Winter Term 2017 Syllabus-Introduction to Probability and Statistics II Rachel Webb, Stat 244 001 - CRN 43688, T & R 12:00-13:50, Room NH 96

Instructor	Rachel Webb
Office Hour	Tuesday & Thursday 2:15-3:15 or by appointment
Office Location	Neuberger Hall, Room M416
email	webbr@pdx.edu or use the D2L email under People-Classlist-Faculty

Teaching Assistant	Jess Millar					
Office Hour	Tuesday 10:45-11:45					
Office Location	Neuberger Hall, Room 354B					
email	jmillar@pdx.edu					
Open Tutorial	Monday 16:00-18:00 NH 96					

Course Description

Statistics 244 is the second of a two quarter sequence in probability and statistics designed primarily for nonmath students. This course serves as an introduction to inferential statistics. Included in this will be techniques to make inferences from samples to populations. We will be looking at hypothesis testing, confidence intervals, correlation, regression, analysis of variance, non-parametric statistics and the use of statistical computer packages. Most majors require that this course be taken for a letter grade and not a P/NP.

The prerequisite for this course is a C- or above grade in Stat243. Students can register for this course when they are concurrently enrolled in Stat243, however you will be dropped from the course the second week of classes if you do not meet this prerequisite and may still have to pay partial tuition.

Required Textbook

<u>Elementary Statistics, A Step by Step Approach</u>, **Custom PSU 9th edition**, Bluman, McGraw Hill, 2013; This is a loose-leaf textbook that comes with the Connect code. can be purchased

at <u>http://shop.mheducation.com/mhshop/productDetails?isbn=1260145867</u> for \$75.00.

The Connect code gives you access to the homework, quizzes and interactive <u>Smartbook</u>. Note that if you purchase the Connect code separately without the textbook bundle it will cost you \$104 for just the code.

Required Hardware/Software

- Access to the internet to use Desire2Learn. Login at <u>http://my.pdx.edu</u> and go to the Courses tab and select the current term, then click on the title of the course, or go directly to <u>http://d2l.pdx.edu</u>.
- MyOpenMath account. This is a free online system that we will use for the quizzes. You must have your account created prior to the first quiz. Instructions and course code will be in D2L.
- Optional: Connect online practice homework quizzes and videos. Directions and course code will be available in D2L in the introduction module. System is free for two weeks from the first day of class, code comes with purchased bundle with textbook listed above.
- Excel and SPSS, available in all PSU campus computer labs. Directions and due dates for the Computer labs will be posted in D2L. No prior experience required, we will be going through each lab in class.
- A TI-84, 83 or 89 graphing calculator with advanced statistical program is **required**. The graphing calculator will be used **HEAVILY** throughout this course. Other brands will work, just make sure your calculator has a statistics menu that will find probability distributions and confidence intervals.

Learning Objectives

After successfully completing this course, students should be able to:

- Utilize sound methods to draw trustworthy conclusions based on data.
- Have sufficient command of the concepts and terminology of statistics to engage in work and applications.
- Calculate and interpret interval estimates for means, proportions, standard deviations and variances.

- Perform hypothesis tests for means, proportions, standard deviations and variances.
- Perform an analysis of variance for comparison of 3 or more means.
- Perform a simple linear regression analysis.
- Utilize statistical software to create statistical graphics and insert them into documents.

Assignments and Grading

Your final grade in this course will be determined by your performance on the following activities:

- **Computer Lab Assignments (15%)** Your computer lab grade is based on 4 assignments worth 25 points each. These labs are done using the software Excel and SPSS, instructions are posted in Desire2Learn. Hard copy is due within the first 15 minutes of lecture on the due date posted in the Desire2Learn Calendar. No late work is accepted, if you know you will miss class, hand the lab in prior to the due date.
- Attendance and Weekly Worksheets (5%) Worksheets are handed out during class not online.
- Quizzes (20%) The best 5 out of 6 quiz scores, quizzes will be short answer showing your work for partial credit if incorrect, given during class time on MyOpenMath. Dates will be posted in the D2L calendar.
- Midterm Exam (30%) The midterm is during the regular class time on <u>Thursday</u>, February 14th. The midterm covers concepts in the homework, lecture, D2L videos, worksheets and the text.
- Final Exam (30%) The final exam is cumulative but concentrates on the last half of the course. The final is scheduled for <u>Thursday</u>, <u>March 23rd from 10:15-12:05</u>. Students that fail the final will not receive a passing grade in the course even if their overall grade is above the 70%.
- What materials do you bring to the quizzes and exams?
 - Valid PSU photo ID. This includes the PSU one card or the regular white ID card.
 - A graphing calculator with an advanced stat program. All other electronic devices, including computers and cell phones, are not to be in use during the exam.
 - One 8.5" x 11" page of notes filled out on both sides. This can be typed or handwritten. This page may need to be turned in with your test.
 - Formula Sheets called Hypothesis Testing Guide and Formula Flow Chart (found on D2L).

