

SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY

SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

Course Title MACHINE DESIGN

Code No. : MCH 307

Program: MECHANICAL TECHNOLOGY

Semester: FIVE

Date : SEPTEMBER 1992

Author: COLIN RISING

New: Revision: ^X

APPROVED f If u ^ r u dtZ
 Chairperson Q

Date 9*~a?-o^

MACHINE DESIGN

MCH 307

Course Name

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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" - Faies (McMillan)

"Machine Design" - Myatt (McGraw-Hill)

TOPICS :

Lubrication

Journal Bearings

Anti-Friction Bearings

Stress Analysis

Compound Stress

Complex Stress

Mohr's Circle of Stress