

## **Human Factors in Industrial Design**

Kinesiology 486

Section: D100

Term: 2007 Fall

Instructor: Anne-Kristina Arnold (aarnolda@sfu.ca)

Burnaby Office #: K8627 - Phone: 291-3615

HC Office: HC2421 - Phone: 291-5213

Discussion Topics: Location: Burnaby

Lecture: Tuesday 9:30 11:20

Lab: Thursday 9:30 11:20

### COURSE DESCRIPTION

This course is primarily designed for students who are following the Ergonomics stream of the undergraduate program, but is also open to students with a general interest in the design of useable, safe and comfortable consumer products. The objective of the course is to explain how ergonomics principles are incorporated into the design process in order to improve safety, comfort, usability and efficiency for the everyday user. Various case studies will be used to illustrate applied design. The course consists of a 2-hour lecture, 2-hour lab format. Lecture material will cover theoretical background material and labs will allow hands-on experience in applying ergonomics techniques. Lab reports constitute a significant proportion of term marks. Topics covered include:

Introduction to the design process

Tools and techniques

Product design

Design of controls and displays

Design evaluation

Design of manual materials handling

Design of hand-held devices

Workplace design

## Human Factors in Industrial Design

Interface design

Professional ethics

Usability Evaluation

Grading: Kin 486 Marking Scheme:

Midterm exam - 15%

Final Exam - 20%

Lab Reports (9 @ 5%) - 45%

Lab 10 Presentation (1@10%) - 10%

Lab 10 Report - 10%

Late assignments: Course assignments must be handed in by the due date to receive full grade. Late work will be assessed a penalty of 5% per day.

Examinations: Students will only be allowed to write a make-up exam if clear medical evidence of inability to write the scheduled exam is presented. Please note that the university provides the exam schedule with registration material. Therefore, a student may not write the final exam at another time except due to direct exam conflict, illness or a family emergency.

Required Texts: A courseware package will be available for purchase.

Recommended Texts:

Materials/Supplies:

Prerequisite/Corequisite: Prerequisites: Kin 180 plus KIN 380 or KIN 383.

Notes: Class begins September 4

Failure to attend an examination

Students who miss examinations due to exceptional circumstances (such as serious illness or compassionate reasons) are required to obtain a physician's certificate, whereby the physician states that you were unable to write your midterm or final on the set date due to a medical condition beyond your control, or other supporting documents in order to obtain consideration in the course. Such documents must be filed with the School Director (via the Kinesiology office) or Registrar within four calendar days of the date on which the examination was to have been written. Exceptional circumstances must be approved by the Undergraduate Program Committee in order for a student to receive consideration.

## Human Factors in Industrial Design

Students must check the exam schedule when making course selections. Students are reminded that final examinations may be scheduled at any time during the examination period and that students should avoid making travel or employment arrangements for this period.

In the event of a missed midterm or final examination Dr. White reserves the right to give an oral examination of the material.

### Academic honesty and student conduct

Academic honesty is a condition of continued membership in the University community.

Academic dishonesty, including plagiarism or any other form of cheating is subject to serious academic penalty, i.e. failure on an assignment, failure in a course, suspension or expulsion from the University.

The University codes of student conduct and academic honesty are contained in policies T10.01 and T10.02 which are available in the Course Timetable and on the Web via <http://www.reg.sfu.ca>.

July 2000

This outline is derived from a course outline repository database that was maintained by SFU Student Services and the University's IT Services Department. The database was retired in 2014 and the data migrated to SFU Archives in 2015.