



**Department of Psychology**  
**Psychology 407 (L01) – Psychometrics**  
**Winter 2010 – Course Outline**

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<b>Instructor:</b>	Dr. Theresa Kline	<b>Lecture Location:</b>	Scurfield Hall 288
<b>Phone:</b>	(403) 220-3469	<b>Lecture Days/Time:</b>	MWF/12:00 – 12:50
<b>Email:</b>	<a href="mailto:Babbitt@ucalgary.ca">Babbitt@ucalgary.ca</a>		
<b>Office:</b>	Administration 135B		
<b>Office Hours:</b>	To Be Announced		

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### **Course Description and Goals**

Theory and application of methodological and statistical issues in psychological assessment. Topics include: theories of psychological measurement, scale development, item analysis, item bias, reliability, validity, and test fairness.

### **Prerequisites**

Psyc 312 – Experimental Design and Quantitative Methods for Psychology

### **Required Text**

Kline, T.J.B. (2005). *Psychological Testing: A Practical Approach to Design and Evaluation*. Thousand Oaks, CA: Sage. Available at the U of C Bookstore

A required package of notes for this course is available at the Department of Psychology.

### **Evaluation**

The final course grade will be based on the following:

First quiz:	10%
Second quiz:	10%
Third quiz:	10%
Fourth quiz:	10%
Fifth Quiz	10%
Paper	25%
Lab Assignments:	25% (grade will be based on five assignments)

Quizzes are multiple-choice format. Laboratory assignment format is covered in the lab outline. Papers are due **Mar. 31, 2009 by 4:00 p.m.** and must be in hard copy form. They can be turned in during class time or at the Department of Psychology Office in Administration 275. Papers received after the due date will be reduced 10 points (out of 100) for each day they are late. There are NO exceptions to this. The document should conform to APA style (6<sup>th</sup> Ed) and be 10 pages in length. A marking scheme is attached to let you know how the paper grading will be handled. Quizzes (multiple-choice format) will cover material in the text as well as lecture material that is NOT covered explicitly in the text. Laboratory assignments and expectations

will be covered in your first lab. Students must achieve a passing grade on both the class and lab components to pass this course.

### Grading Scale

A+	96-100%	B+	80-84%	C+	67-71%	D+	54-58%
A	90-95%	B	76-79%	C	63-66%	D	50-53%
A-	85-89%	B-	72-75%	C-	59-62%	F	0-49%

As stated in the University Calendar, it is at the instructor’s discretion to round off either upward or downward to determine a final grade when the average of term work and final examinations is between two letter grades. To determine final letter grades, final percentage grades will be rounded up to the nearest whole percentage (e.g., 89.4% will be rounded up to 90%).

### Tentative Lecture Schedule

Date	Topic/Chapter(s) from Text
M Jan 11	Winter Lectures begin The Testing Enterprise/Review of Correlation & Regression/ Chapter 1
W Jan 13	The Testing Enterprise/Review of Correlation & Regression/ Chapter 1
F Jan 15	Designing and Writing Test Items/Chapter 2
M Jan 18	Designing and Writing Test Item Items/Chapter 2
W Jan 20	Designing and Writing Test Item Responses/Chapter 3
F Jan 22	Last day to drop a course with no W grade and tuition refund. Designing and Writing Test Item Responses/Chapter 3
M Jan 25	Collecting Data and Sampling Issues/Chapter 4
T Jan 26	Last day for registration/change of registration.
W Jan 27	Collecting Data and Sampling Issues/Chapter 4
F Jan 29	Collecting Data and Sampling Issues/Chapter 4
M Feb 1	Quiz 1 (Chapters 1-4)
W Feb 3	Classical Test Theory/Chapter 5
F Feb 5	Classical Test Theory/Chapter 5
M Feb 8	Modern Test Theory (Dichotomous Data)/Chapter 6
W Feb 10	Modern Test Theory (Dichotomous Data)/Chapter 6
F Feb 12	Modern Test Theory (Dichotomous Data)/Chapter 6
M Feb 15	Reading Days. No lectures.
W Feb 17	Reading Days. No lectures.
F Feb 19	Reading Days. No lectures.
M Feb 22	Modern Test Theory (Polytomous Data)/Chapter 6
W Feb 24	Modern Test Theory (Polytomous Data)/Chapter 6
F Feb 26	Modern Test Theory (Polytomous Data)/Chapter 6
M Mar 1	Quiz 2
W Mar 3	Reliability of Tests and Items/Chapter 7
F Mar 5	Reliability of Tests and Items/Chapter 7
M Mar 8	Reliability of Tests and Items/Chapter 7
W Mar 10	Reliability of Raters/Chapter 8
F Mar 12	Reliability of Raters/Chapter 8

