SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ONTARIO



COURSE OUTLINE

COURSE TITLE: INDUSTRIAL HEALTH AND SAFETY

CODE NO.: ENV102 SEMESTER: 1

PROGRAM: MECHANICAL PROGRAMS

AUTHOR: Cam Pucci – www.campucci@shaw.ca

DATE: Aug/06 **PREVIOUS OUTLINE DATED:** Jan/06

APPROVED:

DEAN DATE

TOTAL CREDITS:

PREREQUISITE(S): none

HOURS/WEEK: 2

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Health and Safety ENV102

I. COURSE DESCRIPTION:

This is an introductory course for all those interested in pursuing a future in an industrial field from the standpoint of industrial health and safety practices. The course examines provincial legislation and other related regulations that define the workers rights and responsibilities. Recognition, evaluation, control methods, safe work practices, WHMIS, confined spaces, lockouts, and fire safety are also examined.

II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

Upon successful completion of this course, the student will demonstrate the ability to:

- 1. Integrate health and safety procedures into the work environment. Potential Elements of the Performance:
 - Differentiate between the terms health and safety
 - Differentiate between accidents and injury
 - List the functions of the industrial hygienist
 - List the four elements of a successful health and safety program
 - List and explain the causes of accidents and injuries
 - Identify the major items on a safety policy
 - Perform accident investigations and prepare an accident report
 - Proper method of performing a safety audit
 - Differentiate between sampling and monitoring
- 2. Relate legislation regulations from Occupational Health and Safety <u>Potential Elements of the Performance</u>:
 - Explain the four basic rights workers have under the OHSA
 - Identify who is covered the OHSA and who is not
 - Sate when and how a Joint health and safety committee is required
 - List the rights and responsibilities of Joint health and safety committee members, employers, certified members and workers
 - Explain the procedures and steps to be followed under the right to refuse work and the right to stop work
 - Explain how WHMIS information is transmitted to workers
 - Name the six categories of controlled substances
 - List and briefly explain the responsibilities of the supplier, employer, and the worker under WHMIS

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- 3. Understand and demonstrate the ability to deal with hazards Potential Elements of the Performance:
 - Explain the steps dealing with hazards
 - List the factors that determine the degree of hazard
 - Differentiate between the terms hazardous and toxic
 - Differentiate between the terms acute and chronic
 - Define pertinent terms dealing with health hazards
 - Identify physical hazards
 - Identify a knowledge of the process by which noise is detected and measured
 - Indicate rules of thumb if there is excessive noise
 - Demonstrate a knowledge of methods used to relieve cold stress and heat strain
- 4. Introduce methods of control, which will reduce exposure to hazards Potential Elements of the Performance:
 - Identify work practices and controls that can reduce exposure levels
 - Identify different types of protective devices used to minimize exposure to hazards
 - Define general ventilation and exhaust systems designed to maintain safe work environments
 - Differentiate between a quantitative and a qualitative respirator system

III. TOPICS:

- 1. Introduction to Engineering Safety
- 2. Legislation and Related Regulations
- 3. Chemical and Physical Hazards
- 4. Safe Work Practices
- 5. Respiratory Protection
- 6. WHMIS
- 7. Confined Spaces
- 8. Basic Fire Safety

IV. REQUIRED RESOURCES/TEXTS/MATERIALS: Industrial Health and Safety Study Guide

V. EVALUATION PROCESS/GRADING SYSTEM:

Activities and Assignments 20% Attendance/Attitude 10% Tests 50% Final Exam 20%

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The following semester grades will be assigned to students in postsecondary courses:

	5 (1.11)	Grade Point
Grade	<u>Definition</u>	Equivalent
A+	90 – 100%	4.00
Α	80 – 89%	4.00
В	70 - 79%	3.00
С	60 - 69%	2.00
D	50 – 59%	1.00
F (Fail)	49% and below	0.00
CR (Credit)	Credit for diploma requirements has been awarded.	
S	Satisfactory achievement in field /clinical	
	placement or non-graded subject area.	
U	Unsatisfactory achievement in	
	field/clinical placement or non-graded	
	subject area.	
Χ	A temporary grade limited to situations	
	with extenuating circumstances giving a	
	student additional time to complete the	
	requirements for a course.	
NR	Grade not reported to Registrar's office.	
W	Student has withdrawn from the course	
	without academic penalty.	

VI. SPECIAL NOTES:

Special Needs:

If you are a student with special needs (e.g. physical limitations, visual impairments, hearing impairments, or learning disabilities), you are encouraged to discuss required accommodations with your professor and/or the Special Needs office. Visit Room E1101 or call Extension 2703 so that support services can be arranged for you.

Retention of Course Outlines:

It is the responsibility of the student to retain all course outlines for possible future use in acquiring advanced standing at other postsecondary institutions.

Plagiarism:

Students should refer to the definition of "academic dishonesty" in *Student Rights and Responsibilities*. Students who engage in "academic dishonesty" will receive an automatic failure for that submission and/or such other penalty, up to and including expulsion from the course/program, as may be decided by the professor/dean. In order to protect students from inadvertent plagiarism, to protect the copyright of the material referenced, and to credit the author of the material, it is the policy of the department to employ a documentation format for referencing source material.

Course Outline Amendments:

The professor reserves the right to change the information contained in this course outline depending on the needs of the learner and the availability of resources.

Substitute course information is available in the Registrar's office.

<include any other special notes appropriate to your course>

VII. PRIOR LEARNING ASSESSMENT:

Students who wish to apply for advanced credit in the course should consult the professor. Credit for prior learning will be given upon successful completion of a challenge exam or portfolio.

VIII. DIRECT CREDIT TRANSFERS:

Students who wish to apply for direct credit transfer (advanced standing) should obtain a direct credit transfer form from the Dean's secretary. Students will be required to provide a transcript and course outline related to the course in question.