
Psychology 425

Human Factors

Fall 2015

Instructor:	Dr. Jeff Caird	Lecture Location:	EDC 284
Phone:	(403) 220-8441	Lecture Days/Time:	Tu, Th/11–12:15
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		Lab. Times:	B01: W 11 – 12:50 B02: F 11 – 12:50
Office:	222 Administration	TA:	Sarah Simmons
Office Hours:	TBA	Office:	67 Administration

Course Description and Goals

This course surveys the theory and data pertaining to the relationships between humans and technology. A research paper and laboratory experiences are integral parts of this course.

Learning Objectives

- 1) Students will understand the knowledge and methods within human factors.
- 2) Apply knowledge and methods to a variety of contexts and problems.
- 3) Search and synthesize knowledge on a specific topic.
- 4) Students will collaborate, discuss, experience, write, present and be tested.

Prerequisites

Psychology 312 – Experimental Design and Quantitative Methods for Psychology

Required Texts (available from the Bookstore and online)

Vicente, K. (2003). *The Human Factor*. Toronto: Vintage Canada.

Wickens, C. D., Lee, J., Lui, Y., & Gorden-Becker, S. (2015). *An Introduction to Human Factors Engineering (3rd ed.)*. Upper Saddle River, N.J.: Pearson Education.

Evaluation

Examinations:

- 1) The mid-term exam on **October 15th (Th)** will cover readings (C1–7) and lectures through Oct. 13th. The midterm is closed book and no materials may be used during the exam.

- 2) The final exam will stress the final half of the course readings (C8–10) and lectures, however, a portion of it will be cumulative (e.g., usability, sensation and perception, etc.). The final exam will be scheduled by the Registrar and will be two hours in length and is again closed book.
- 3) The format of the midterm and final exams is approximately 60% multiple choice and 40% essay. The weighting of each exam is indicated under the Distribution of Grades. A review sheet will be provided prior to each exam with example essays.

Laboratories:

Approximately six laboratories assignments are required and comprise 30% of the final grade. The TA will provide a detailed laboratory handout that outlines each of the laboratories and marking expectations. Students must achieve a passing grade on both the class and lab components to pass this course.

Written Papers:

A major written paper is part of the course requirements. A paper proposal is due during lab on either October 21st and 23rd. The paper proposal should be structured into a one-page outline of the topics that are to be addressed in the review and summarize a minimum of three empirical papers. The Instructor and T.A. will provide guidance in the selection of appropriate topics. Students are expected to select a topic, research it in depth, write a review outside of class, and edit it extensively. APA (6.0) formatted papers shall not exceed 15 pages inclusive of references. Papers are due **November 26th (Th) at 4:00 p.m. No exceptions.** I will not accept emailed papers. Students will give a presentation of their paper for about 5 minutes in class (**Nov. 26th, Dec. 1st, 3rd, 8th**). The presentation should cover the topic reviewed and the important conclusions reached. Missed presentations will be assigned a 0.

Distribution of Grades:

Laboratory Assignments	30%
Paper	20%
Mid-term Exam	20%
Final Exam	30%
Total	100%

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%

Grading Policies:

- 1) Your laboratory reports and research papers are due on the days listed. Late assignments will not be accepted. Exam make-ups and late assignments will be considered for "university valid" excuses and only with sufficient documentation.
- 2) Any tape recordings of lectures must be approved by the lecturer.
- 3) 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 there will be no rounding up of final grades, especially in light of the opportunities students have to increase their final grade via research participation.

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.

Important Dates

Date	Topic/Activity/Readings/Due Date
T Sep 8	Lecture begins.
W, F Sep 9, 11	No Labs. (First week)
F Sep 18	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 21	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.
F Sep 25	Fee payment deadline for Fall Term full and half courses.
M Oct 12	Thanksgiving Day, University closed (except Taylor Family Digital Library, Law, Medical, Gallagher and Business Libraries). No lectures.
R Oct 15	Midterm Exam
W Nov 11	Remembrance Day (Observed). University Closed (except Taylor Family Digital Library, Law, Medical, Gallagher and Business Libraries). No lectures.
Nov 11-15	Reading Days. No lectures.
R Nov 26	Review paper due by 4:00 p.m.
R Nov 26	Paper Presentations
T Dec 1	Paper Presentations
R Dec 3	Paper Presentations
T Dec 8	Paper Presentations
T Dec 8	Fall Term Lectures End. Last day to withdraw with permission from Fall Term half courses.
TBA	Final Exam to be scheduled by Registrar's office.

Approximate Lecture Schedule

	Dates	Topic(s)	Readings
1.	Sept. 8, 10	Introduction and Historical Context	Wickens et al., C1
2.	Sept. 15, 17	Research & Evaluation Methods	Wickens et al., C2, C3
3.	Sept. 22, 24, 29	Sensory Systems	Wickens et al., C4, C5
4.	Oct. 1, 6, 8, 13	Cognition & Decision Making	Wickens et al., C6, C7
5.	Oct. 20, 22	Displays & Controls	Wickens et al., C8, C9
6.	Oct. 27, 29	<i>The Human Factor</i>	Vicente (2003)
7.	Nov. 3, 5	Anthropometry & Workplace Design	Wickens et al., C10
8.	Nov. 10	Aging Human Factors	Notes
9.	Nov. 17, 19	Transportation Human Factors	Notes
10.	Nov. 19, 24	Healthcare Human Factors	Notes
11.	Nov. 26, Dec. 1, 3, 8	Paper Presentations	

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 via the Department Office (Admin 255), 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 8, 2015**

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 [suyvaca@ucalgary.ca](mailto:suypaca@ucalgary.ca)
Student Union Faculty Rep.: Phone: 403-220-3913 socialsciirep@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.su.ucalgary.ca/services/student-services/student-rights.html>).

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 18, 2015**. Last day for registration/change of registration is **September 21, 2015**. The last day to withdraw from this course is **December 8, 2015**.