

Red Deer College Department of Psychology Psychology 425 – Human Factors

Winter 2011 – Course Outline

Instructor: Dr. Jeff Caird

Office: Rm. 2506 H **Hours:** M, 11:30 to 11:55 a.m.,

by appointment

Telephone: (403) 357-3675, RDC E-mail: <u>ikcaird@ucalgary.ca</u>

(403) 220-8441, Calgary Lec 01 M, 12:00 to 2:50 p.m., Main 2301

Lab Instructor: Aimee Pearson

Office: Rm. 2506 H Hours: TBA

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(403) 220-5910, Calgary Lab. M, 3:00 to 4:50 p.m., Main 2103

Course Description

This course surveys the theory and data pertaining to the relationships between human and machine behavior. A research paper is an integral part of this course.

Prerequisite

Psychology 312 – Experimental Design and Quantitative Methods for Psychology

Texts: (Available at the Bookstore and online.)

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

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

Evaluation

Examinations:

- An essay quiz will be given on January 31st (M) that covers Vicente (2003).
- 2) The mid-term exam on **February 28th (M)** will cover readings and lectures through Feb. 14th (M).
- 3) 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.

4) The format of exams is approximately 60% multiple choice and 40% essay. Exams are closed book. The weighting of each quiz and exam is indicated below.

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 February . The paper proposal should be structured into a one-page outline of the topics that are to be addressed in the review. 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 **April 4th (M) 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 or laboratory (**April 11th, M**). The presentation should cover the topic reviewed and the important conclusions reached.

Distribution of Grades:

Component	Percent of Final Grade			
Laboratory Assignments	25%			
Quiz	5%			
Paper	25%			
Mid-term Exam	20%			
Final Exam	25%			

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%

Feedback will be liberally provided so that you will know how you are performing in the class. For example, each component will be assigned a numerical score and a letter grade (e.g., 171 out of 200 points for a B on the mid-term). 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.

Class Policies

- 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. Make-up exams will be essay only and more difficult than the exam given to the whole class.
- 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 and students in this course may be asked to participate in departmentally approved studies.
- 4) 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. Students should examine sections of the University Calendar, which present a Statement of Intellectual honesty and definitions and penalties associated with Plagiarism/Cheating/and Other Academic Misconduct.

Schedule of Lecture Topics and Assigned Readings:

Topics to be covered:

2. Research & Evaluation Methods

3. Sensory Systems

4. Cognition & Attention

Decision Making
 Displays & Controls
 Workplace Design

8. Human Error and Accidents

9. Aging Human Factors

10. Transportation Human Factors11. Healthcare Human Factors

12. Technosophy & Humane Factors

Final Examination: TBA

Important Dates

No Labs. (first week)
Last day to get a refund
January 10th (M), 2011
January 21st, 2011

QuizMonday, January 31st, 2011Midterm ExamMonday, February 28th, 2011Paper DueMonday, April 4th, 2011Family Day.Monday, February 21st, 2011Last Day of LecturesMonday, April 11th, 2011

Last Day to Withdraw April 15th, 2011

Final Exam To be scheduled by Registrar's office

Written Assignments

Laboratories are to be handed to the instructor or placed in the green box outside 275 prior to the due data 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.

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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 fourteen (14) days after the start of this course.

Important Dates (RED DEER)

The last day to drop this course with no "W" notation and **still receive a tuition fee refund** is **Jan. 21st, 2011**. Last day for registration/change of registration is **Jan 24th, 2011**. The last day to withdraw from this course is **April 15th, 2011**.