

Read It : STA 3032 Fall 2020

Course Homepage

Instructor:

John Seppala, Lecturer and Actuarial Science Coordinator
Department of Statistics, University of Florida

[Accessibility score: Perfect Click to improve](#)

Instructor email:

jseppala@ufl.edu

Instructor office hours:

Monday and Wednesday 9:00 am to 10:00 am
Tuesday and Thursday 10:00 am to 11:00 am

Teaching Assistant Information:

Jaewoong Joo

jaewoongjoo@ufl.edu

Office Hours: TBA

Somnath Bhadra

somnath.bhadra@ufl.edu

Office hours: TBA

Course information:

This course is an asynchronous class, with four prerecorded video lectures per week.

Credit hours: 3. Contact hours: 3. Prerequisite: MAC 2311.

Course description:

A study of basic concepts in probability and statistics with engineering applications. Topics include descriptive statistics, probability, random variables, special discrete and continuous distributions, sampling, interval estimation, hypothesis testing, analysis of variance, and linear and multiple regression.

Course learning goals:

After successful completion of the course, students will be able to:

- - describe data sets visually and numerically
 - calculate probabilities of events
 - calculate probabilities, means, and variances for random variables
 - calculate probabilities, means, and variances for special distributions
 - make inferences using confidence intervals
 - make inferences using hypothesis tests
 - analyze data using ANOVA techniques
 - analyze data using regression techniques

Welcome message:

Students,

Hello, and welcome to Engineering Statistics! I am excited to be teaching this course, and I hope that you are excited to be taking it! The course is a comprehensive treatment of introductory concepts of probability and statistics. In order to succeed in the course, you will need to vigorously attack the material, diligently keep up with and complete all assignments, and properly apply dozens of formulas. Upon successful completion of the course, you will have mastered the concepts and calculations of probability and statistics and should be well prepared to analyze data using a wide variety of techniques.

Please **scroll through** the information below to familiarize yourself with the basic course structure in Canvas. Then **complete** the rest of Pre-Module 0 to begin the course. I hope you will find this course interesting and useful, and that your experience this semester will be challenging and rewarding!

Grace and peace,

John Seppala

Modules:

The course is organized into 9 content modules. Each content module contains the following:

- Lecture videos (multimedia audio/visual/screen; 3 to 6 videos per module)
- Lecture notes (handwritten; 2 to 6 pages per lecture video)
- Course notes (typed; 1 or 2 pages per module)
- Homework assignments (4 to 8 problems per assignment; 1 or 2 assignments per module)
- Discussion boards (optional participation; 1 per module)

List of Graded Work:

The following items are components of the overall course grade:

- Course introduction quiz (online in Canvas), due Sun Sep 6
- 40 prerecorded video lectures (viewed online in Canvas using Mediasite), due each Mon/Tue/Wed/Thu
- 11 homework assignments (submitted online in Canvas), due each Sunday
- Course project (submitted online in Canvas), due in phases Sun Oct 11 and Sun Nov 8

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This page contains information about various aspects of STA 3032.

Section 1: Basic Course Communication Information

Name and Title:	John Seppala, Lecturer and Actuarial Science Coordinator	Jaewoong Joo, TA	Somnath Bhadra, TA
Office Location:	N/A Fall 2020	N/A Fall 2020	N/A Fall 2020
Phone:	N/A Fall 2020	N/A Fall 2020	N/A Fall 2020
Email:	jseppala@ufl.edu	jaewoongjoo@ufl.edu	somnath.bhadra@ufl.edu

Preferred form of Contact:	email	email	email
Open Office Hours:	MT 10:00 am to 11:00 am WR 9:00 am to 10:00 am	TBA soon	TBA soon
Office Hours Link:	https://ufl.zoom.us/j/5032820010	https://ufl.zoom.us/j/TBA_soon	https://ufl.zoom.us/j/4819574508

Scope: Collectively, the instructor and the TAs are a resource to help students succeed in the course. The instructor is the primary point of contact for administrative matters and the secondary contact for instructional matters. The TAs are the primary points of contact for instructional matters and the secondary points of contact for administrative matters.

Communication: The instructor and the TAs will each hold open office hours through ZOOM. In addition, they may be contacted by email, Canvas messaging, or Canvas discussion boards. Return correspondence will generally be made within 2 business days Monday through Friday, 8:00 am to 5:00 pm.

Conduct: Please follow the [UF Netiquette Guide for Online Courses](#).

Section 2: Required and Recommended Materials for this Course

- Textbooks: The following textbook is only available through UF All Access and is required for the course:
 - [Probability and Statistics for Engineers and Scientists \(9e\)](#), by Walpole, Myers, Myers, and Ye
- Calculators: A graphing or scientific calculator is highly recommended for the course. Calculators can be purchased at walmart.com, target.com, bestbuy.com, officemax.com, and epsstore.ti.com.
- Homework Assignments: [Pearson My Lab and Mastering](#) is required for homework access and submission.
 - [Instructions for My Lab and Mastering Opt-In](#)
- Required Technology: Students will need to use ZOOM, Adobe Reader, My Lab and Mastering, and a reliable high speed Ethernet connection for various elements of the course.
- Course Fees: N/A

Section 3: Grading Policies and Grading Scale

- Late Videos: **NO** credit will be given for any reason for lecture videos watched after their due dates. It is highly recommended that students watch all lecture videos at least 48 hours before their due dates.
- Late Homework: Late homework is **NOT** accepted for any reason. At the end of the semester, the lowest homework score will be replaced by the second-lowest score. It is highly

recommended that students complete and submit all homework assignments at least 48 hours before their due dates.

