scheduled statistical consulting meetings with clients. Students will present and discuss consulting reports and consulting experiences.

### Learning Outcomes

Students will practice writing and presenting throughout the semester, gaining soft skills that aren't necessarily covered in their other courses. Students will work individually on consulting projects provided by the instructor. Students in this course will select projects from a database of projects. All feedback will be provided by the professor and peers in the class. Covered topics will include negotiating expectations with clients, technical writing and editing, data cleaning and visualization, and finding research ideas from consulting projects.

### Course Structure

Group activities, lectures, labs. Be prepared to participate in in-class activities, some requiring programming/coding.

### Course Policies

There will be no late work accepted as a general policy. In certain instances an extension may be granted if the instructor is contacted at least 24 hours prior to the assignment due date and time.

### Instructors

**Dr Dan Harris** (doharris) - *Instructor*

**Email:** [doharris@ncsu.edu](mailto:doharris@ncsu.edu)

**Phone:** 919-515-1924

**Office Location:** 5118 SAS Hall

**Office Hours:**

My office hours are offered via Zoom.

Tu 6:00-7:00pm ET

or by appointment

**Samsul Alam** (malam3) - *Teaching Assistant*

**Email:** [malam3@ncsu.edu](mailto:malam3@ncsu.edu)

**Phone:** N/A

**Office Location:** SAS Hall

**Office Hours:**

Office hours are offered via Zoom.

TBD

or by appointment

## Course Meetings

### Lecture

**Days:** M

**Time:** 6:30pm - 7:30pm

**Campus:** Main

**Location:** Zoom link provided in Moodle.

*This meeting is required.*

### Meeting Notes

Initial meeting will be Thursday, 1/11 from 6:00-7:00pm. Beginning Monday, 1/23, class will meet every Monday from 6:30-7:30pm.

## Course Materials

### Textbooks

**Becoming an Academic Writer** - Goodson, Patricia

**Edition:** 2nd

**ISBN:** 9781483376257

**Cost:** softcover: \$45 new, ebook: \$28 to rent

*This textbook is required.*

### Expenses

None.

### Materials

None.

## Requisites and Restrictions

### Prerequisites

None.

### Co-requisites

None.

### Restrictions

PhD Students in the Statistics Program

## Transportation

This course will not require students to provide their own transportation.

## Safety & Risk Assumptions

None.

## Grading

### Grade Components

Component	Weight	Details
<b>Homework</b>	<b>40%</b>	Written reflections, updates, and responses to readings will be assigned throughout the semester.
<b>Written Introduction</b>	<b>10%</b>	The draft of your written introduction you submit during Week 6.
<b>Written Methods</b>	<b>10%</b>	Revised introduction and draft methods section you submit during Week 9.
<b>Final Report</b>	<b>15%</b>	Final written report submitted during Week 15.
<b>Methods Presentation</b>	<b>10%</b>	Methods presentation given during Week 9.
<b>Final Presentation</b>	<b>15%</b>	Finals presentations given during Weeks 14 and 15.

## Letter Grades

**This Course uses Standard NCSU Letter Grading:**

97	≤	<b>A+</b>	≤	100
93	≤	<b>A</b>	<	97
90	≤	<b>A-</b>	<	93
87	≤	<b>B+</b>	<	90
83	≤	<b>B</b>	<	87
80	≤	<b>B-</b>	<	83
77	≤	<b>C+</b>	<	80
73	≤	<b>C</b>	<	77
70	≤	<b>C-</b>	<	73
67	≤	<b>D+</b>	<	70
63	≤	<b>D</b>	<	67
60	≤	<b>D-</b>	<	63
0	≤	<b>F</b>	<	60

## Requirements for Credit-Only (S/U) Grading

Performance in research, seminar and independent study types of courses (6xx and 8xx) is evaluated as either "S" (Satisfactory) or "U" (Unsatisfactory), and these grades are not used in computing the grade point average. For credit only courses (S/U) the requirements necessary to obtain the grade of "S" must be clearly outlined.

All students in this course are registered as "Credit-Only (S/U)." To receive a grade of "S," a student must earn a grade of "C" or better on the letter grade scale shown above.

### **Requirements for Auditors (AU)**

Information about and requirements for auditing a course can be found at <http://policies.ncsu.edu/regulation/reg-02-20-04>.

### **Policies on Incomplete Grades**

If an extended deadline is not authorized by the Graduate School, an unfinished incomplete grade will automatically change to an F after either (a) the end of the next regular semester in which the student is enrolled (not including summer sessions), or (b) by the end of 12 months if the student is not enrolled, whichever is shorter. Incompletes that change to F will count as an attempted course on transcripts. The burden of fulfilling an incomplete grade is the responsibility of the student. The university policy on incomplete grades is located at <http://policies.ncsu.edu/regulation/reg-02-50-03>. Additional information relative to incomplete grades for graduate students can be found in the Graduate Administrative Handbook in Section 3.17.G at <http://www.ncsu.edu/grad/handbook/index.php>

### **Late Assignments**

If you need extra time to complete an assignment, please contact the instructor as early as possible to make accommodations. Deadlines are in place to structure the course and ensure that you keep up with the material. Late work often creates more late work, so please strive to complete your work on time.

### **Attendance Policy**

For complete attendance and excused absence policies, please see <http://policies.ncsu.edu/regulation/reg-02-20-03>

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### **Absences Policy**

If possible, please email me if you know you are going to miss class. You do not need to provide detailed health information or doctors notes. If it is not possible to contact me ahead of time, please email me as soon as you are able to after class to make arrangements to catch up on the coursework.

