

Psychology 417	Test & Individual Differences	Fall 2016
Instructor: Yannick Griep	Lecture Location: SA 013	
Phone: 403-210-7344	Lecture Days/Time: Tue/Thu 2:00 – 3:15PM	
Email: yannick.griep@ucalgary.ca	[Lab and/or TA info in remaining cells (delete if N/A)]	TA still to be confirmed
Office: Admin 214		
Office Hours: Tuesday 5:30PM – 6:30PM		

Course Description

An introduction to the theory and practice of psychological measurement. Topics include the following: introduction to testing and individual differences; the evaluation of reliability and validity in psychological tests; factor analysis; psychometric principles of test construction and evaluation; contemporary issues related to the use and usefulness of psychological tests; challenges and biases in testing.

Course Learning Outcomes

The Department of Psychology is committed to student knowledge and skill development. The table below lists the key learning outcomes for this course, the program-learning outcomes they facilitate (see psyc.ucalgary.ca/undergraduate/program-learning-outcomes), and the expected level of achievement.

Discuss research methods used in testing and individual differences	1, 6	A
Evaluate reliability and validity in psychological tests	3, 1	A
Apply (exploratory and confirmatory) factor analysis to answer psychological questions	3, 1, 7	A, C
Discuss theory and applications of psychometric principles of scale development	3	A
Examine commonly used tests of personality, mental abilities, and interests	1, 2	A
Discuss contemporary issues related to the use and usefulness of psychological tests	2, 7	A

Notes. PLOs = Program-Learning Outcomes: 1 = demonstrate knowledge of psychological sciences, 2 = think critically and solve problems, 3 = conduct research and analyze data, 4 = communicate effectively, 5 = demonstrate information literacy, 6 = understand and implement ethical principles, 7 = apply psychological knowledge and skills. Level of PLO achievement facilitated by this course: I = introductory, C = competency, A = advanced.

Prerequisites

PSYC 312 - Experimental Design and Quantitative Methods for Psychology

Required Text

A pdf copy of the required readings (See the required reading list appended in this course outline) is available from the U of Calgary library. Additional readings will be made available throughout class.

Evaluation

This class will be evaluated by means of a mid-term exam, a final exam, a group presentation, and a lab project.

1. Mid-term exam (20% of final grade). The mid-term exam will take place on October 27th and will cover all lecture and reading materials from September 13th to October 20th. The exam will comprise a combination of multiple choice and short answer questions. You are not allowed to use computers, iPods, iPads, smart watches, cellphones, notes, or books during this exam.

2. Final exam (35% of final grade). The final exam will take place at the end of the fall term and will cover all lecture and reading materials from September 13th to December 8th. The exam will comprise a combination of short- and long answer questions. You are not allowed to use computers, iPods, iPads, smart watches, cellphones, notes, or books during this exam.

3. Group presentation (15% of final grade). In teams, you are required to deliver a 50- to 60-minute lecture on one of the topics relevant to individual differences and their assessment. A more elaborate explanation of this group presentation will be given during class. You and your team are required to register for this group presentation. Presentations will take place during class (November 29th, December 1st, December 6th, and December 8th). Missed presentations will result in 0% of the final grade. You will also be requested to evaluate your peers, akin to me evaluating the group presentation.

4. Lab project (30% of the final grade). This lab project will deal with test construction and item analysis. Your task in this assignment is to use the data set provided, in order to construct self-report scales that measure the personality characteristics of the "Five-Factor Model" of personality structure. You will be required to write a 5-page report in which you are required to provide statistics that will allow an evaluation of your scales (and the items of the scales) and appropriately interpret them. A more elaborate explanation of this individual project (paper report) will be given during class (November 17th). Reports are due on December 8th and should be handed in during class, akin to being send via email. Failure to hand in the report on the given due date will be penalized by a 10% reduction in grades per day (including weekends).

Students must achieve a passing grade on both the class and lab components to pass this course. Failure on either the class (mid-term exam, final exam, and group presentation) or the lab component (lab project) will result in a failure for the entire course.

