UNIVERSITY OF RHODE ISLAND

STA 220

Statistics in Modern Society

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Office Hours:

Class Times:

Recitations:

TA:

TA Email:

Credits:

TA Office Hours:

COURSE DESCRIPTION:

This is an introductory statistics class that begins with exploring and understanding data including how to summarize data with graphs, statistics, and verbal descriptions. The class then progresses to exploring relationships between different variables, as well as learning about randomness and probability.

COURSE GOALS:

STA 220 asks students to:

- 1. Overview of basic statistical concepts and terminology including the collection, analysis, interpretation, and presentation of numeric data.
- 2. Gain an appreciation for quantitative analytical skills.
- 3. Recognize the common usage and limitations of basic descriptive statistics.
- 4. Develop statistical thinking and improve statistical literacy.

PROGRAM OUTCOMES AND COURSE OBJECTIVES:

As part of the University of Rhode Island General Education Program, this course will fulfill B3 --- Mathematical, Statistical, and Computational Strategies.

Upon successful completion of this course, students will be able to:

- 1. Describe data in context Who, What, When, Where, Why and How of a data set, or recognize when some of this information has not been provided.
- 2. Identify, describe, summarize, and display distributions of categorical and quantitative data and associated descriptive statistics including measures of center and measures of variability.
- 3. Compare observations and/or distributions of different groups of data and interpret trends/patterns, differences, and relationships, being able to quantify this with appropriate statistical measures and methods.
- 4. Manipulate, determine and interpret probabilities of specific events based on basic probability concepts and use of contingency tables and Venn Diagrams, as well as the Law of Large Numbers.
- 5. Demonstrate mastery of statistical procedures including collection and analysis of data, interpretation of statistical results, and drawing appropriate conclusions through completion of class project.

<u>TEXTBOOK Information: Not Required slides available on Brightspace</u> (Pearson Code is <u>NOT</u> needed, all work is done on brightspace)

E-book: Intro Stats, 5th Ed DeVeaux, Velleman and Bock, Pearson, 2018 (Older editions are also acceptable to use) Need credit card to purchase through www.pearsonmylabandmastering.com

-OR-

Intro Stats + MyStatLab, 5th Ed, (Looseleaf Version Bundle) De Veaux, Velleman and Bock Pearson, 2018 (Older editions are also acceptable to use) ISBN 9780134210223

EXAM Information:

Both **exams are taken in Brightspace**, the midterm and final exam. Each exam will have a specific time limit with ONLY 1 attempt. It is your responsibility to check your computer prior to the final exam to ensure that your computer system and Internet are working properly.

Technology Requirements:

Computer access to the Internet is required in order to successfully navigate this course. Firefox is the recommended browser for Brightspace compatibility and can be downloaded free from www.mozilla.com/firefox. You will require additional plug-ins (Adobe Reader, Adobe Flash, Real Player, Quicktime). These are all free downloads. Internet Explorer for Windows, version 6 or higher is also an option. Be sure to turn off pop-up blocker.

It is recommended that you have a <u>calculator</u> to use for the online homework assignments in Brightspace and during exams. In terms of the class project, you will be required to perform some statistical analysis using any statistical software package of your choice- for example Excel, StatCrunch, Google Sheets or something else.

The use of cell phones, iPads, iPods, MP3 players, etc., **WILL NOT** be permitted during on-line exams.

Brightspace Help

The ITS Service Desk, located in the URI Library, is prepared to help students should they encounter problems with Brightspace. Please read through the following information:

- 1. For login problems, call the Service Desk at 874-4357.
- 2. The Service Desk Website, https://web.uri.edu/itservicedesk/ opens in new window opens in new window, posts the semester operating schedule as well as a link on the right index to the self- help technical wiki. That site contains Brightspace help and instructions for both students and faculty.
- 3. Recommended browsers (those with the most QA testing effort against them) are Google Chrome, Safari, and Mozilla Firefox. The mobile versions of these browsers also work well with the majority of operations in Brightspace. Internet Explorer is not recommended.

4. Brightspace offers 24/7 support via live chat. Look for the chat icon on the homepage when you first login.

Classroom Etiquette:

Please be respectful in all discussions posts.

ASSIGNMENTS AND GRADING POLICY

EVALUATION METHODS:

Participation in discussions	15%
HW and Quizzes	25%
Project	10%
Exam 1	20%
Exam 2	30%

DESCRIPTION OF ASSIGNMENTS:

A. Participation in discussions 15%

Student participation in the discussions is an important part of this course. Sharing questions and ideas pertaining to the course project is important way to evaluate your level of understanding of the subject and your ability and confidence to successfully complete the course project using the appropriate statistical methods. The discussions are your means of communication and participation with the other students. You will have access to the discussions via the menu on the top of the Brightspace class site. Once every other week a topic for discussion will be posted and you will be asked to reply to "my prompt". Your role in the FORUM will be to enter into a discussion ONLINE regarding your project topic and specific biweekly task completed by the assigned due date.

All discussions are done in groups, ALL group members must reply to the group post to receive credit for that discussion.

B. On-line Assignments HW and Quizzes 25%

All assignments will be completed on Brightspace. There are 8 homework assignments and 8 Quizzes in total corresponding to the chapters and course material covered weekly.

All homework assignments and Quizzes must be submitted by 11:59 PM on the day they are due for credit toward your class grade (Usually on Monday).

