

**Syllabus**  
**Psychology B07: Data Analysis in Psychology**

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Classes are Tues (1-2 pm), Thurs (1-3 pm), and Fri (1-2 pm) in room S 309.

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**General Course Overview**

This course provides an introduction to many of the statistical procedures used to address psychological issues. I will try my best to explain the situations in which certain tests are appropriate and we will go through the tests at both a conceptual and a numerical level.

In addition to attending classes at the times specified above, you are encouraged to attend one tutorial per week. A listing of the TAs along with their tutorial and office hour information is provided in the table below.

You will not be **required** to use computers in this class but you will be **encouraged** to. Most psychologists rely heavily on statistical software when performing their analyses and you could use the same software to check over your homework assignments before handing them in.

My lecture overheads will be put on reserve in the library in two parts. The first part will cover chapters 1 through 5, and it should be available in the library now. Just ask for the Psychology B07 course notes. The second part will cover chapters 6 through 10 and will be put on reserve shortly after the first midterm. In addition, these overheads are also available on the website described at the end of the syllabus. Remember, only really evil people steal from the reserve material.

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<b>Teaching Assistants</b>	<b>Tutorial Time</b>	<b>Office Hours</b>
Tom Spalek	Tues, 4 pm in S-357	Tues, 3 pm in S-567B
Darren Piercey	Weds, 9 am in S-357	Fri, 9:30 am in S-567B
Andrew Weeks	Weds, 1pm in H-308	Wed, noon in S-567B
Janina Ferbinteanu	Weds, 1pm in H-309	Wed, 11:00 am in S-567B
Tonya Stokes	Tues, 4 pm in H-402	Thur, 9:00 am in S-567B

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### **Textbook**

The Textbook we will be using for the course is the third edition of Statistical Methods for Psychology authored by David C. Howell (4<sup>th</sup> Edition). We will be covering Chapters 1 through 10 (if all goes according to plan). Note that this is a brand new edition of the text. Previous editions of the text can also be used although I leave it to the student to identify and compensate for any changes that have occurred across editions.

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### **Evaluation**

Your mark in this course will be determined on the basis of a final exam (50%), a midterm exam (40%), homework assignments (6%), and dreaded pop quizzes (4%).

The Final Exam will include questions from all of the chapters.

The Midterm Exam is scheduled for Friday, October 18<sup>th</sup>. This is a couple of weeks prior to the drop date to insure that you know your midterm mark as well as your marks on some assignments and quizzes prior to the drop date.

There will be six homework assignments. The assignments will typically involve me giving you a dataset and requiring you to do the appropriate statistical analyses given the issues I describe. Although these assignments are only worth 1% each, they provide excellent practice for the pop quizzes and exams and, as a result, are very valuable in an indirect way.

There will be 6 pop quizzes with only your best four counting towards your grade. Note that missing classes is not a good idea because these quizzes cannot be made up. In fact, the primary purpose of the quizzes is to encourage you to show up for class, read the chapters we are discussing, and do your homework assignments.

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### **Calculator**

You should purchase a scientific calculator for use in this course. Make sure that, at the very least, the calculator has a button for calculating square roots. Note that "programmable calculators" are not allowed!

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## The "Fairness" Clause

I strongly believe that every student in the class should be evaluated in an identical manner. In order to insure this I must lay down certain ground rules that attempt to prevent any student from gaining any form of special treatment.

- I. I **do not** give out any marks other than rounding up to the nearest integer. If you end up being one mark away from the next highest letter grade, then that is where you'll stay.
- II. Midterms and Final Exams can only be missed for extreme reasons and formal documentation explaining your absence is required and will be checked up on.
- III. My office hours are meant to assist students who are having difficulties with the course despite regular class attendance. I **will not** spend office hours re-teaching a class to a student who chose not to attend that class.

I realize that these rules make me seem a bit authoritarian. I'm sure you'll soon see that I am actually quite easy going and, hopefully, easy to communicate with. The above rules are only meant to keep all of the students on an equal footing. And I should stress that if you do have a valid reason for missing either exams or classes, I am open to discussing possibilities with you. It's just very important that the reasons be valid.

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## The B07 Homepage

For those net-surfers out there, I have created a homepage devoted to this course. The home page can be accessed using any browser (e.g., Netscape, Mosaic, etc...) by going to:

<http://psych.utoronto.ca/courses/c1/PsyB07.html>

The homepage includes this syllabus (for those of you with a tendency to lose paper), a course description, the overheads I present in the course, more info about me and my research interests, a time table listing critical dates for the course and an on-line listing of the marks in the course to date.

In addition, two tutorials are currently being added to the page. The first is a basic-math tutorial specifically designed to help you brush up on the basic math skills you need in this course. The second is a statistical software tutorial which will demonstrate how to do many of the analyses we describe in class using current statistical software.

It is worth the effort to become comfortable on the net. For those of you who haven't yet surfed, now is a good time to get your feet wet (Sorry, couldn't resist).

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**Time Table**  
**Psychology B07: Data Analysis in Psychology**

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**Critical Dates**

**Midterm Exam:** October 18 in rooms S309 and S319

**Final Exam:** December 11-20 in room ????

**Assignments:** The due dates for assignments will be specified when the assignments are handed out. In general, you will have one week to complete an assignment.

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**Not So Critical Dates**

**First Day of Classes:** September 10, 1995

**Last Day to Add the Course:** September 20, 1995

**Last Day to Withdraw without Penalty:** November 1, 1995

**Last Day of Classes:** December 6, 1995

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**Approximate Class Schedule**

We cover 10 chapters in 13 weeks. Your first midterm will be written and graded prior to the drop date so that you have a sizable proportion of your mark known at that time. As a result, the course will be split up as follows; Chapters 1-5, midterm, Chapters 6-10, final. That gives us 6 weeks to cover the first 5 chapters, and 7 weeks to cover the last 5. Basically, a chapter a week with overflow. A detailed breakdown is presented below.

<b>Week</b>	<b>Starting</b>	<b>Material to be Covered</b>
1	Sept. 10	Chapter 1 - Basic Concepts
2	Sept. 17	Chapter 2 - Describing and Exploring Data
3	Sept. 24	Chapter 3 - The Normal Distribution
4	Oct. 1	Chapter 4 - Sampling Distributions/Hypothesis Testing
5	Oct. 8	Chapter 5 - Basic Concepts of Probability
6	Oct. 15	Overflow and Review for Midterm
7	Oct. 22	Chapter 6 - Categorical Data and Chi-Square
8	Oct. 29	Chapter 7 - Hypothesis Testing Applied to Means
9	Nov. 5	Chapter 8 - Power
10	Nov. 12	Chapter 9 - Correlation and Regression
11	Nov. 19	Chapter 10 - Alternate Correlation Techniques
12	Nov. 26	Overflow
13	Dec. 4	Overflow and Review for Final

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