Department of Psychology Grade Distribution Policy

The distribution of grades in Psychology courses (the percentage of A grades, B grades, etc.) will be similar to the distribution of grades in other courses in the Faculty of Arts. The Department monitors the grade distributions of 200-, 300-, and 400-level courses in the Faculty to ensure that the grade distributions in Psychology courses are comparable. Based on these reviews, students can expect that 1) up to 30% of grades in 200- and 300-level psychology courses will be "A" grades (A+, A, and A-), and 2) up to 40% of grades 400-level psychology courses will be "A" grades.

Department of Psychology Criteria for Letter Grades

Psychology professors use the following criteria when assigning letter grades:

A+ grade: *Exceptional Performance*. An A+ grade indicates near perfect performance on multiple choice and short answer exams. For research papers/essays/course projects/presentations, an A+ grade is awarded for exceptional work deserving of special recognition and is therefore not a common grade.

A, A- Range: *Excellent Performance*. Superior understanding of course material. Written work is very strong in terms of critical and original thinking, content, organization, and the expression of ideas, and demonstrates student's thorough knowledge of subject matter.

B Range: *Good Performance*. Above average understanding of course material. Written work shows evidence of critical thinking and attention to organization and editing but could be improved in form and/or content.

C Range: *Satisfactory Performance*. Adequate understanding of course material. Knowledge of basic concepts and terminology is demonstrated. Written work is satisfactory and meets essential requirements but could be improved significantly in form and content. Note: All prerequisites for courses offered by the Faculty of Arts must be met with a minimum grade of C-.

D range: *Marginally meets standards*. Minimal understanding of subject matter. Written work is marginally acceptable and meets basic requirements but requires substantial improvements in form and content. Student has not mastered course material at a level sufficient for advancement into more senior courses in the same or related subjects.

F grade: *Course standards not met*. Inadequate understanding of subject matter. Written work does not meet basic requirements. Student has not demonstrated knowledge of course material at a level sufficient for course credit.

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 or down to the nearest whole percentage (e.g., 89.5% will be rounded up to 90% = A but 89.4% will be rounded down to 89% = A-).

Tentative Lecture Schedule

Ideally in table format with date of class, topics to be covered, and chapters/readings to be read. Due dates for tests/exams and assignments should be included in this schedule as well.

T Sep 13	Course Introduction
R Sep 15	Introduction to psychometrics
T Sep 20	Scaling
R Sep 22	Individual differences, and the nature of variability
F Sep 23	Last day to drop full courses (Multi-term) and Fall Term half courses. No refunds for full courses (Multi-term) or Fall Term half courses after this date.
M Sep 26	Last day to add or swap full courses (Multi-term) and Fall Term half courses. Last day for change of registration from audit to credit or credit to audit.
T Sep 27	Associations: Covariance and correlations
R Sep 29	Introduction to reliability
F Sep 30	Fee payment deadline for Fall Term full and half courses.
T Oct 4	Reliability
R Oct 6	Reliability
M Oct 10	Thanksgiving Day, University closed (except Taylor Family Digital Library, Law, Medical, Gallagher and Business Libraries). No lectures.
T Oct 11	Introduction to validity
R Oct 13	Validity
T Oct 18	Validity
R Oct 20	Factor analysis
T Oct 25	Factor analysis
R Oct 27	Mid-Term exam (Lecture and reading materials from Sep 13 to Oct 20)
T Nov 1	APA style – class by TA
R Nov 3	Ethics in testing – class by TA
T Nov 8	Test construction and item analysis
R Nov 10-13	Reading Days. No lectures.
F Nov 11	Remembrance Day (Observed). University Closed (except Taylor Family Digital Library, Law, Medical, Gallagher and Business Libraries). No lectures.
T Nov 15	Test construction and item analysis
R Nov 17	Test construction and item analysis & introduction to lab project
T Nov 22	Response set & response style
R Nov 24	Test bias
T Nov 29	Student group presentations
R Dec 1	Student group presentations
T Dec 6	Student group presentations
R Dec 8	Student group presentations & explanation final exam
F Dec 9	Fall Term Lectures End. Last day to withdraw with permission from Fall Term half courses.
Dec 12-22	Fall Term Exam Period.