You will be allowed *multiple* attempts on some cases. Be careful when submitting answers as the number of decimal places required and correct rounding are necessary when inputting the values. Incorrect rounding will result an incorrect answer on homework assignments. You must be specific and attentive to format required of a particular problem answer.

C. Project 10%

Using the statistical concepts presented in the course, a class project will be completed over the course of the semester. A topic of interest will first be identified and then data identified or collected to be analyzed. Each week, progress will be made regarding the class project and posted in the discussions where you will interact with other students in the class. This will allow you ample time to complete the project. Guidelines for the class project can be found on the STA 220 brightspace site in the Resources tab in the "Project" folder. You will need Excel, Google Sheets, StatCrunch or some other software that allows you to produce statistical results to run the analyses of your class project. A copy of your data set and survey (as applicable) are required at time of final project submission. The Projects will be done in groups of three, unless stated otherwise.

D. Exam #1 20%

This exam will consist of material from Chapters 1, 2, 3 & 4 of the class textbook/power point slides. The format will be multiple choice, short answer/open response, and fill in the-blank. See Course Timetable for dates. You will be allowed 2 hours to complete this exam in Brightspace and will need a calculator. It is suggested that you attempt all of the HW and Quizzes with your calculator in preparation for the exam.

E. Exam #2 30%

This exam will consist of material from Chapters 5, 6, 7, 8 & 12 of the class textbook. The format will be multiple choice, short answer, and fill-in-the-blank. See Course Timetable for dates. You will be allowed 3 hours to complete this exam in Brightspace

and will need a calculator. It is suggested that you attempt all of the HW and Quizzes with your calculator in preparation for the exam.

Missed exams may be made up at the discretion of the instructor and will be allowed only under <u>exceptional</u> circumstances.

FORUM ASSIGNMENTS / CLASS ASSIGNMENTS and EXAMS NOT SUBMITTED BY THE DEADLINE WILL RECEIVE A GRADE OF ZERO. Please back up your work on a flash drive, email to yourself, and/or store in a cloud. It is a good idea to have a back-up plan in case of computer problems, e.g., a friend's computer, a work computer, a library computer, etc.

GRADING SCALE:

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Final	(ir	ade	Sca	le.

A	94-100
A-	90-93.99
B+	87-89.99
В	83-86.99
В-	80-82.99
C+	77-79.99
C	73-76.99
C-	70-72.99
D+	65-69.99
D	60-64.99
F	Below 60

ACADEMIC SUPPORT SERIVCES

Office of Disability Services

- 1. Any student with a documented disability is welcome to contact me early in the semester so that we may work out reasonable accommodations to support your success in this course. Students should also contact Disability Services for Students, Office of Student Life, 330 Memorial Union, 401-874-2098.
- 2. From the University Manual: **6.40.10 and 6.40.11 Accommodations for Qualified Students With Disabilities.**

Students are expected to notify faculty at the onset of the semester if any special considerations are required in the classroom. If any special considerations are required for examinations, it is expected the student will notify the faculty a week before the examination with the appropriate paperwork.

PROFESSIONAL CONDUCT

Cheating and plagiarism are serious academic offenses, which are dealt with firmly by the College and University. Scholastic integrity presumes that students are honest in all academic work. **Cheating** is the failure to give credit for work not done independently (i.e., submitting a paper written by someone other than yourself), unauthorized communication during an examination, or the claiming of credit for work not done (i.e., falsifying information).

<u>Plagiarism</u> is the failure to give credit for another person's written or oral statement, thereby falsely presuming that such work is originally and solely your own.

If you have any doubt about what constitutes plagiarism, visit the following website: http://gervaseprograms.georgetown.edu/hc/plagiarism.html, the URI Student Handbook, and University Manual sections on plagiarism and cheating at http://www.uri.edu/facsen/8.208.27.html-cheating.

Students are expected to be honest in all academic work. A student's name on any written work, quiz or exam shall be regarded as assurance that the work is the result of the student's own independent thought and study. Work should be stated in the student's own words, properly attributed to its source. Students have an obligation to know how to quote, paraphrase, summarize, cite and reference the work of others with integrity. The following are examples of academic dishonesty.

- Using material, directly or paraphrasing, from published sources (print or electronic) without appropriate citation;
- Claiming disproportionate credit for work not done independently;
- Unauthorized possession or access to exams;
- Unauthorized communication during exams;
- Unauthorized use of another's work or preparing work for another student;
- Taking an exam for another student;

- Altering or attempting to alter grades;
- The use of notes or electronic devices to gain an unauthorized advantage during exams;
- Fabricating or falsifying facts, data or references;
- Facilitating or aiding another's academic dishonesty;
- Submitting the same paper for more than one course without prior approval from the Instructor.

Please note the following section from the University Manual:

8.27.17. Instructors shall have the explicit duty to take action in known cases of cheating or plagiarism. The instructor shall have the right to fail a student on the assignment on which the instructor has determined that a student has cheated or plagiarized. The circumstances of this failure shall be reported to the student's academic dean, the instructor's dean, and the Office of Student Life. The student may appeal the matter to the instructor's dean, and the decision by the dean shall be expeditious and final. Such action will be initiated by the instructor if it is determined that any written assignment is copied or falsified or inappropriately referenced.

Any good writer's handbook as well as reputable online resources will offer help on matters of plagiarism and instruct you on how to acknowledge source material. If you need more help understanding when to cite something or how to indicate your references, PLEASE ASK.

<u>Please note:</u> Students are responsible for being familiar with and adhering to the published "Community Standards of Behavior: University Policies and Regulations" which can be accessed in the University Student Handbook.