



Psychology 425

Human Factors

Instructor:	Dr. Jeff Caird	Lecture Location:	Admin. 167
Phone:	(403) 220-9438	Lecture Days/	T/Th
		Time:	2:00 to 3:15 p.m.
Email:	jkcaird@ucalgary.ca	Lab. TA:	Kate Johnston
		Email:	kate.johnston@ucalgary.ca
		Phone:	(403) 220-5910
Office:	Admin. 222	Office:	Admin. 67
Office Hours:	T/Th, 3:15 to 3:45 p.m. By appointment	Office Hours:	TBA, By appointment

Course Description

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.

Prerequisites:

Psychology 312 – Experimental Design and Quantitative Methods for Psychology

Required Text: (Available at the Bookstore and online.)

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

Wickens, C. D., Lee, J., Lui, Y., & Gordon-Becker, S. (2004). *An Introduction to Human Factors Engineering (2nd ed.)*. Upper Saddle River, N.J.: Pearson Education.

Evaluation

Examinations:

- 1) The mid-term exam on **November 1st (Th)** will cover readings and lectures through Oct. 30th.
- 2) The final exam will stress the final half of the course readings 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.
- 3) The format of the midterm and final exams is approximately 60% multiple choice and 40% essay. Exams are closed book. The weighting of each quiz and exam is indicated under the Distribution of Grades. A review sheet will be provided prior to each exam with example essays.

Laboratories:

Approximately five laboratories assignments are required and comprise 25% 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 29th and 31st. 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 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 29th (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. 29th, Dec. 4th or 6th**). The presentation should cover the topic reviewed and the important conclusions reached. Missed presentations will be given a 0.

Distribution of Grades:

Laboratory Assignments	25%
Paper	25%
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) When questions arise about a particular laboratory, paper, or exam score, a student must discuss their work with the instructor or T.A. within two weeks after it has been returned. Failure to pick-up assignments when they are returned is not a valid excuse. After two weeks re-evaluation will not be considered.

- 3) Any tape recordings of lectures must be approved by the lecturer.
- 4) 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.

Approximate Lecture Schedule:

	Dates	Topic(s)	Readings
1.	Sept. 11, 13	Introduction and Historical Context	Wickens et al., C1
2.	Sept. 13, 18, 20	Research & Evaluation Methods	Wickens et al., C2, C3
3.	Sept. 20, 25, 27, 2	Sensory Systems	Wickens et al., C4, C5
4.	Oct. 4, 9, 11, 16	Cognition & Decision Making	Wickens et al., C6, C7
5.	Oct. 18, 23, 25	Accidents and Human Error	Vicente (2003)
6.	Nov. 6, 8	Displays & Controls	Wickens et al., C8, C9
7.	Nov. 15	Anthropometry & Workplace Design	Wickens et al., C10
8.	Nov. 15, 20	Stress & Workload	Wickens et al., C13
9.	Nov. 20	Medical Human Factors	Notes
10.	Nov. 22	Aging Human Factors	Notes
11.	Nov. 27	Transportation Human Factors	Notes
12.	Nov. 27	Technosophy & Humane Factors	Notes

Important Dates

No Labs. (first week)	September 10th, 12th (M, W), 2012
Last day to get a refund	Friday, September 21st, 2012
Last day to change registration	Monday, September 24th, 2012
Midterm Exam	Thursday, November 1st, 2012
Review Paper Due	Thursday, November 29th, 2012

Reading Days. No lecture.	Tuesday, November 13 th , 2012
Last day to allocate research credits	Fri., December 7 th , 2012
Last Day of Lectures	Friday, December 7 th , 2012
Last Day to Withdraw	Friday, December 7 th , 2012
Final Exam	To be scheduled by Registrar's office

Written Assignments

The written paper and laboratories are to be handed to the instructor/TA or placed in the green box outside 275 prior to the due date and time. The written review paper must be submitted as hardcopy. No late assignments will be accepted (i.e., a 0 will be assigned).

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.

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 275), 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

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 7, 2012**.

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

[suyaca@ucalgary.ca](mailto:suypaca@ucalgary.ca)

Student Union Faculty Rep.: Phone: 403-220-3913

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 September 21, 2012**. Last day for registration/change of registration is **September 24, 2012**. The last day to withdraw from this course is **December 7, 2012**.