- Projects: Late projects are **NOT** accepted for any reason. It is highly recommended that students complete and submit both phases of the project at least 48 hours before their due dates.
- Grade FAQs:
 - Do you give extra credit? No.
 - Can I redo an assignment/project for a higher grade? No.
 - Will you curve the assignments or project? No.
 - Can you give me a higher final grade than I earned? No.
- Grade Feedback: Grades will generally post to the Canvas gradebook within one week of the assignment due date for all graded work (Introductory Quiz, Video Lectures, Homework, and Course Project).
- Grade Calculation: The following assignments (worth 1000 points total) will count towards the final course grade:
 - Introductory Quiz (14 questions x 5 points each = 70 points)
 - Lecture Videos (40 videos x 10 points each = 400 points)
 - Homework (11 assignments x 30 points each = 330 points)
 - Course Project (60 points + 140 points = 200 points)
- Grading Scale: The following grading scale (in points) will be used for the course:
 - A = 900 to 1000
 - A- = 880 to 899.99
 - B+ = 860 to 879.99
 - B = 800 to 859.99
 - B- = 780 to 799.99
 - C+ = 760 to 779.99
 - C = 680 to 759.99
 - D = 600 to 679.99
 - E = 0 to 599.99
- Compliance: Grading in this class is consistent with [UF Grading Policies](#).

Section 4: UF Policies Shaping This Course

Contact Hours:

"Contact Hours" refers to the hours per week in which students are in contact with the instructor, excluding office hours or other voluntary contact. The number of contact hours in this course (3) equals the number of credits offered for the course (3).

Workload:

As a Carnegie I, research-intensive university, UF is required by federal law to assign at least two hours of work outside of class for each contact hour. Work done in these hours may include reading/viewing assigned material and doing explicitly assigned individual or group work, as well as reviewing notes from class, synthesizing information in advance of exams or papers, and other self-determined study tasks.

Accommodation for Students with Disabilities:

Students with disabilities who experience learning barriers should connect with the Disability Resource Center to [initiate the process of requesting accommodations](#). This class supports the needs of different learners. It is important for students to **SUBMIT** their accommodation letters to the instructor and **REVIEW** their access needs with the instructor at the very beginning of the semester.

Course Evaluations:

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing end-of-semester course evaluations online via GatorEvals, which provides [guidance on how to give feedback in a professional and respectful manner](#). Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via [the evaluation system](#). Summaries of course evaluation results are available to students at the [public results website](#). Students will have at least one additional opportunity to provide anonymous feedback during the semester through GatorEvals Midterm Evaluations and/or another mechanism.

Course Recording:

Class and other open/group sessions may be aurally and/or visually recorded for students in the class to refer back to and for use of enrolled students who are unable to attend live. Students who participate with their camera engaged or utilize a profile image are agreeing to have their video or image recorded. If you are unwilling to consent to have your profile or video image recorded, keep your camera off and do not use a profile image. Likewise, students who un-mute during class and participate verbally are agreeing to have their voices recorded. If you are unwilling to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live. The chat will not be recorded or shared. As in all courses, unauthorized recording and unauthorized sharing of recorded materials is prohibited.

Section 5: Additional Course Policies and Information

Honor Code

UF students are bound by The Honor Pledge which states, “We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the [Honor Code](#).” Students are required to adhere to the Honor Code in all aspects of the course. On all work submitted for credit in the course, the following pledge is either required or implied: “On my honor, I have neither given nor received unauthorized aid in doing this assignment.”

The Honor Code specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, students are obligated to report any condition that facilitates academic misconduct to appropriate personnel. Any student found in violation of the Honor

Code will receive a final course grade of "E" and may be subject to additional disciplinary action by the University. If you have any questions or concerns, please consult with the instructor or TAs in this class.

University Police

The [University Police](#) are together for a safe campus.

Phone (non-emergencies): (352) 392-1111

Phone (emergencies): 9-1-1

Email: <https://police.ufl.edu/contact/contact-upd/>

Career Connections Center

The [Career Connections Center](#) connects job seekers with employers and offers guidance to enrich your collegiate experience and prepare you for life after graduation.

Phone: (352) 392-1601

Email: UFCareerCenter@ufsa.ufl.edu

Counseling and Wellness Center

The [Counseling and Wellness Center](#) provides counseling and support as well as crisis and wellness services including a [variety of workshops](#) throughout the semester.

