STA 3024 Introduction to Statistics 2 Fall 2019

Instructor:

John Seppala
116A Griffin-Floyd Hall
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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:

Cheng Zeng
234 Griffin-Floyd Hall
czeng1@ufl.edu
MWF 9:30am-10:30am, W 4:00pm-6:00pm, R 3:00pm-6:00pm

Yanxi Liu
234 Griffin-Floyd Hall
liuyanxi@ufl.edu
MWF 12:20pm-3:00pm

Delaney Gomen
234 Griffin-Floyd Hall
gomendp@ufl.edu
T 3:00pm-5:00pm

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

Class:

MWF 10:40am-11:30am Period 4
University Auditorium 200 Section 4433

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.

Exams:

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

Fri, Sep 20 Fri, Oct 25 Wed, Dec 4

The exams will each consist of 25 multiple-choice questions. A pre-printed formula sheet and a set of statistical tables will be given. A scientific or graphing calculator without external communication capability may be used. No other aids (physical, electronic, or otherwise) are permitted. A review session will be held during the class period 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 **only** be given for **documented** cases of emergencies and **extreme** illnesses. Proper notification should be given to the instructor as soon as possible. All approved make-up exams will be given at 8:30am on Wed, Dec 11.

Homework:

Twelve weekly homework assignments will be submitted in Canvas through MyStatLab. Homework is due during the exam weeks. 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 it wisely to facilitate your learning—not just to get the right answer!

Projects:

Two projects will be assigned during the semester and submitted in Canvas. Each project will consist of an in-depth analysis of a data set using a procedure learned in class. Each project must be done with one other classmate. The projects will be due at 11:30 pm on Mon, Oct 7 and Mon, Nov 25. Late projects will not receive credit. More details about the projects will be given during the semester.

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 visit www.pearsonmylabandmastering.com for help with 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 x 200	=	600 points
Homework	10 x 20	=	200 points
Projects	2 x 50	=	100 points
Free Points	1 x 100	=	100 points
Total		=	1000 points

The grading scale will be as follows:

A = 900-1000, A− = 880-899, B+ = 860-879, B = 800-859, B− = 780-799, C+ = 760-779, C = 680-759, D = 600-679, E = 0-599.

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 projects, students will write and sign the Honor Pledge: "On my honor, I have not given, received, or witnessed unauthorized aid on this [exam/project]." Students are also bound by honor to report academic misconduct to the instructor. 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. Thank you in advance for making a personal commitment to maintaining a high standard of integrity and for helping me to promote 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. Students must also schedule exams individually through the DRC.

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.

University Services:

The University of Florida is committed to ensuring the well-being of all students by creating a culture of care on campus. Members of the community are encouraged to look out for each other and to reach out for help as needed. Please contact one of the following resources if you or another student would benefit from services.

U Matter, We Care www.umatter.ufl.edu 352-294-2273

UF Counseling and Wellness Center www.counseling.ufl.edu 352-392-1575

UF Police Department www.police.ufl.edu 352-392-1111 (or 911 for emergencies)

Tentative Course Schedule:

Day	Lesson	Lesson	Section(s)	Topic(s)
Wed	Aug 21	A1	Ch. 1-4	Descriptive statistics
Fri	Aug 23	A2	8.1, 8.2	Confidence intervals for one proportion
Mon	Aug 26	A3	9.1, 9.2	Significance tests for one proportion
Wed	Aug 28	A4	8.3, 9.3	Inference for one mean
Fri	Aug 30	A5	10.1	Inference for two proportions
Mon	Sep 2			No class – Labor Day
Wed	Sep 4	A6	10.2	Inference for two means
Fri	Sep 6	B1	14.1a	ANOVA completely randomized design
Mon	Sep 9	B2	14.1b	The F-test and the ANOVA table
Wed	Sep 11	B3	14.2	Multiple comparisons of means
Fri	Sep 13	B4	14.3a	ANOVA randomized block design
Mon	Sep 16	B5	14.3b	Two-way ANOVA with interaction
Wed	Sep 18		Review	
Fri	Sep 20		Exam #1	
Mon	Sep 23	C1	12.1	Simple linear regression
Wed	Sep 25	C2	12.3	Correlation
Fri	Sep 27	C3	12.4a	ANOVA F-test with simple linear regression
Mon	Sep 30	C4	12.2	Inference for the regression line slope
Wed	Oct 2	C5	12.4b	Inference for regression output values
Fri	Oct 4			No class – UF Homecoming
Mon	Oct 7			No class – Project #1 due
Wed	Oct 9	D1	13.1	Multiple regression
Fri	Oct 11	D2	13.2	Correlation with multiple regression
Mon	Oct 14	D3	13.3	Inference with multiple regression
Wed	Oct 16	D4	13.4	Residual analysis with multiple regression
Fri	Oct 18	D5	13.5	Other models with multiple regression
Mon	Oct 21	D6	13.6	Logistic regression
Wed	Oct 23		Review	
Fri	Oct 25		Exam #2	
Mon	Oct 28	E1	11.1	Association for categorical variables
Wed	Oct 30	E2	11.3	Relative risk and the odds ratio
Fri	Nov 1	E3	11.2a	Goodness-of-fit test
Mon	Nov 4	E4	11.2b	Homogeneity and independence tests
Wed	Nov 6	E5	11.4	Cell partitioning and residual analysis
Fri	Nov 8	F1	15.1	The rank-sum test
Mon	Nov 11			No class – Veterans Day
Wed	Nov 13	F2	15.2a	The Kruskal-Wallis test
Fri	Nov 15	F3	15.2b	The sign test
Mon	Nov 18	F4	15.2c	The signed-rank test
Wed	Nov 20	F5	15.2d	Rank correlation
Fri	Nov 22	F6	15.2e	Median regression line
Mon	Nov 25			No class – Project #2 due
Wed	Nov 27			No class – Thanksgiving
Fri	Nov 29			No class – Thanksgiving
Mon	Dec 2		Review	
Wed	Dec 4		Exam #3	