### **Makeup Work Policy**

If you need to make up work for an excused absence, please contact the instructor as early as possible to make accommodations.

### **Additional Excuses Policy**

None.

### **Academic Integrity**

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Violations of academic integrity will be handled in accordance with the Student Discipline Procedures (NCSU REG 11.35.02) (<https://policies.ncsu.edu/regulation/reg-11-35-02/>).

Academic Integrity: Students are required to comply with university policy on academic integrity found in the Code of Student Conduct found at <http://policies.ncsu.edu/policy/pol-11-35-01>.

Academic Honesty: See <http://policies.ncsu.edu/policy/pol-11-35-01> for a detailed explanation of academic honesty.

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None.

### **Honor Pledge**

Your submission via Moodle on any assignment indicates "I have neither given nor received unauthorized aid on this test or assignment."

### **Digital Course Components**

Students may be required to disclose personally identifiable information to other students in the course, via digital tools, such as email or web-postings, where relevant to the course. Examples include online discussions of class topics, and posting of student coursework. All students are expected to respect the privacy of each other by not sharing or using such information outside the course.

**Digital Course Components:** Students are required to use Moodle and Zoom. The Zoom-based class meetings will be recorded which captures conversations in the classroom in addition to instruction. Comments made via email or web-postings will not be disseminated outside of the class. Students may be required to disclose personally identifiable information to other students in the course, via electronic tools like email or web-postings, where relevant to the course; examples include online discussions of class topics. All students are expected to respect the privacy of each other by not sharing or using such information outside the course.

### **Accommodations for Disabilities**

Reasonable accommodations will be made for students with verifiable disabilities. In order to take advantage of available accommodations, students must register with the Disability Resource Office at Holmes Hall, Suite 304, 2751 Cates Avenue, Campus Box 7509, 919-515-7653. For more information on NC State's policy on working with students with disabilities, please see the Academic Accommodations for Students with Disabilities Regulation (NCSU REG 02.20.01) (<https://policies.ncsu.edu/regulation/reg-02-20-01/>)

### **Non-Discrimination Policy**

NC State provides equal opportunity and affirmative action efforts, and prohibits all forms of unlawful discrimination, harassment, and retaliation ("Prohibited Conduct") that are based upon a person's race, color, religion, sex (including pregnancy), national origin, age (40 or older), disability, gender identity, genetic information, sexual orientation, or veteran status (individually and collectively, "Protected Status"). Additional information as to each Protected Status is included in NCSU REG 04.25.02 (Discrimination, Harassment and Retaliation Complaint Procedure). NC State's policies and regulations covering discrimination, harassment, and retaliation may be accessed at <http://policies.ncsu.edu/policy/pol-04-25-05> or <https://oied.ncsu.edu/divweb/>. Any person who feels that he or she has been the subject of prohibited discrimination, harassment, or retaliation should contact the Office for Institutional Equity and Diversity (OIED) at 919-515-3148.

## Additional NC State Rules and Regulations

Students are responsible for reviewing the NC State University Policies, Rules, and Regulations (PRRs) which pertain to their course rights and responsibilities, including those referenced both below and above in this syllabus:

Equal Opportunity and Non-Discrimination Policy Statement

<https://policies.ncsu.edu/policy/pol-04-25-05> with additional references at <https://oied.ncsu.edu/divweb/policies/>

Code of Student Conduct <https://policies.ncsu.edu/policy/pol-11-35-01>.

## Course Schedule

**NOTE:** The course schedule is subject to change.

### **Lecture Th 6:00pm - 7:00pm — Week 1 — 01/08/2024 - 01/14/2024**

Course Introduction, Ethics

### **Week 2 — 01/15/2024 - 01/21/2024**

Project Assignments

No class meeting Monday, 1/15 due to MLK, Jr. holiday.

### **Lecture M 6:30pm - 7:30pm — Week 3 — 01/22/2024 - 01/28/2024**

How to Structure a Meeting

### **Lecture M 6:30pm - 7:30pm — Week 4 — 01/29/2024 - 02/04/2024**

Exploratory Data Analysis, Data Visualization

### **Lecture M 6:30pm - 7:30pm — Week 5 — 02/05/2024 - 02/11/2024**

Communicating Statistics to Nonstatisticians

### **Lecture M 6:30pm - 7:30pm — Week 6 — 02/12/2024 - 02/18/2024**

Difficult Conversations

### **Lecture M 6:30pm - 7:30pm — Week 7 — 02/19/2024 - 02/25/2024**

Reproducible Research

### **Lecture M 6:30pm - 7:30pm — Week 8 — 02/26/2024 - 03/03/2024**

Writing Methods

**Lecture M 6:30pm - 7:30pm — Week 9 — 03/04/2024 - 03/10/2024**

Methods Presentations

**Week 10 — 03/11/2024 - 03/17/2024**

Spring Break

**Lecture M 6:30pm - 7:30pm — Week 11 — 03/18/2024 - 03/24/2024**

The p-Value

**Lecture M 6:30pm - 7:30pm — Week 12 — 03/25/2024 - 03/31/2024**

Communicating Results

**Week 13 — 04/01/2024 - 04/07/2024**

Work Week, Practice Presentations

No class meeting Monday, 4/1

**Lecture M 6:30pm - 7:30pm — Week 14 — 04/08/2024 - 04/14/2024**

Final Presentations, Day 1

**Lecture M 6:30pm - 7:30pm — Week 15 — 04/15/2024 - 04/21/2024**

Final Presentations, Day 2

Note: Final Presentation files and Final Reports will be due the last week of class.