#### Spring Term 2015 Syllabus -Introduction to Probability and Statistics II Stat 244 NB2 - CRN 64960, T & R 12:00-13:50 + Recitation, HOFF 109

Instructor	Rachel Webb					
Office Hour	Tuesday & Thursday 14:30-15:30 or by appointment					
Office Location	Neuberger Hall, Room M416					
email	Use the D2L email under People>Classlist>Faculty					
<b>Recitation Leader</b>	Jason Dolor					
Office Hour	Monday & Wednesday 15:30-16:30					
Office Location	Neuberger Hall, Room 328					
<b>Recitation Sections</b>	P01 CRN 64961 Tuesday 14:00-15:00 XSB 205					
<b>Recitation Leader</b>	Jess Millar					
Office Hour	Tuesday 15:15-16:15 & Thursday 14:00-15:00					
Office Location	Neuberger Hall, Room 360					
<b>Recitation Sections</b>	P02 CRN 64963 Tuesday 14:00-15:00 NH 366					
	P07 CRN 64968 Wednesday 12:45-13:45 NH 458					
<b>Recitation Leader</b>	Andrew Pingree					
Office Hour	Wednesday 13:00-14:00 & Thursday 10:00-11:00					
Office Location	Neuberger Hall, Room M314					
<b>Recitation Section</b>	P04 CRN 64965 Tuesday 16:00-17:00 BHB 220					
	P09 CRN 64970 Wednesday 15:15-16:15 SRTC 166					

### **Course Description**

Statistics 244 is the second of a two quarter sequence in probability and statistics designed primarily for nonmath students. This course covers chapters 8 through 13 from the text. 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, nonparametric 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. A basic understanding of computers and the MS Windows operating system is also required.

#### Textbook

Elementary Statistics, A Step by Step Approach, Custom PSU 8<sup>th</sup> edition, Bluman, McGraw Hill, 2011; ISBN 9780077578534. This textbook can be purchased at

<u>http://shop.mheducation.com/mhshop/productDetails?isbn=125916666X</u>. This comes with a code to the online homework and videos in Connect. You can purchase an ebook with a connect code directly from the publisher, directions will be posted on D2L.

Or: Ebook option with ALEKS interactive optional homework: <u>http://www.aleks.com/</u> (instructions in D2L and emailed prior to course start date)

Or: Search online for free pdf

#### Hardware/Software

• Access to the internet to use Desire2Learn. Login at <a href="http://my.pdx.edu">http://my.pdx.edu</a> and go to the Courses tab and select the current term, then click on the title of the course, or go directly to <a href="http://dl.pdx.edu">http://dl.pdx.edu</a>.

- Optional: Connect access code packaged with new textbooks or ebook or ALEKS 360 packaged with the ebook. These online homework systems are highly recommended.
- SPSS, available in all PSU campus computer labs. An introduction to SPSS will be given during week 1 lecture. Do not purchase SPSS, there is a free software called PSPP if you don't want to use the school's lab. Directions and due dates for the SPSS labs will be posted in D2L.
- A TI-84 or TI-83 graphing calculator with advanced statistical program is **required**. The graphing calculator will be used **HEAVILY** throughout this course. A TI-89 can also be used if you have the stat-list editor app (if you bring your calculator to my office hour, I can load this app on to your TI-89 for free). Other brands will work, just make sure you 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:

- Calculate and interpret simple descriptive statistics (e.g., mean, & standard deviation).
- Interpret data and graphs critically.
- Utilize sound methods to draw trustworthy conclusions based on data.
- Have sufficient command of the concepts and terminology of probability and statistics to engage in work, study, 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.
- Perform a linear regression analysis.
- Utilize SPSS to create and interpret statistical output.

# 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.

## 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.

### **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 are a student with a documented disability and have already registered with the <u>Disability Resource Center</u> (DRC), please contact the instructor immediately to arrange academic accommodations for this class. To register for services visit PSU's <u>DRC</u>.
- 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.** 

• Free Tutoring- Math tutors are available free through PSU. Tutor hours will be posted on Desire2Learn. Check the schedule to determine the hours most convenient for you.

### Assignments and Grading

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

- Computer Lab Assignments (10%) Your computer lab grade is based on 4 assignments worth 25 points each. These labs are done using the software SPSS, instructions are posted in Desire2Learn. Hard copy is due within the first 15 minutes of recitation 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 to your recitation leader prior to the lab due date, or have someone drop the lab off in their department mail box in NH334 before 11:50am on the due date. Make sure you include your recitation number on the lab.
- **Recitation (15%) Attendance is required**. Your overall grade will drop 5% for each recitation that you miss. If you miss a recitation, contact your recitation leader immediately to see if you can make up the time in another recitation that week. Recitation grade includes attendance, worksheets, and participation. There will be some extra credit to make up for one missed recitation.
- Quizzes (15%) The best 4 out of 5 quiz scores, quizzes will be short answer showing your work for partial credit if incorrect.
- Midterm Exam (30%) The midterm is during the regular class time on Thursday, May 7<sup>th</sup>. The midterm cover concepts in the homework, lecture, recitation, worksheets and the text. Midterm is multiple choice scantron exam with no partial credit.
- Final Exam (30%) The final exam is cumulative and is scheduled for <u>Thursday</u>, June 11<sup>th</sup> from 10:15-12:05. Students that fail the final will not receive a passing grade in the course. Final exam is multiple choice scantron exam with no partial credit.
- What materials do you bring to the quizzes and exams?
  - Valid PSU photo ID.
  - 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 will be turned in with your test.
  - Glossy formula Card (comes with text, but a printed pdf from D2L is also fine).
  - Hypothesis Testing Guide (found on D2L).
  - Scantron form 882 for midterm and final.

Grade Scale	A	<b>A-</b>	<b>B</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