CONTACT INFORMATION

Professor: James Bernhard
Email address: jbernhard@pugetsound.edu
Office: Thompson Hall 390G
Office hours: TBA — see course website

My phone number is 879-3812, but the phone is usually one of the slowest ways to reach me. Email is usually much faster.

The course website is the best resource for information about the course. Among other things, it contains a complete calendar for the semester, including all assignments. Also, if you email me a password, you will be able to access your grade-to-date any time during the semester via the course website.

LEARNING OBJECTIVES

The primary goals of this course, in order of importance, are:

1. To learn how to learn mathematics.
2. To learn how to present and discuss mathematics.
3. To learn about the subject of mathematical statistics.

For the third item, we will study primarily the mathematics behind statistical hypothesis testing, particularly in the context of linear models.

PREREQUISITES

To take this course, you should have completed Mathematics 375 (Probability Theory) or the equivalent. This includes some background in linear algebra and multivariable calculus. If you have not satisfied the prerequisites, you should see me so that we can discuss the suitability of this course for you.

COURSE MATERIALS

The required text for this course is Statistical Models: Theory and Practice (revised edition) by David A. Freedman (2009), available at the campus bookstore. You may find it convenient at times to use a calculator or computer program (such as R), but no particular specialized technology is required for this course.

That said, I will expect your work to be word-processed on a computer. If you are not already familiar with how to typeset mathematics (such as with \LaTeX, \texttt{LyX}, Word’s Equation Editor, etc.), you will need to become familiar with this during the semester. I would be happy to help you with this. You will not be graded on your typographical skills, but you will need to be able to use them to communicate successfully.

COURSEWORK

The coursework consists of:

- A group presentation to the class during the first half of the semester, of one of the chapters in the required text. This will extend over two class periods.
- Approximately weekly homework assignments, during the second half of the semester.
- Three take-home tests, over the course of the semester.

There is no final exam for this course. The course is finished on the last day of class.

The weekly homework assignments during the second half of the semester are designed to help you learn the material covered in class. They will consist of multiple problems, and I will grade them in full as usual (contrary to the method and goal of the homework problems in Math 375 last semester).

GRADING

Your grade will be based on my assessment of your understanding of the material. By default, I will weight the various components of the course as follows:

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
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<tbody>
<tr>
<td>Group in-class presentation</td>
<td>15%</td>
</tr>
<tr>
<td>Homework assignments</td>
<td>20%</td>
</tr>
<tr>
<td>Test 1</td>
<td>20%</td>
</tr>
<tr>
<td>Test 2</td>
<td>25%</td>
</tr>
<tr>
<td>Test 3</td>
<td>20%</td>
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</tbody>
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However, these weights are subject to change due to individual circumstances, so if you believe the above components do not accurately represent your understanding of the material, then you should let me know. If the circumstances dictate, I can work with you to find another way to demonstrate your understanding of the material.

**Policy on Late Work** I will not accept late work without an appropriate reason, which you should explain to me before the work is late if possible. If you are falling behind or need to turn something in late, please see me so that we can discuss it.

**Academic Honesty** I encourage you to work with others (other students, myself, tutors, etc.) on homework problems in any way that helps you understand the material, but the write-up that you turn in should be your own. Also, in the group presentations, you should work with others in your group as well as with me, but not with anyone else. You may not discuss the take-home tests with anyone besides me before they are due and turned in, and you may use only the resources allowed in the instructions.

For practical guidelines on using quotation and paraphrasing effectively and honestly, see the following guide put together by staff at the University of Puget Sound Library:

http://alacarte.pugetsound.edu/subject-guide/6-Academic-Integrity-Puget-Sound

For general information on issues of academic honesty, see the official University of Puget Sound academic honesty policy at:

http://www.pugetsound.edu/student-life/student-resources/student-handbook/academic-handbook/academic-integrity/

**Other** Feel free to contact me with any other questions you have regarding the course. I look forward to an enjoyable class with you this semester!