

UNIVERSITY OF RHODE ISLAND
STA 220 – Statistics in Modern Society
Winter J Term 2019

COURSE SYLLABUS

Instructor:	Prince Allotey
Instructor's Office:	128 Tyler Hall
Office Hours:	MoTuTh 1:30 – 3:30 pm & by appointment
Telephone Office:	874 - 2701
Email:	prince_allotey@uri.edu
Classroom:	Tyler Hall Room 106
Meeting Time:	MoTuWeTh 9:00am - 1:00pm

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.

REQUIRED TEXTBOOK:

Intro Stats 3 hole punch with MyStats lab: ISBN 9780134210247

-OR-

MyStatsLab Only with eText: ISBN 9780134768366

-OR-

Purchase My StatLab access code only through publisher
 (Will provide online access to the E-book)
 Need credit card to purchase through
www.pearsonmylabandmastering.com

ASSIGNMENTS AND GRADING POLICY
EVALUATION METHODS:

Participation	5%
Online Assignments	15%
Project	20%
Exam 1	30%
Exam 2	30%

DESCRIPTION OF ASSIGNMENTS:

A. Participation 5%

Student participation in the class is an important part of this course. Sharing questions and ideas pertaining to the course & the course project is important way to evaluate your level of understanding of the subject and your ability and confidence to

successfully complete the exams and course project using the appropriate statistical methods.

B. Online Assignments in MyStatLab 15%

All assignments will be completed in MyStatLab online and will have a strict deadline. **You will NEED your own access code to complete and submit the homework assignments.** There are 6-7 homework assignments in total corresponding to the chapters and course material covered over the semester. A link to MyStatLab will be provided in Sakai under the Resources tab in the folder “Homework Assignments”. You will need to register at <http://www.pearsonmylabandmastering.com> with **Course ID allotey99784** for this class. Please refer to the Student Registration Handout located in Sakai under the Resources tab in the folder “Syllabus & Additional Course Info” regarding how to register.

You will need a valid e-mail address. This is how I will be in contact with you throughout the semester. Be sure to correctly enter your e-mail address the first time. Any MyStatLab homework assignment completed after the due date **for any reason will incur a 50% penalty.** All homework assignments must be submitted by the last day of class at 11:59 pm for credit toward your class grade. Make sure you take advantage of the ample time to do assignments and submit them before the deadline!

You will be allowed multiple attempts on some problems in MyStatLab. Please be careful when submitting answers in MyStatLab 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.

C. Project 20%

Using the statistical concepts presented in the course, a class group 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. Guidelines for the class project can be found on the STA 220 Sakai site in the Resources tab in the “Project” folder. StatCrunch is free statistical software you will have access to through MyStatLab and can be used for the class project allowing you to create graphs and compute statistics for your data set of interest. However, you may choose to use Excel or some other software that allows you to produce statistical results.

D. Exam #1 30%

This exam will consist of material from Chapters 1, 2, 3 & 4 of the class textbook. See Course Timetable for dates. You will need a calculator.

E. Exam #2 30%

This exam will consist of material from Chapters 5, 6, 7, 8 & 12 of the class textbook. See Course Timetable for dates. You will need a calculator.

GRADING SCALE:

Final Grade Scale (rounded to the nearest integer)

A	94-100
A-	90-93
B+	87-89
B	83-86
B-	80-82
C+	77-79
C	73-76
C-	70-72
D+	65-69
D	60-64
F	Below 60

CLASS NOTES:

Power point handouts of the notes will be provided **ONLY for the first three Chapters**.
Class notes will be posted on SAKAI under **Resources/Lecture Notes**.

SAKAI:

Student's class notes, handouts, practice exams and answer keys to practice exams will be posted on SAKAI. A link to MyStatLab will be provided under the heading **Resources/Homework Assignments**.

CALCULATOR:

It is recommended that you have a calculator to use for the class and during exams.

The use of cell phones, iPads, iPods, MP3 players, etc., **WILL NOT** be permitted during class and exams.

ACADEMIC SUPPORT SERVICES: 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.

CLASSROOM ETIQUETTE:

Cell Phones

There will be NO cell phone use during class. If I see or hear your cell phone, I will ask you to leave the classroom and mark you absent for the day. If I see a cell phone during an exam, a failing grade will be assigned for that exam.

Talking

There will be NO talking during lecture class. If you are disrupting the class, I will ask you to leave and you will be marked absent for the day. However, your questions and input are encouraged.

GRADING POLICY:

Late assignments

Any assignment completed after the deadline ***for any reason will incur a 50% penalty.***

Exams

If a student knows beforehand that she/he will not be able to take an exam the day it is officially scheduled for, it is the responsibility of the student to make arrangements to take the exam **prior** to the day the exam is given to the class. In case of having to miss an exam because of circumstances beyond your control, make sure you contact the class professor to discuss alternatives.

Incomplete Grades

The University Policy regarding incomplete grades follows:

“A student shall receive a report of **Incomplete** in any course in which the course work has been passing up until the time of a documented precipitating incident or condition, but has not been completed because of illness or another reason which in the opinion of the instructor justifies the report. (Section 8.53.20 University Manual).”

I would not consider granting an Incomplete grade unless the University policy is fulfilled.

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).

Plagiarism 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/8.20-8.27.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.

Please note: 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**.

COURSE OUTLINE AND READING ASSIGNMENTS

	TOPIC	READING
1.	What is Statistics, Data, Variables and Models	Chapter 1
2.	Displaying and Describing Data	Chapter 2
3.	Relationships between Categorical Variables	Chapter 3
4.	Understanding and Comparing Distributions	Chapter 4
5.	The Standard Deviation as a Ruler and the Normal Model	Chapter 5
6.	Scatterplots, Association, and Correlation	Chapter 6
7.	Linear Regression	Chapter 7
8.	Regression Wisdom	Chapter 8
9.	From Randomness to Probability	Chapter 12