STA 3032 – Engineering Statistics (Summer B 2020)

<u>Class Time</u>: M,T,W,R,F | Period 3 (11:00 AM - 12:15 PM)

<u>Room</u>: Due to the COVID-19 situation, this course will be delivered online. Class Number - Section Number: 14193 - 4718

Instructor:

Jiayuan Zhou

- Office hours: TBD
- E-mail: zhou.j@ufl.edu

Teaching Assistants:

TA's	Office hours	E-mail
Karina Gelis	TBD	kgeliscadena@ufl.edu
Sourav Mukherjee	TBD	souravmukherjee@ufl.edu
Jaewoong Joo	TBD	jaewoongjoo@ufl.edu

Course Communication:

- Via e-learning. It usually takes less than 24 hours on weekdays and less than 48 hours on weekends for responses so please try to plan ahead.
- Check course website daily for up to date announcements.
- Discussion forum in e-Learning.
- Live conference hours posted and updated on course website. No hours during UF holidays.
- E-mail for questions regarding course policies. (Ensure that STA 3032 is in the subject line. Failure to do so may result in a non-response.

Attendance:

• It is not a synchronous class. While not required, it is suggested that you should not skip video lectures.

Course Website: e-Learning (Canvas)

Textbook:

Probability and Statistics for Engineers and Scientists (9e), by Walpole, Myers, Myers, and Ye

Course Description:

A survey of the basic concepts in probability and statistics with engineering applications. Topics include probability, discrete and continuous random variables, confidence interval estimation, hypothesis testing, correlation, regression, and analysis of variance regression.

Prerequisite(s): MAC 2311 – Analytic Geometry and Calculus I

Course Goals and Objectives:

1. Access, manipulate and analyse data using statistical software.

2. Produce appropriate graphs and descriptive statistics for one and two variables, for both categorical and continuous data.

3. Interpret graphs and descriptive statistics for one and two variables.

4. Know and apply the basic probability rules, the concepts of expected value and variance for discrete and continuous variables.

5. Know and apply the Central Limit Theorem, which is crucial for inference.

6. Understand confidence intervals and hypothesis tests.

7. Carry out and interpret one-sample and two-sample analyses for means and proportions.

8. Carry out and interpret statistical modeling using multiple regression and analysis of variance.

9. Know and apply basic quality control procedures.

Letter Grade Distribution:

A (4.00): 93% - 100%	A- (3.67): 90% - 92.99%	
B+ (3.33): 87% - 89.99%	B (3.00): 80% - 86.99%	B- (2.67): 77% - 79.99%
C+ (2.33): 74% - 76.99%	C (2.00): 64% - 73.99%	
D (1.00): 50% - 63.99%	E (0.00): < 50%	

Schedule & Assessment:

Assessment	Percent	Tentative
	of Total	Date(s)
Exam 1	20%	Fri, Jul 10
Exam 2 (Non-cumulative)	20%	Fri, Jul 24
Exam 3 (Non-cumulative)	20%	Fri, Aug 7
Homework	40%	Canvas

Exams:

- Exams are timed with a duration of 75 minutes (60 minutes with up to 15 minutes provided for the startup) and will be available for about 3 days. Be sure to study the material and familiarize yourself with the procedures prior to the exam as time is limited. Start the exam at least 75 minutes before the hard deadline.
- Exams are available on the class page in Canvas for which you realistically have only 1 attempt.
- It is highly encouraged to use a reliable device with a reliable internet connection. Being disconnected means that you are no being longer supervised which could potentially mean that your exam will not be graded.

Make-Ups:

• Planned make-ups need to be scheduled within <u>at least</u> one week prior to the official exam date. Each case will be reviewed individually. Valid and detailed documentation is a prerequisite for scheduling a make-up under such extenuating circumstances. Being on vacation or booking a trip prior to the completion of the semester is not a valid reason.

- In case of an unforeseen illness or emergency, the instructor must be notified by midnight on the day of the exam and must receive either a medical excuse or a valid and detailed documentation.
- The make-up exam may be in a different format, and the class curve to an official exam (if it exists) may not be given for the make-up exam.

Assignments

- There are tentatively 8 assignments.
- All deadlines are at 23:59 of the due/end date. These are hard deadlines meaning that any open or ongoing assignments will automatically be submitted at the deadline. For example you should not start an assignment at 23:58. No late assignments will be accepted under any circumstances.
- Students are expected to work independently, unless otherwise specified in writing. Offering and accepting solutions from others is an act of plagiarism, which is a serious offense and all involved parties will be penalized according to the UF Honor Code. Discussion amongst students is encouraged, but when in doubt, direct your questions to the instructor.
- Students are expected to show and explain their work.
- All electronically submitted work must be as one merged file. In Canvas, all uploaded files automatically get a grade of 0, until the teaching assistant grades them.

Dropping and Withdraw:

For late course drops and course withdrawals please visit <u>https://catalog.ufl.edu/UGRD/academic-regulations/dropping-courses-withdrawals/</u>

Incomplete:

An Incomplete grade may be assigned at the discretion of the instructor as an interim grade for a course in which the student has completed a major portion of the course with a passing grade, been unable to complete course requirements before the end of the term because of extenuating circumstances (such as an accident, or extended hospitalization), and obtained agreement from the instructor and arranged for resolution of the Incomplete grade in the next term. Instructors are not required to assign Incomplete grades and having a failing grade in the course is not a valid reason for requesting an Incomplete. For complete details please visit <u>CLAS incomplete grade policies and forms</u>.

Privacy Policies:

Student records are confidential. Only information designated "UF directory information" may be released without your written consent. UF views each student as the primary contact for all communication. If your parents contact me about your grade, attendance, or other information that is not "UF directory information", they will be directed to contact you. More information can be found <u>here</u>.

Students with Disabilities:

Students with disabilities requesting accommodations should first register with the <u>Disability Resources</u> <u>Program</u> by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

Academic Honesty:

Students are held accountable to the UF Honor Code.