

# The University of Texas at Austin

## Statistics and Research Design (44050 & 44055)

PSY 418 – Fall 2009

Lecture: T, Th 3:30-5 (ENS 145)

Lab: F 11-1 (SEA 2.114; 2.122)

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### Psychology Department Information

1. Statistics and Research Design at UT Austin (PSY 418) must be passed with a “C” or better to meet the prerequisite requirements for both lower and upper division courses in the Psychology Department.
2. Please refer to the UT website calendar section for information regarding drop deadlines. If you need to drop this class, that is where you will find info regarding fee refunds, requirements for administrative approval, etc.

### General Course Information

1. This course consists of 2 lectures and a lab each week. Your grades will be calculated using a 40/60 split. The exam grade (40%) is determined on the basis of your performance on 3 exams. The first and second exam will cover material from statistics and the third exam will cover material from research methods. The remaining 60% is determined by your homework (10%), and your performance on writing assignments (50%).
2. There will be no make-up exams given without prior notice of the pending absence or a doctor’s note regarding illness. No exceptions. Make-up exams will be conducted during TA office hours no later than 1 week after the date of the missed exam. This is non-negotiable, so if you have conflicts with the exam times as listed, please arrange your life accordingly.
3. Grades are on a point system (not a curve). Your grade will be assigned based on total points earned / total points possible.

A = 93 – 100	A- = 90 – 92		
B+ = 87 – 89	B = 83 – 86	B- = 80 – 82	
C+ = 77 – 79	C = 73 – 76	C- = 70 – 72	D – F = below 70

**REQUIRED TEXTS:**

ISBS: Interactive Statistics for the Behavioral Sciences – (<https://www.sinauer.com/introstats/>)

TPAD: The Psychologist as Detective, Smith & Davis,

APA: Publication Manual of the American Psychological Association (recommended)

*Using SPSS for Windows and Macintosh*, Green, Salkind, ISBN-10: 0-13-189025-5

This book is a step-by-step guide to using the statistical software in the Psych 418 which is used to enter data, manage data, create graphs, and conduct statistical analyses.

<http://www.mypearsonstore.com/bookstore/product.asp?isbn=9780131890251&redir=1>

**Stats. Schedule**

<b>Date</b>	<b>Lecture</b>	<b>Readings</b>	<b>Assign</b>	<b>Due</b>	<b>LAB</b>
8/27	Introduction	Syllabus			
9/01	Introduction	Ch. 1 (ISBS)	Hwk. 1	9/4	
9/03	Looking at Data	Ch. 2 (ISBS)			
<b>9/04</b>	<b>Intro to Lab and SPSS</b>				<b>Lab SOP's</b>
9/08	Center & Spread	Ch. 3 (ISBS)	Hwk. 2	9/11	
9/10	Center & Spread	Ch. 3 (ISBS)			
<b>9/11</b>	<b>SPSS; Ms. Andrews</b>	<b>Handout (or <i>Using SPSS for Windows &amp; Mac</i>)</b>			<b>Data Entry</b>
9/15	Probability	Ch. 4 (ISBS)	Hwk. 3	9/18	
9/17	z-scores	Ch. 5 (ISBS)			
<b>9/18</b>	<b>SPSS</b>	<b>Handout (or <i>Using SPSS for Windows &amp; Mac</i>)</b>			<b>Data Mgmt.</b>
9/22	t-distributions	Ch. 6 (ISBS)	Hwk. 4	9/25	
9/24	Errors (I and II)	Ch. 7 (ISBS)			
<b>9/25</b>	<b>Exam 1</b>	<b>Ch. 1-7 (ISBS)</b>			<b>Exam</b>
9/29	t-Tests	Ch. 8 (ISBS)	Hwk. 5	10/02	
10/01	ANOVA	Ch. 10 (ISBS)			
<b>10/02</b>	<b>SPSS</b>	<b>Handout (or <i>Using SPSS for Windows &amp; Mac</i>)</b>			<b>Analyses</b>
10/06	ANOVA (cnt'd)	Ch. 10 (ISBS)	Hwk. 6	10/09	
10/08	Correla. & Regress.	Ch. 11 (ISBS)			
<b>10/09</b>	<b>SPSS</b>	<b>Handout (or <i>Using SPSS for Windows &amp; Mac</i>)</b>			<b>Analyses</b>
10/13	Correla. & Regress.	Ch. 11 (ISBS)	Hwk. 7	10/16	
10/15	Chi-Square Tests	Ch. 12 (ISBS)			
<b>10/16</b>	<b>Exam 2</b>	<b>Ch. 8, 10, 11, 12 (ISBS)</b>			<b>Exam</b>

