Syllabus - Statistics

Pierce College   **Math 227, Spring 2021**   **Section 19910**

Goals:
- To learn the key concepts, techniques, formulas, and tools of Descriptive Statistics, Probability, and Inferential Statistics.
- To prepare for success in future studies that might involve Statistics (areas such as Business, Finance, Political Science, Psychology, and Sociology).
- To reach our potential by emphasizing qualities such as curiosity, persistency, and grit.

Expectations:
- I aim to provide you with a positive and informative course that covers the appropriate topics and that helps you learn the material.
- I expect you to attend all class meetings (on Zoom) and to review and practice the subject outside of class so that you can successfully complete the course.

Class Information:
Textbook: *Statistics, Unlocking the Power of Data, Second Edition,* by The Lock Family
Website1:   Canvas on mycollege.laccd.edu/
Website2:   wileyplus.com/go/login   (Our class Code is A33497.)
Website3:   StatKey on www.lock5stat.com/StatKey/
Website4:   www.learner.org/series/against-all-odds-inside-statistics/
Website5:   www.mathempowers.wix.com/info (for back-up in case Canvas is down)
Instructor: Chris Paulus
Location: "Fully Synchronous" Online, Zoom Calls and Canvas. Details below.
Class Time: 6:45 – 7:50 a.m. MTWTh
Office Hours: 7:50 – 8:05 a.m. MTWTh
Contact Info: paulusca@piercecollege.edu or paulusca@laccd.edu
Key Supplies: The websites above and textbook, StatKey, a basic calculator

The Structure:
As you know, due to current conditions, we will not be meeting in person but rather will have a "fully synchronous" class. This means we will be using Zoom for our daily class meetings starting at 6:45 a.m., and we will use Canvas as our course management system to support our online learning adventure. Unless something happens that requires us to update our Zoom meeting information, we plan to use this link, meeting ID, and passcode for all of our Zoom meetings this semester:

Join Zoom Meeting
https://laccd.zoom.us/j/92879830779?pwd=WThKeEtGenBON015SjF3cXFaK2JkQT09
Meeting ID: 928 7983 0779
Passcode: 134656

The Plan:
We will be using Wileyplus, our textbook, StatKey, and also some of the "Against All Odds" videos, along with a little bit of R to conquer the material.
Please sign up on Wileyplus and obtain the textbook (electronic is fine). You can test it out with a 14 day free trial. Visit **www.wileyplus.com/go/login** and enter our class code A33497.

Homework – Wileyplus
Feel free to work on your own or with others on all homework. The goal is to learn and understand the material as best we can. We will have about 20 exercise sets that you submit on wileyplus.com. *No late homework is accepted, but the lowest score will be dropped.*

Group and Individual Quizzes:
We will have about 10 or so quizzes on Canvas. Individual quizzes will for you to work on by yourself, but for group quizzes you can work with others. *We will not have any make-ups on quizzes, but your lowest score will be dropped.*

Exams (Chapter Tests and the Final):
We plan to have a total of about 5 exams (4 during the semester over the chapters we cover from the book and then our final exam.) The live, online final exam is scheduled for Thursday, June 3rd from 6:30 to 8:30 a.m. *We will not have any make-ups on tests, but the lowest test score (excluding the final exam) will be dropped.*

Warm-Ups and In-Class Exercises and Extra Credit:
Some days will begin with a warm-up question, and we also have in-class exercises. You can get extra credit when you help with these puzzles. You receive one point per solution with a maximum of twenty total extra credit points for the class. (We will also have a set of exercises near the end of the course than you can do for extra credit to help you prepare for the final and as another chance to obtain the maximum of twenty extra credit points.)

StatKey, R, and Calculators
We will be using StatKey as our primary statistical software for this course. We will also get some exposure to R (a widely used statistical environment). It will also be useful to have a basic calculator for some of the calculations during the semester.

