

STA 3024 Introduction to Statistics 2 Fall 2018

Instructor: John Seppala

116A Griffin-Floyd Hall

jseppala@ufl.edu 352-273-2971

MTWR 12:15pm-1:15pm

The instructor is your sole point of contact for matters pertaining to course administration, course policy, course grades, and examinations. The instructor is also your secondary point of contact for assistance with course material and the use of technology.

TAs:Zeren Xing116D FLOzeren.xing@ufl.eduCheng Zeng234 FLOczeng1@ufl.edu

Erin Connors 234 FLO <u>erinconnors@ufl.edu</u>
Jeremy Sanchez 234 FLO <u>sanchezjeremy@ufl.edu</u>
Meghana Tatineni 234 FLO <u>mtatineni@ufl.edu</u>

The TAs are your primary points of contact for assistance with course material and the use of technology.

Tutoring Hours:

Period	Mon	Tue	Wed	Thu	Fri
4	Zeren	Cheng	Cheng	Cheng	Zeren
5					Jeremy
6	Meghana	Erin	Meghana	Erin	Jeremy
7	Meghana	Erin	Meghana	Erin	
8	Meghana	Erin	Meghana	Erin	
9	Meghana	Erin	Meghana	Erin	
10	Jeremy	Jeremy	Jeremy		
11	Jeremy	Jeremy	Jeremy		

Classes: Section 4432 Section 4433

0100 Williamson Hall 0200 University Auditorium MWF 8:30am-9:20am MWF 10:40am-11:30am

Period 2 Period 4

Textbook: Statistics: The Art and Science of Learning from Data (4e), by

Agresti, Franklin, and Klingenberg. The e-book is in Canvas.

Description: A continuing study of basic statistical concepts with applications.

Topics include a review of inferential statistics for one and two groups, analysis of variance, linear and multiple regression, categorical data analysis, and nonparametric statistical methods.

Credits: 3. Prerequisite: STA 2023 or the equivalent.

Homework: Twelve weekly homework assignments will be submitted in Canvas

through MyStatLab. Homework is due on Thursdays at 11:30 pm. Late homework will not receive credit. The two lowest homework scores will be dropped. Homework is assigned to help reinforce the material learned in class—and to help improve your course grade! MyStatLab has several built-in features to assist you with your homework. Use them wisely to facilitate your learning—not

just to get the right answer!

Mini-Projects: Two mini-projects will be assigned during the semester. Each

mini-project will consist of an in-depth analysis of a data set using a procedure learned in class (analysis of variance, regression, or categorical methods). Each mini-project may be done individually or with another classmate. More details about the mini-projects

will be given at a later date.

Exams: Three exams will be given during class time on the following dates:

Fri Sep 21 Fri Oct 26 Wed Dec 5

The exams will each have a 25-question multiple-choice format. A formula sheet will be given for each exam. A scientific or graphing calculator without external communication capability may be used for each exam. No other aids (physical, electronic, or otherwise) are permitted during the exam. A review session will be held during class time prior to each exam. Although many concepts learned early in the course continue to be used later in the course, the exams are not designed to be cumulative. There is not a final exam for the course. Make-up exams will not be given, except for documented cases of extreme illnesses and emergencies. Proper notification should be given to the instructor as soon as possible. Any approved make-up exams will be given during the final exam period:

Section 4432 Wed Dec 12 3:00-5:00pm Section 4433 Tue Dec 11 12:30-2:30pm **Canvas:** Students should log in to Canvas regularly to complete homework,

view and download class files, check announcements, and view and participate in discussions. Visit https://elearning.ufl.edu or

call 352-392-4357 for help with Canvas and MyStatLab.

Attendance: Attendance is not a direct component of the course grade.

However, poor attendance is a major contributor to low grades. I encourage every student to arrive to class prepared to engage in the learning process that unfolds during each day's lesson.

