SAULT COLLEGE OF APPLIED ARTS AHD TECHNOLOGT

SAULT STE. MARIE, ON

COURSE OUTLINE

COURSE TITLE: MACHINE DESIGN

CODE NO. : MCH 307 SEMESTER: FIVE

PROGRAM: MECHANICAL TECHNOLOGY

AUTHOR: COLIN RISING

DATE: SEPTEMBER 1993 PREVIOUS OUTLINE DATED: ^SEPTEMBER 1992

APPROVED : V*~ J LXL L^/Xtfc A f 3 '&<f- //

CHAIRPERSON \ DATE

MACHINE DESIGN **WCH** 307

Course **Name** **Course Number**

PHILOSOPHY/GOALS:

To have the student aware of, and able to solve fundamental problems of design with respect to: lubrication, bearings, and stress analysis including compound stress, complex stress, Mohrs circle.

METHOD OF ASSESSMENT (GRADING METHOD):

A+	91-100%
A	80-90
B	69-79
C	55-68
R	less than 55%

Grading will be based on logical solutions, layout, sketches, diagrams and general tidiness of presentation.

TESTS:

a. There will be a minimum of one week's notice for tests.

b. Tests will be held at intervals throughout the semester.

c. In the event of a'student being absent for a test, he/she will be given an opportunity to write a test of similar content at a time suitable to the teacher,

d. If a student fails a test, an opportunity will be given to that student to write a make up test at a time designated by the teacher.

e. An 80% attendance record is required for a student to be eligible to write a make-up test.

f. The maximum grade a student will be given for a make-up test will be a "C".

ASSIGNMENTS:

a. All assignments must be handed in for marking on the specified date and time.

b. Grades for assignments handed in late will be reduced according to the degree of lateness.

c. Late assignments will not be accepted if they are submitted after those that were submitted on time have been marked.

d. The marking of assignments may be on a random basis.

DISTRIBUTION OF MARKS:

Tests	70%
Assignments	20%
Attitude	10%

TEXTBOOK(S):

Mechanical Engineering Design - Shigley (McGraw-Hill)

REFERENCE TEXT:

"Design of Machine Elements" - Spotts (Prentice-Hall)

"Design of Machines Elements" - Faires (McMillan)

"Machine Design" - Myatt (McGraw-Hill)

TOPICS:

Lubrication

Journal Bearings

Anti-Friction Bearings

Stress Analysis

Compound Stress

Complex Stress

Mohrs Circle of Stress