

STAT 8010: Statistical Methods I  
Section 001, Spring 2020  
Tuesday and Thursday, 9:30am – 10:45am  
Martin Hall M-104

**Instructor:** Whitney Huang  
**Office:** O-221 Martin Hall

**Email:** [wkhuang@clemson.edu](mailto:wkhuang@clemson.edu)  
**Office Phone:** (864) 656-3070

**Office Hours:** 11:00am - 12:00pm Tues., Thurs. and by appointment

**Required Text:**

*An Introduction to Statistical Methods and Data Analysis*, 6<sup>th</sup> Edition. **Lyman Ott and Micheal T. Longnecker, Duxbury, 2010; ISBN-13: 978-1305269477**

**Course Website:** [https://whitneyhuang83.github.io/stat8010\\_2020Sp.html](https://whitneyhuang83.github.io/stat8010_2020Sp.html)

**Attendance:**

Regular attendance is expected. Students are free to leave if the instructor is more than 15 minutes late to class.

**Exam Information:**

There will be two in-class exams. The (tentative) dates for the two exams are:

- **Exam I:** Feb. 13, Thursday
- **Exam II:** Mar. 26, Thursday

The **Final Exam** will be given on Wednesday, Apr. 29, 8:00 am - 10:30 am.

**Homework:**

Homework will be assigned periodically to be graded and returned to you in a timely manner. All assignments are to be handed in by 9:30 am on the due dates. **NO LATE HOMEWORK WILL BE ACCEPTED UNDER ANY CIRCUMSTANCES.** To accommodate unusual circumstances that prevent the completion of homework, the lowest homework grade will be dropped from evaluation of the homework average.

## Evaluation:

- Grade Distribution:

Homework:	20%
Exam I	25%
Exam II	25%
Final Exam	30%

- Letter Grade:

$\geq 90.00$	A
88.00 ~ 89.99	A-
85.00 ~ 87.99	B+
80.00 ~ 84.99	B
78.00 ~ 79.99	B-
75.00 ~ 77.99	C+
70.00 ~ 74.99	C
68.00 ~ 69.99	C-
$\leq 67.99$	F

## Course Objectives:

At the end of this course, the student will be able to:

1. Summarize and interpret research data.
2. Apply statistical techniques and knowledge appropriately.
3. Select and implement several basic experimental designs.
4. Draw appropriate conclusions and inferences from data.

## Key Dates:

- **Jan. 14, Tue:** Last day to register or add a class or declare audit
- **Jan. 22, Wed:** Last day to drop a class or withdraw from the University without a W grade
- **Mar. 29, Fri:** Last day to drop a class or withdraw from the University without final grades

## Academic Integrity Statement:

“As members of the Clemson University community, we have inherited Thomas Green Clemson’s vision of this institution as a ‘high seminary of learning.’ Fundamental to this vision is a mutual commitment to truthfulness, honor, and responsibility, without which we cannot earn the trust and respect of others. Furthermore, we recognize that academic dishonesty detracts from the value of a Clemson degree. Therefore, we shall not tolerate lying, cheating, or stealing in any form. In instances where academic standards may have been compromised, Clemson University has a responsibility to respond appropriately to charges of violations of academic integrity.”

Please refer to the current Graduate School Policy Handbook for the graduate academic integrity policy.

### **Disability Access Statement:**

It is university policy to provide, on a flexible and individualized basis, reasonable accommodations to students who have disabilities. Students with disabilities requesting accommodations should make an appointment with Disability Services (656-6848), to discuss specific needs within the first month of classes. Students should present a Faculty Accommodation Letter from Student Disability Services when they meet with instructors. Accommodations are not retroactive and new Faculty Accommodation Letters must be presented each semester.

### **Title IX Statement:**

Clemson University is committed to a policy of equal opportunity for all persons and does not discriminate on the basis of race, color, religion, sex, sexual orientation, gender, pregnancy, national origin, age, disability, veteran's status, genetic information or protected activity (e.g., opposition to prohibited discrimination or participation in any complaint process, etc.) in employment, educational programs and activities, admissions and financial aid. This includes a prohibition against sexual harassment and sexual violence as mandated by Title IX of the Education Amendments of 1972. The policy is located at <http://www.clemson.edu/campus-life/campus-services/access/non-discrimination-policy.html>. Alesia Smith is Clemson University Title IX Coordinator. She is also the Executive Director of Equity Compliance, Her office is located at 223 Holtzendorff Hall, (864) 656-3181 (voice).

### **Inclement Weather:**

Any exam that was scheduled at the time of a class cancellation due to inclement weather will be given at the next class meeting unless contacted by the instructor. Any assignments due at the time of a class cancellation due to inclement weather will be due at the next class meeting unless contacted by the instructor. Any extension or postponement of assignments or exams must be granted by the instructor via email or Canvas within 24 hours of the weather related cancellation.

### **Academic Continuity Plan for this Class:**

Clemson has developed an academic continuity plan for academic operations. Should University administration officially determine that the physical classroom facility is not available, class will be conducted in a virtual (online) format. The University issues official disruption notifications through email/ www/ test notification / social media. When notified, use one of the following links to navigate for Clemson Canvas, where you will find important information about how we will conduct class:

- Primary access link: [www.clemson.edu/canvas](http://www.clemson.edu/canvas)
- Secondary access link, if needed: <https://clemson.instructure.com/>
- You can also use the Canvas Student App.

Our activities for teaching and learning will occur through our Canvas course. This includes: assignments, quizzes

### Tentative Course Schedule:

Week	Dates	Topic
1	Jan. 9	Introduction
2	Jan. 14 & Jan. 16	Data Summary and Display
3	Jan. 21 & Jan. 23	Intro to Probability & Probability Distributions I
4	Jan. 28 & Jan. 30	Probability Distributions II
5	Feb. 4 & Feb. 6	Normal Distribution & Central Limit Theorem
6	Feb. 11 & Feb. 13	Exam I
7	Feb. 18 & Feb. 20	Statistical Inference for a Single Sample
8	Feb. 25 & Feb. 27	Statistical Inference for Two Samples
9	Mar. 3 & Mar. 5	One Way ANOVA & Multiple Comparisons
10	Mar. 10 & Mar. 12	Randomized Complete Block Designs
11	Mar. 17 & Mar. 19	No Classes–Spring Break
12	Mar. 24 & Mar. 26	Exam II
13	Mar. 31 & Apr. 2	Inference on Proportions
14	Apr. 7 & Apr. 9	Contingency Table Analysis
15	Apr. 14 & Apr. 16	Correlation and Simple Linear Regression I
16	Apr. 21 & Apr. 23	Simple Linear Regression II