Grade Scale	A	A-	B +	В	В-	C+	С	C-	D+	D	D-	F
%	93- 100	90- 92	87- 89	83- 86	80- 82	77- 79	73- 76	70- 72	67- 69	63- 66	60- 62	< 60

Desire2Learn and Technology Assistance

If you cannot access your course through the courses tab at my.pdx.edu you can contact the **PSU Help Desk** either by email (help@pdx.edu) or by phone (503-725-HELP). If you are local you can visit the PSU Help Desk in Room 18 of SMSU.

Communication

Desire2Learn has an internal email system that will also be used in this course for correspondence involving more personal matters that should not go into the discussion forums. You can set your D2L e-mail to forward to your regular e-mail account so that you do not miss the reply messages. You cannot reply to forwarded e-mail though. To reply you have to be in the Desire2Learn email tool. If you use the pdx email, state which course and section number that you are in and sign with your name.

General Course Policies

• **Grades**-Official grades for the course will be posted to student records at the end of the term using the Portland State University <u>Grading System</u>. See further details regarding incomplete grades below.

- **Refunds**-Portland State University's standard policies for registration, withdrawals, and <u>tuition refunds</u> apply to this course during the academic quarter. Refund and withdrawal options are based on the university's <u>Academic Calendar</u> and the deadlines provided apply to all courses. Consult with the instructor if you have any questions regarding withdrawing from the course.
- Late Paper/Assignment Policy-Unless otherwise stated, the following policy applies to all late assignments and exams: You will be given a 0 if you miss an assignment or turn it in late without prior approval of the instructor. The only exceptions to these rules are for medically approved absences or other extenuating circumstances supported by appropriate documentation and the instructor's consent.
- Academic Accommodations and Disability Services-If you have, or think you may have, a disability that may affect your work in this class and feel you need accommodations, contact the Disability Resource Center to schedule an appointment and initiate a conversation about reasonable accommodations. The DRC is located in 116 Smith Memorial Student Union, <u>503-725-4150</u>, <u>drc@pdx.edu</u>, <u>http://www.pdx.edu/drc</u>. If you are a student with a documented disability and have already registered with the DRC, please contact the instructor immediately to arrange academic accommodations for this class.
- Portland State University Student Code of Conduct-Code of Student Conduct and Responsibility.
- Academic Integrity- By turning in an examination, paper, assignment, or in providing discussion board contributions, you (the student) certify that the work was produced without plagiarism or other forms of academic dishonesty. Quoting from the <u>University Bulletin</u>: acts of academic dishonesty, include, but are not limited to, plagiarism, buying and selling of course assignments and research papers, performing academic assignments for other persons, unauthorized disclosure and receipt of academic information, and other practices commonly understood to be academically dishonest. If you have questions about what constitutes academic dishonesty or the university's policies on this matter you should carefully review the current the <u>University Bulletin</u>; Ignorance of these rules is not an acceptable excuse for misconduct in this course. Students who are discovered engaging in such conduct will, at a minimum, receive no credit on the assignment for which the conduct was related. More formal proceedings may also be initiated at the discretion of the instructor. Questions regarding this policy may be addressed to the instructor or to the Office of Student Affairs (503-725-4422). This includes digital copies of computer lab assignments and having someone else do your online work for you.
- **Free Tutoring-** Tutors are available free through PSU. Tutor hours will be posted on Desire2Learn. Check the schedule to determine the hours most convenient for you.