

SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY
SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

COURSE TITLE: OCCUPATIONAL HEALTH AND SAFETY
CODE NO.: SAF 200-3 SEMESTER:
PROGRAM: ENVIRONMENTAL ENGINEERING
AUTHOR: D. HEGGART/ L. VANDERZWET
DATE: AUGUST 1991 PREVIOUS OUTLINE DATED: JUNE 1989

APPROVED:

DEAN



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OCCUPATIONAL HEALTH & SAFETY

SAF 200-3

COURSE NAME

COURSE NUMBER

TOTAL CREDIT HOURS: 48

PREREQUISITE(S): Admission to Environmental Engineering Program

I. PHILOSOPHY/GOALS:

SAF200-3 is an introductory level course taught to students in Environmental Engineering. The course looks at the Provincial Legislation and related regulations that apply to workers. In addition, safe work practices will be studied as they apply to sampling, trenching and construction.

II. TOPICS TO BE COVERED:

UNIT 1 INTRODUCTION TO OCCUPATIONAL HEALTH & SAFETY.

- differentiate between Health & Safety
- role of Industrial Hygiene
- sampling & monitoring
- Safety Audit

UNIT II LEGISLATION AND RELATED REGULATIONS

- Occupational Health & Safety Act
- Regulations for Industrial, Construction, Mining
- Workplace Hazardous Material Information WHMIS
- Confined Space Entry
- Regulations for designated substances
- MSDS

UNIT III CHEMICAL & PHYSICAL HAZARDS

- Identification of Chemical Hazards, Hazard Rating NFPA
- Toxicity as Hazard, Acute as chronic TLV, STEL
- Evaluation of chemical hazards
- Fire & explosion, LEL, UEL
- Identification of physical hazards

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II. TOPICS TO BE COVERED: (cont'd)

UNIT IV SAFE WORK PRACTICES

- Confined Space Entry (class A, B, C)
- Ventilation
- Personal Protective Equipment
 - clothing
 - respirators
 - hearing
- Trenching

UNIT IV RESPIRATORY PROTECTION I

Identification of Hazard
Hazard assessment
Hazard Control
Respiratory Selection
Worker Training
Maintenance Procedures
Medical Surveillance
Program Evaluation

VIDEO

- Respirators - Norton (18min)
- Air Purifying Respirators (19min)
- Atmosphere Supplying Respirators (19min)
- Respirators for Health & Safety (10min)

RESPIRATORY PROTECTION II

- Types of respirators
- Limitations
- Protection Factors
- Case histories

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III. EVALUATION METHODS:

The final grade is the sum of all assignments, tests and final examination.

GRADING:

90% > A+

80% > A

70% > B

60% > C

60% < R

IV. REQUIRED STUDENT RESOURCES:

Fundamentals of Industrial Hygiene by Julian B. Olishifski; National Safety Council

Occupational Health & Safety Act and WHMIS Regulation.

Regulations for Industrial Establishment.

Confined space Hazards and Control Reference Manual IAPA.

V. SPECIAL NOTES:

Students with special needs (e.g. physical limitations, visual impairments, hearing impairments, learning disabilities) are encouraged to discuss required accommodations confidentially with the instructor.

Your instructor reserves the right to modify the course as he/she deems necessary to meet the needs of students.