Tutoring:
You might experience difficulty with general issues such as note-taking strategies, study skills, memorization techniques, and basic math skills. If you would like help with any of these issues, I encourage you to contact the Center for Academic Success to meet with a tutor who can help clarify these concepts and/or skills. Please call (818) 719-6414 for more information or to schedule an appointment.   I have called this number and not gotten a response. If you have the same problem, stay tuned and we will have more information on tutoring.

Special Services:
If you think you might have a disability, I encourage you to contact Special Services at (818) 719-6430. Their office is in the new Student Services building. They will help you determine what assistance is available for you.

Dropping and Exclusion:
If you decide not to take this course, it is best if you drop it officially, since I might not do it for you. The last day you can drop a class (on-line) is Sunday, May 9th. The last day to drop a class without a grade of "W" is Sunday, February 21st.

Instructors are required to exclude students who do not attend the first day of class. However, due to current conditions, we will probably not follow this as strictly this semester.

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Class Room Rules and Guidelines:

- Do your own work on tests and individual quizzes.

Zero Tolerance Cheating Policy – Mathematics Department
The Math department has adopted a zero tolerance cheating policy. In this class, cheating is defined as knowingly or unknowingly participating in the submission of unoriginal work on individual quizzes or tests. If it is determined that a student has cheated, the instructor is required to fill out an Academic Dishonesty Report Form and submit it to the Mathematics chair who will forward it to the VP of Student Services for disciplinary action. This may result in suspension or expulsion.

- Make our experience in class productive and positive for yourself and others.

Attend classes. Ask questions, when something isn't clear. Listen and take notes. Do warm-up and in-class exercises. Avoid verbal and non-verbal disruptions and private conversations. Disruptive behavior may result in suspension and notification of the Mathematics chair and the Dean of Student Services. This is a little different in the online format of this course, but I am mentioning it anyway. The main idea is to be respectful of yourself and others.

Student Learning Outcomes (SLO):

We will cover selected topics from chapters 1 through 10 in our text, as well as Chapter P on Probability. The official math department learning objectives are listed below.

Upon successful completion of the course the student will be able to perform a real-world task requiring Statistics that demonstrates meaningful application of essential knowledge and skills.

Examples of essential knowledge and skills at the Statistics level may include but are not limited to:

a) Interpreting graphical displays and numerical summaries of data,

b) Identifying common sources of (statistical) bias in surveys and experiments,

c) Distinguishing among measures of central tendency (mean, median, mode) as well as their appropriate applications - in particular, how they can be misused,

d) Constructing a correct inference via a confidence interval or a hypothesis test and interpreting the results as well as the interconnection between the two inferences,

e) Using a graphing calculator or statistical software for calculations needed for statistical analysis.

Statistics, Math 227, Course Calendar & Grading Topics
Pierce College, Spring 2021
Math 227, Section 19910

Course Calendar

Week Number	Week Starting	Monday	Tuesday	Wednesday	Thursday
1	February 8				
2	February 15	*Holiday*			
3	February 22				
4	March 1				
5	March 8				
6	March 15				
7	March 22				
8	March 29			*Holiday*	
9	April 5	*Holiday*	*Holiday*	*Holiday*	*Holiday*
10	April 12				
11	April 19				
12	April 26				
13	May 3				
14	May 10				
15	May 17				
16	May 24				
17	May 31	*Holiday*			**Final Exam**

Final Exam

June 3rd, Thursday, 6:30-8:30 a.m.

Holidays (No class)

Presidents Day	February 15
Caesar Chavez Day	March 31
Spring Break	April 3 – 9
Memorial Day	May 31

Grading Topics:

		Points
Tests:	About 4 tests, 100 points each (drop lowest score)	400
Homework (WileyPlus):	About 20 sets, 5 points each (drop lowest score)	100
Group/Individual Quizzes:	About 10 quizzes, 5 points each (drop lowest score)	50
Final Exam:	*Cumulative Final in two parts*	*100*
Total:		650

Percentage	Grade
90-100%	A
80-89%	B
70-79%	C
60-69%	D
0-59%	F