Phone: (352) 392-1575

Dean of Students Office

The [Dean of Students Office](#) provides a variety of services to students and families, including [Field and Fork](#) (UF's food pantry) and [New Student and Family programs](#).

Phone: (352) 392-1261

Disability Resource Center

The [Disability Resource Center](#) helps to provide an accessible learning environment for all students by providing support services and facilitating accommodations, which may vary from course to course. After registering and meeting with the DRC, students will receive a current accommodation letter that **MUST** be reviewed with the instructor in order for accommodations to be implemented in the course. Students should follow this procedure at the very beginning of the semester.

Multicultural and Diversity Affairs

[Multicultural and Diversity Affairs](#) provides a wide range of services, educational opportunities, learning, support, outreach, activities, and engagement for students.

Phone: (352) 294-7850

Office of Student Veteran Services

[The Office of Student Veteran Services](#) assists student military veterans with access to benefits.

Phone: (352) 294-2948

Email: vacounselor@ufl.edu

ONE.UF

[ONE.UF](#) is the home of all the student self-service applications, including access to:

- [Advising](#)
- [Bursar](#) (352-392-0181)
- [Financial Aid](#) (352-392-1275)
- [Registrar](#) (352-392-1374)

Official Sources of Rules and Regulations

The official sources of rules and regulations for UF students are the [Undergraduate Catalog and Graduate Catalog](#). Quick links to other information have also been provided below.

- [Student Handbook](#)
- [Student Responsibilities](#), including academic honesty and student conduct code
- [e-Learning Supported Services Policies](#) includes links to relevant policies including Acceptable Use, Privacy, and many more
- [Accessibility](#), including the Electronic Information Technology Accessibility Policy and ADA Compliance
- [Student Computing Requirements](#), including minimum and recommended technology requirements and competencies

Read It : STA 3032 Fall 2020 List of Graded Work

Course Introduction Quiz

- 14 questions x 5 points each = 70 points total
- overview of course policies from Pre-Module 0
- 30 minute time limit
- take and submit in Canvas

Lecture Videos

- 40 videos x 10 points each = 400 points total
- four videos per week throughout the semester
- approximately 30 to 60 minutes for each video
- view in Canvas using Mediasite

Homework

- 11 assignments x 30 points each = 330 points total
- one or two assignments per week throughout the semester
- approximately 4 to 8 questions for each assignment
- approximately 2 to 4 hours for each assignment
- access and submit in Pearson My Lab and Mastering within Canvas

Course Project

- data collection phase = 60 points
- data analysis phase = 140 points
- work with one other classmate as a partner
- covers content from Module D and Module E
- approximately 10 to 20 hours total
- upload and submit in Canvas

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STA 3032 Fall 2020 Tentative Course Schedule:

Week of	Lessons	Assignments
Aug 31	0 = Course Introduction	Intro Quiz due Sun Sep 6
Sep 7	A1 = Data A2 = Descriptive Statistics A3 = Basic Probability A4 = Probability Rules	HW A due Sun Sep 13
	B1 = Discrete Univariate Random Variables B2 = Discrete Bivariate Random Variables	

Sep 14	B3 = Continuous Univariate Random Variables B4 = Continuous Bivariate Random Variables	HW B&BB due Sun Sep 20
Sep 21	C1 = Bernoulli and Binomial Distributions C2 = Multinomial & Hypergeometric Distributions C3 = Geometric & Negative Binomial Distributions C4 = Poisson and Uniform Distributions	HW C due Sun Sep 27
Sep 28	C5 = Exponential and Gamma Distributions C6 = Standard Normal and Normal Distributions D1 = Sampling Distributions D2 = The Central Limit Theorem	HW CC due Sun Oct 4
Oct 5	P1 = Project Data Collection	Due Sun Oct 11
Oct 12	D3 = One Proportion Estimation D4 = One Proportion Testing D5 = Two Independent Proportions Inference E1 = T-Distribution and One Mean Estimation	HW D due Sun Oct 18
Oct 19	E2 = One Mean Testing E3 = Two Independent Means Inference F1 = Two Dependent Means Inference F2 = Two Dependent Proportions Inference	HW E due Sun Oct 25
Oct 26	F3 = χ^2 -Distribution and Goodness-of-Fit Test F4 = Homogeneity and Independence Tests G1 = Completely Randomized Design G2 = F-Distribution and ANOVA F-Test	HW F due Sun Nov 1
Nov 2	P2 = Project Data Analysis	Due Sun Nov 8
Nov 9	G3 = Multiple Comparisons of Means G4 = ANOVA Randomized Block Design G5 = ANOVA Two-Factor Design with Interaction H1 = Simple Linear Regression	HW G due Sun Nov 15
Nov 16	H2 = SLR Correlation and Determination H3 = SLR Analysis of Variance H4 = SLR Parameter and Output Inference J1 = Multiple Regression	HW H due Sun Nov 22
Nov 23	-----	Thanksgiving
Nov 30	J2 = MR Analysis of Variance J3 = MR Determination and Correlation J4 = MR Parameter and Output Inference J5 = MR Model Extensions	HW J due Sun Dec 6