Readings

Burisch, M. (1984). Approaches to personality inventory construction: A comparison of merits. *American Psychologist*, 39(3), 214–227. DOI: 10.1037/0003-066X.39.3.214

DeVellis, R. F. (2012). *Scale development: Theory and applications*. Thousand Oaks, CA: Sage Publications Inc.

Jackson, D. N., Wroblewski, V. R., & Ashton, M. C. (2000). The impact of faking on employment tests: Does forced-choice offer a solution? *Human Performance*, 13(4), 371–388. DOI: 10.1207/S15327043HUP1304_3

Vantilborgh, T., Bidee, J., Pepermans, R., Griep, Y., & Hofmans, J. (2016). Antecedents of psychological contract breach: The role of job demands, job resources, and affect. *PlosOne*, 11(5), e0154696. DOI: 10.1371/journal.pone.0154696

The Burisch (1994) article and selected chapters from the DeVellis (2012) book will be used to explain test construction and item analysis.

The Jackson and colleagues (2000) article will be used to explain response set and response style.

The Vantilborgh and colleagues (2016) article will be used to demonstrate the basic principles of confirmatory factor analysis.

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; no reappraisal of term work is permitted after the 15 days. 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

Students seeking an accommodation based on disability or medical concerns should contact Student Accessibility Services ; SAS will process the request and issue letters of accommodation to instructors. For additional information on support services and accommodations for students with disabilities, visit www.ucalgary.ca/access/. Students who require an accommodation in relation to their coursework based on a protected ground other than disability should communicate this need in writing to their Instructor. The full policy on Student Accommodations is available at http://www.ucalgary.ca/policies/files/policies/student-accommodation-policy_0.pdf.

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 up to 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 during exam make-up hours provided by the department <http://psychology.ucalgary.ca/undergraduate/exam-and-course-information#mues>. If a student cannot write their final exam on the date assigned by the Registrar's Office, they need to apply for a deferred exam http://www.ucalgary.ca/registrar/exams/deferred_final. Under no circumstances will this be accommodated by the department.

Travel During Exams

Consistent with University regulations, students are expected to be available to write scheduled exams at any time during the official December and April examination periods. Requests to write a make-up exam because of conflicting travel plans (e.g., flight bookings) will NOT be considered by the department. Students are advised to wait until the final examination schedule is posted before making any travel arrangements. If a student cannot write their final exam on the date assigned by the Registrar's Office, they need to apply for a deferred exam http://www.ucalgary.ca/registrar/exams/deferred_final. Under no circumstances will this be accommodated by the department.

Freedom of Information and Protection of Privacy (FOIP) Act

The FOIP legislation disallows the practice of having student's retrieve tests and assignments from a public place. Therefore, tests and assignments may be returned to students during class/lab, or during office hours, or will be made available only for viewing during exam review sessions scheduled by the Department. Tests and assignments will be shredded after one year. Instructors should take care to not link students' names with their grades, UCIDs, or other FOIP-sensitive information.

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 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 **Dec 9, 2016**

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 130 and may be contacted at 403-220-5567.

Student Union VP Academic: Phone: 403-220-3911 suvpaca@ucalgary.ca
Student Union Faculty Rep.: arts1@su.ucalgary.ca

Student Ombudsman's Office

The Office of the Student Ombudsmen provides independent, impartial and confidential support for students who require assistance and advice in addressing issues and concerns related to their academic careers. The office can be reached at 403-220-6420 or ombuds@ucalgary.ca
(<http://www.ucalgary.ca/provost/students/ombuds>)

Safewalk

The safewalk program provides volunteers to walk students safely to their destination anywhere on campus. This service is free and available 24 hrs/day, 365 days a year.
Call 403-220-5333.

Important Dates

The last day to drop this course with no "W" notation and **still receive a tuition fee refund** is **September 23, 2016**. Last day for registration/change of registration is **September 26, 2016**. The last day to withdraw from this course is **December 9, 2016**.