Grading: Numeric grading will be on a point system as follows:

Exams 3×100 = 300 pointsHomework 10×10 = 100 pointsMini-Projects 2×20 = 40 pointsTotal= 440 points

The minimum points required to earn each letter grade will be as follows:

A = 385 B = 330 C = 275 D = 220

Some grades in the high B range may be rounded to A- or B+, and some grades in the high C range may be rounded to B- or C+.

Student Honor Code:

UF students are required to adhere to both the Student Conduct Code and the Student Honor Code, https://sccr.dso.ufl.edu/students/student-conduct-code/. On all exams and mini-projects, students will write and sign the Honor Pledge: "On my honor, I have neither given nor received unauthorized aid on this [exam/project]." Students are also bound by honor to report academic misconduct to the instructor. Thank you in advance for making a personal commitment to integrity, and for helping me create and maintain an atmosphere of respect for one another that is conducive to learning, both in class and online.

Students with Disabilities:

Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor in order for the accommodations to be implemented in the course.

Faculty Course Evaluations:

Student feedback is welcomed by the instructor and beneficial to future students in the course. Students are requested to provide feedback on the quality of instruction in this course by completing a brief confidential evaluation towards the end of the semester at https://evaluations.ufl.edu. Summaries of the evaluation results can be found at https://evaluations.ufl.edu/results.

Tentative Course Schedule:

	Day	Lesson	Section(s)	Topic(s)
W	Aug 22	A1	Ch. 1-4	Descriptive Statistics
F	Aug 24	A2	8.1, 8.2	Confidence intervals for one proportion
M	Aug 27	A3	9.1, 9.2	Significance testing for one proportion
W	Aug 29	A4	10.1	Inference for two proportions
F	Aug 31	A5	8.3, 9.3	Inference for one mean
M	Sep 3		,	
W	Sep 5	A6	10.2	Inference for two means
F	Sep 7	B1	14.1a	One-way ANOVA
M	Sep 10	B2	14.1b	The F-test and the ANOVA table
W	Sep 12	В3	14.2	Comparing pairs of means
F	Sep 14	B4	14.3a	Two-way ANOVA
M	Sep 17	B5	14.3b	Interaction in two-way ANOVA
W	Sep 19		Review	
F	Sep 21		Exam #1	
M	Sep 24	C1	12.1	Simple linear regression
W	Sep 26	C2	12.2	Inference for the regression slope
F	Sep 28	C3	12.3	Correlation
M	Oct 1	C4	12.4a	ANOVA with simple linear regression
W	Oct 3	C5	12.4b	Inference for output values
F	Oct 5	C6	12.4c	Residual analysis
M	Oct 8	C7	12.5	Exponential regression
W	Oct 10	D1	13.1	Multiple regression
F	Oct 12	D2	13.2	ANOVA with multiple regression and correlation
M	Oct 15	D3	13.3a	Inference for multiple regression slopes
W	Oct 17	D4	13.3b	Inference for output values
F	Oct 19	D5	13.4	Residual analysis
M	Oct 22	D6	13.6	Logistic regression
W	Oct 24		Review	
F	Oct 26		Exam #2	
M	Oct 29	E1	11.1	Association for categorical variables
W	Oct 31	E2	11.2a	The goodness-of-fit test
F	Nov 2			
M	Nov 5	E3	11.2b	Tests for homogeneity and independence
W	Nov 7	E4	11.3	Relative risk and the odds ratio
F	Nov 9	E5	11.4	Cell partitioning and residual analysis
M	Nov 12			
W	Nov 14	E6	11.5	Exact tests for small samples
F	Nov 16	F1	15.1	The rank-sum test
M	Nov 19		FLEX	
W	Nov 21			
F	Nov 23			
M	Nov 26	F2	15.2a	The Kruskal-Wallis test
W	Nov 28	F3	15.2b	The sign test
F	Nov 30	F4	15.2c	The signed-rank test
M	Dec 3		Review	
W	Dec 5		Exam #3	
F	Dec 7			
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