

Department of Psychology Psychology 417-01 – Test and Individual Differences Winter 2010 – Course Outline

Lecture

Instructor: Dr. Kibeom Lee Lecture Location: SH 288

Phone: 403-210-9469 **Lecture Days/Time:** MWF 1:00 – 1:50 PM

Email: Kibeom@ucalgary.ca

Office: Admin 220
Office Hours: by appt

Tutorial

Lab Instructor: Ms. Megan Kendall Lab Location: SS 018

Phone: 403-220-8931 **Lab Days/Time:** Tue 1:00-1:50

Wed 3:00-3:50

Email: makendal@ucalgary.ca

Office: 141G
Office Hours: by appt

Course Description and Goals

An introduction to the theory and practice of psychological measurement. Topics include the following: the evaluation of reliability and validity in psychological tests; factor analysis; psychometric principles of test construction; commonly used tests of personality, mental abilities, and interests; contemporary issues related to the use and usefulness of psychological tests.

Prerequisite

PSYC 312 - Experimental Design and Quantitative Methods for Psychology

No Textbook is Required

Evaluation

Component	% of grade	Date
Open Book Exam	15 %	March 3 and 5
Closed Book Exam	25 %	scheduled by registrar
Factor Analysis Project	20 %	Due: March 22
Group presentation	10 %	Various
Lab project: Test Construction and Item Analysis	25 %	Due: April 16
Lab Attendance/Assignment	5 %	Various

Short descriptions of the exams and assignment

- 1. Open book exam (15%) will cover readings and lecture notes before the exam date. The exam consists of calculation questions as well as short-answer questions. Example questions will be provided on March 1.
- 2. Closed book exam (25%) will cover readings and lecture notes for the whole semester. The exam consists of short and long answer questions.
- 3. Factor Analysis Project (20%): The instruction will be provided in the week of Feb 22. In short, you will factor analyze ratings on a set of personality scales and write a report on the results. Data will be provided. The report should be about 4 pages long (not including cover page, references, tables and figures.) A hard copy of the report must be handed in during the class or to the green box outside of A275 (Due: March 22; late penalty = 10% per day, including weekends)
- 4. Group presentation (10%): You, as a team of 2 to 4, will deliver a 45 minute lecture on one of the topics relevant to individual differences and their assessment (a list of possible topics will be provided). A detailed instruction will be given on January 25 (the groups for the presentation will be formed on this date too). Individuals missing the presentation will receive 0 %, but the other members of the team will not be penalized.
- 5. Test Construction and Item Analysis Project (25%): The instruction will be provided in the week of March 8. In this assignment, you will develop your own personality scales and write a report on the psychometric properties of the scales. All the materials and data that are needed will be provided. The report is appr. 6 pages long (not including cover page, references, tables and figures.) A hard copy of the report must be handed in during the class or to the green box outside of A275 (Due: April 16; late penalty = 10% per day, including weekends).
- 6. Lab Attendance/Assignment: Details will be provided by the TA in the first week (5%).

Grading Scale

A+	96-100%	B+	80-84%	C+	67-71%	D+	54-58%
Α	90-95%	В	76-79%	С	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. In this course, to determine final letter grades, final percentage grades will be rounded up or down to the nearest whole percentage (i.e., 89.5% will be rounded up to 90%; 89.4% will be rounded down to 89%, etc.

Tentative Lecture Schedule

Date	Topic	Due
Jan 11	Course Introduction	
Jan 13/15	Basic statistics	
Jan 18/20/22	Basic statistics	
Jan 25/27/29	Reliability (Chapter about reliability in any	Jan 25: instruction
	psychological testing text books)	for student
		presentation
Feb 1/3/5	Validity (Chapters about validity in any psychological	
	testing text books)	

Factor analysis I (Lee and Ashton chapter)	
Factor Analysis II (Lee and Ashton chapter)	
Introduction to the Factor Analysis Project (Handout)	
NEO-FFI Testing and Scoring	
Exam Review	
Open Book Exam – Including everything	
Open Book Exam – Not including factor analysis	
Test Construction / Item Analysis (Burisch article)	
Introduction to the Test Construction and Item	
Analysis Project (Handout)	
Structure and Measurement of Personality (McCrae &	
John; Ashton, et al; Boies et al)	
Response set & Response Style (Jackson et al. article;	Mar 22 Factor
Nunnally's Chapter 16, pp. 658-677)	analysis paper due
Structure and Measurement of Intelligence (Neisser et	
al. article)	
Student Group Presentation	
TBA (conference)	
Student Group Presentation	Apr 16 Item
	Analysis Project
	due
	Factor Analysis II (Lee and Ashton chapter) Introduction to the Factor Analysis Project (Handout) NEO-FFI Testing and Scoring Exam Review Open Book Exam – Including everything Open Book Exam – Not including factor analysis Test Construction /Item Analysis (Burisch article) Introduction to the Test Construction and Item Analysis Project (Handout) Structure and Measurement of Personality (McCrae & John; Ashton, et al; Boies et al) Response set & Response Style (Jackson et al. article; Nunnally's Chapter 16, pp. 658-677) Structure and Measurement of Intelligence (Neisser et al. article) Student Group Presentation TBA (conference)

Jan 22: Last day to drop a course with no W grade and tuition refund.

Apr 15: Last day to participate in research and allocate research credits.

Apr 16: Last day to withdraw.

Readings

- ***Lee, K., & Ashton, M. C. (2007). Factor analysis in personality research. In R. W. Robins, R. C. Fraley, & R. F. Krieger (Eds.), Handbook of research methods in personality psychology.
- Burisch, M. (1984). Approaches to personality inventory construction: a comparison of merits. <u>American Psychologist</u>, 39, 214-227.
- McCrae, R. R., & John, O. P. (1992). An introduction to the Five-Factor Model and its applications. <u>Journal of Personality</u>, 60, 175-215.
- Ashton, M. C., Lee, K., Perugini, M., Szarota, P., De Vries, R. E., Di Blas, L., Boies, K., De Raad, B. (2004). A six-factor structure of personality-descriptive adjectives: solutions from psycholexical studies in seven languages. <u>Journal of Personality and Social Psychology</u> *86*, 356-366.
- Boies, K., Lee, K., Ashton, M. C., Pascal, S., Nicol., A. A. M. (2001). The structure of the French personality lexicon. European Journal of Personality, 15, 277-295.
- Jackson, D. N., Wroblewski, V. R., & Ashton, M. C. (2000). The impact of faking on employment tests: Does forced-choice offer a solution? <u>Human Performance</u>, 13, 371-388.
- ***Nunnally, J. C. (1978). Chapter16, pp. 658 677. <u>Psychometric Theories.</u> McGraw-Hill. (pp. 658-677 only)
- Neisser et al. (1996). Intelligence: Knowns and unknowns. <u>American Psychologists</u>, 51, 7-101.
- *** These articles are not available electronically.

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 <u>suvpaca@ucalgary.ca</u>

Student Union Faculty Rep.: Phone: 403-220-3913 <u>socialscirep@su.ucalgary.ca</u>

Important Dates:

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