M Mar 15	Quiz 3
W Mar 17	Content and Criterion-Related Validity Approaches/Chapter 9
F Mar 19	Content and Criterion-Related Validity Approaches/Chapter 9
M Mar 22	Content and Criterion-Related Validity Approaches/Chapter 9
W Mar 24	Internal Structure Validity Approach (part 1)/Chapter 10
F Mar 26	Internal Structure Validity Approach (part 1)/Chapter 10
M Mar 29	Internal Structure Validity Approach (part 1)/Chapter 10
W Mar 31	PAPERS DUE!
F Apr 2	Good Friday. No lectures. University closed.
M Apr 5	Internal Structure Validity Approach (part 2)/Chapter 10
W Apr 7	Internal Structure Validity Approach (part 2)/Chapter 10
F Apr 9	Quiz 4
M Apr 12	Ethics & Professional Issues/Chapter 11
W Apr 14	Ethics & Professional Issues/Chapter 11
R Apr 15	Last day to participate in research and allocate research credits Review of Tests/Chapter 12
F Apr 16	Winter Session Lectures end. Last day to withdraw. Quiz 5

### **Reappraisal of Grades**

A student who feels that a piece of graded term work (e.g., term paper, essay, test) has been unfairly graded, may have the work re-graded as follows. The student shall discuss the work with the instructor within 15 days of being notified about the mark or of the item's return to the class. If not satisfied, the student shall immediately take the matter to the Head of the department offering the course, who will arrange for a reassessment of the work within the next 15 days. The reappraisal of term work may cause the grade to be raised, lowered, or to remain the same. If the student is not satisfied with the decision and wishes to appeal, the student shall address a letter of appeal to the Dean of the faculty offering the course within 15 days of the unfavourable decision. In the letter, the student must clearly and fully state the decision being appealed, the grounds for appeal, and the remedies being sought, along with any special circumstances that warrant an appeal of the reappraisal. The student should include as much written documentation as possible.

### **Plagiarism and Other Academic Misconduct**

Intellectual honesty is the cornerstone of the development and acquisition of knowledge and requires that the contribution of others be acknowledged. Consequently, plagiarism or cheating on any assignment is regarded as an extremely serious academic offense. Plagiarism involves submitting or presenting work in a course as if it were the student's own work done expressly for that particular course when, in fact, it is not. Students should examine sections of the University Calendar that present a Statement of Intellectual honesty and definitions and penalties associated with Plagiarism/Cheating/Other Academic Misconduct.

### **Academic Accommodation**

It is the student's responsibility to request academic accommodations. If you are a student with a documented disability who may require academic accommodation and have not registered with the Disability Resource Centre, please contact their office at 403-220-8237. Students who have not registered with the Disability Resource Centre are not eligible for formal academic

accommodation. You are also required to discuss your needs with your instructor no later than 14 days after the start of this course.

### **Absence From A Test/Exam**

Makeup tests/exams are NOT an option without an official University medical excuse (see the University Calendar). A completed Physician/Counselor Statement will be required to confirm absence from a test/exam for health reasons; the student will be required to pay any cost associated with this Statement. Students who miss a test/exam have 48 hours to contact the instructor and to schedule a makeup test/exam. Students who do not schedule a makeup test/exam with the instructor within this 48-hour period forfeit the right to a makeup test/exam. At the instructor's discretion, a makeup test/exam may differ significantly (in form and/or content) from a regularly scheduled test/exam. Except in extenuating circumstances (documented by an official University medical excuse), a makeup test/exam must be written within 2 weeks of the missed test/exam.

### **Course Credits for Research Participation (Max 2% of final grade)**

Students in most psychology courses are eligible to participate in Departmentally approved research and earn credits toward their final grades. **A maximum of two (2) credits (2%) per course, including this course, may be applied to the student's final grade. Students earn 0.5% (0.5 credits) for each full 30 minutes of participation.** The demand for timeslots may exceed the supply in a given term. Thus, students are not guaranteed that there will be enough studies available to them to meet their credit requirements. Students should seek studies early in the term and should frequently check for open timeslots. Students can create an account and participate in Departmentally approved research studies at <http://ucalgary.sona-systems.com>. The last day to participate in studies and to assign or reassign earned credits to courses is **April 15, 2010**.

### **Evacuation Assembly Point**

In case of an emergency evacuation during class, students must gather at the designated assembly point nearest to the classroom. The list of assembly points is found at <http://www.ucalgary.ca/emergencyplan/assemblypoints>. Please check this website and note the nearest assembly point for this course.

### **Student Organizations**

Psychology students may wish to join the Psychology Undergraduate Students' Association (PSYCHS). They are located in Administration 170 and may be contacted at 403-220-5567.

**Student Union VP Academic:** Phone: 403-220-3911 [suypaca@ucalgary.ca](mailto:suypaca@ucalgary.ca)  
**Student Union Faculty Rep.:** Phone: 403-220-3913 [socialscirep@su.ucalgary.ca](mailto:socialscirep@su.ucalgary.ca)

### **Important Dates:**

The last day to drop this course with no "W" notation and **still receive a tuition fee refund is Jan 22<sup>nd</sup>, 2010**. Last day for registration/change of registration is **Jan 26<sup>th</sup>, 2010**. The last day to withdraw from this course is **Apr 16<sup>th</sup>, 2010**.