## Experimental Design and Methods Schedule

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<u>Date</u>	<u>Lecture Topic</u>		<u>Assign</u>	<u>Due</u>
10/20	Conducting Res.	Ch.1, 2, 3 (TPAD)	Select Teams	10/23
10/22	APA Style I	Ch. 14 (TPAD)	APS Wks 1-2	10/27
<b>10/23</b>	<b>Lab, Experiment 1 – Data Collection – Mandatory Day</b>			
10/27	APA Style II		Exp. 1 Paper	11/05
10/29	Exp. Basics I	Ch. 6 (TPAD)	Lit. Search	11/03
<b>10/30</b>	<b>Lab, Analyze Exp. 1 Data</b>			
11/03	Exp. Basics II	Ch. 7 (TPAD)	Team Design	11/10
11/05	Validity	Ch. 8 (TPAD)	Exp. 2 Paper	11/19
<b>11/06</b>	<b>Lab, Experiment 2 – Data Collection – Mandatory Day</b>			
11/10	2+ Grp. Design	Ch. 10-11 (TPAD)		
11/12	Factorial Design	Ch. 12 (TPAD)		
<b>11/13</b>	<b>Lab, Analyze Exp. 2 Data</b>			
<b>11/17</b>	<b>Data Collection – Mandatory Day</b>		Exp. 3 Paper	12/10
<b>11/19</b>	<b>Data Collection – Mandatory Day</b>			
<b>11/20</b>	<b>Data Collection – Mandatory Day</b>			
<b>11/24</b>	<b>Data Collection – Mandatory Day</b>			
<b>11/26 - 27</b>	<b>Happy Thanksgiving</b>			
<b>12/01</b>	<b>Data Collection – Mandatory Day</b>			
<b>12/03</b>	<b>Data Collection – Mandatory Day</b>			
<b>12/04</b>	<b>EXAM 3</b>	<b>Ch. 1, 2, 3, 6, 7, 8, 10, 11, 12, 14 (TPAD)</b>		

- Except for exams and paper due-dates, this schedule is subject to change

## Grading Breakdown

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	<u>Points</u>	<u>Weight</u>
Exam 1 (Stats):	100	10%
Exam 2 (Stats):	100	15%
Exam 3 (Methods)	100	15%
Research Report 1	100	10%
Research Report 2	100	15%
Research Report 3	100	25%
Homework	100	10%

Points are subtracted from your total points for the following:

1. 10 minutes tardy or unexcused absence from regular lab (1 point).
2. 10 min tardy to class on mandatory days (5 points).
3. Unexcused absence on any mandatory day (5 points)

**Mandatory days are indicated in bold and per notice of instructor.**

Regarding Research Reports:

Experiment 1 paper due: Thur., Nov 5 at the beginning of lecture  
Experiment 2 paper due: Tues., Nov 19 at the beginning of lecture  
Experiment 3 paper due: Thur., Dec 10 via email

1. Research reports must be APA-style per the manual.
2. ***Reports submitted after the deadline will lose 5 points for each day late.***
3. Grammar and spelling are graded.
4. All graphs should be computer generated (no hand drawn graphs, please) and formatted in APA style (see manual).
5. All papers (including the paper generated from the group project) must be original work and are subject to scrutiny for potential plagiarism.

### Writing Center

I strongly encourage you to use the Undergraduate Writing Center located in FAC 211. Their contact information is 471-6222, or <http://uwc.utexas.edu/home>. The Undergraduate Writing Center offers free, individualized, expert help with writing for any UT undergraduate by appointment or on a drop-in basis. Any undergraduate enrolled in a course at UT can visit the UWC for assistance with any writing project. Their services are not just for writing with “problems.” Getting feedback from an informed audience is a normal part of a successful writing project. Consultants help students develop strategies to improve their writing. The assistance they provide is intended to foster independence. Each student determines how to use the consultant’s advice. The consultants are trained to help you work on your writing in ways that preserve the integrity of your work.