SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ONTARIO



CICE COURSE OUTLINE

COURSE TITLE: Industrial Health and Safety CODE NO.: ENV102 SEMESTER: Fall MODIFIED CODE: ENV0102 **PROGRAM**: Pre-Trades and Technology Mechanical Engineering Technician – Manufacturing Mechanical Techniques - Millwright Mechanical Techniques - Machine Shop AUTHOR: Cam Pucci MODIFIED BY: Kim Jefferies, Learning Specialist CICE Program DATE: **PREVIOUS OUTLINE DATED:** Sept Sept 2014 2015 **APPROVED:** "Angelique Lemay" Sept 2015 Dean DATE TOTAL CREDITS: Two PREREQUISITE(S): HOURS/WEEK: 2hrs/wk

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I. COURSE DESCRIPTION:

This is an introductory course for all those interested in industrial practices from the standpoint of industrial hygiene and industrial health and safety. CICE students, with assistance from a Learning Specialist, will acquire basic knowledge with regard to pertinent legislation, industry and workers' rights and responsibilities, recognition, evaluation and control methods and safe working practices.

II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

Goal: Introduce Health and Safety to participants who are interested in pursuing a future in an Industrial Field.

Objectives: Examine safety practices, regulations and standards, and define workers rights and responsibilities by recognizing, evaluating and controlling workplace hazards. Participants will review safe work practices, WHMIS, confined spaces, lockout, and fire safety.

Elements: Participants will be able to:

- Relate the impact of legislation on Occupational Health and Safety
- Understand and demonstrate the ability to recognize, assess and control hazards
- Understand the principles of personal protection in the control of hazards
- Improve health and wellness in the work environment

Upon completion of this course, the CICE student, with the assistance of a Learning Specialist will demonstrate the basic 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 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
- Review accident reporting and the preparation of an accident report
- Review the safety audit process
- Differentiate between sampling and monitoring

2. Relate legislation from The Occupational Health and Safety Act and Regulations.

Potential Elements of the performance

- Explain the basic rights of workers under the OHSA
- Identify who is covered and who is not
- State when and how joint committee is required
- List the roles of JHSC members, employers, certified members and workers
- Explain the process for the steps to follow under the right to refuse work and the right to stop work
- Discuss WHMIS and explain how information is relayed to workers.
- Name the categories of controlled substances and review the Regulation 833 Biological And Chemical Agents.
- List and explain the responsibilities of the supplier, employer and worker under WHMIS

3. Understand and demonstrate the ability to deal with hazards. Potential Elements of the performance

- Explain the steps to deal with hazards
- List the factors to determine the degree of hazard
- Differentiate between the terms hazardous and toxic
- Differentiate between the terms acute and chronic
- Define the terms relates to health hazards
- Identify physical hazards
- Understand noise production, measurement and control
- Understand how to protect from exposure to noise
- Discuss heat stress and cold stress and how to be protected

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 protective devices to minimize exposure to hazards
- Define general ventilation and exhaust systems to maintain safe work environments
- Differentiate between qualitative and quantitative respirator systems
- Review lock out and isolation systems

Topics

- 1. Introduction to engineering safety
- 2. Legislation/ Internal Responsibility System
- 3. Chemical and physical hazards
- 4. Assessing and controlling hazards
- 5. Safe work practices, emergency evacuation
- 6. Electrical/mechanical Hazards
- 7. Slips, trips, falls
- 8. Personal Protective Equipment
- 9. WHMIS
- 10. Confined space
- 11. Basic fire safety and emergency evacuation

IV. **REQUIRED RESOURCES/TEXTS/MATERIALS:**

- Pocket Ontario Health and Safety Act and Regulations by Carswell
- Access to Internet
- E Laws\current consolidated law\Occupational Health and Safety Act, Regulations for Industrial Establishments

V. **EVALUATION PROCESS/GRADING SYSTEM:**

20%
10%
50%
20%

The following semester grades will be assigned to students:

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Definition	Grade Point Equivalent
90 – 100% 80 – 89%	4.00
70 - 79%	3.00
60 - 69%	2.00
50 – 59%	1.00
49% and below	0.00
Credit for diploma requirements has been awarded.	
Satisfactory achievement in field /clinical placement or non-graded subject area.	
	Definition 90 – 100% 80 – 89% 70 - 79% 60 - 69% 50 – 59% 49% and below Credit for diploma requirements has been awarded. Satisfactory achievement in field /clinical placement or non-graded subject area.

III.

U	Unsatisfactory achievement in field/clinical
	placement or non-graded subject area.
Х	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.

If a faculty member determines that a student is at risk of not being successful in their academic pursuits and has exhausted all strategies available to faculty, student contact information may be confidentially provided to Student Services in an effort to offer even more assistance with options for success. Any student wishing to restrict the sharing of such information should make their wishes known to the coordinator or faculty member.

VI. SPECIAL NOTES:

Attendance:

Sault College is committed to student success. There is a direct correlation between academic performance and class attendance; therefore, for the benefit of all its constituents, all students are encouraged to attend all of their scheduled learning and evaluation sessions. This implies arriving on time and remaining for the duration of the scheduled session.

VI. COURSE OUTLINE ADDENDUM:

The provisions contained in the addendum located in D2L and on the portal form part of this course outline.

Addendum:

Further modifications may be required as needed as the semester progresses based on individual student(s) abilities and must be discussed with and agreed upon by the instructor.

CICE Modifications:

Preparation and Participation

- 1. A Learning Specialist will attend class with the student(s) to assist with inclusion in the class and to take notes.
- 2. Students will receive support in and outside of the classroom (i.e. tutoring, assistance with homework and assignments, preparation for exams, tests and quizzes.)
- 3. Study notes will be geared to test content and style which will match with modified learning outcomes.
- 4. Although the Learning Specialist may not attend all classes with the student(s), support will always be available. When the Learning Specialist does attend classes he/she will remain as inconspicuous as possible.

A. Tests may be modified in the following ways:

- 1. Tests, which require essay answers, may be modified to short answers.
- 2. Short answer questions may be changed to multiple choice or the question may be simplified so the answer will reflect a basic understanding.
- 3. Tests, which use fill in the blank format, may be modified to include a few choices for each question, or a list of choices for all questions. This will allow the student to match or use visual clues.
- 4. Tests in the T/F or multiple choice format may be modified by rewording or clarifying statements into layman's or simplified terms. Multiple choice questions may have a reduced number of choices.

B. Tests will be written in CICE office with assistance from a Learning Specialist.

The Learning Specialist may:

- 1. Read the test question to the student.
- 2. Paraphrase the test question without revealing any key words or definitions.
- 3. Transcribe the student's verbal answer.
- 4. Test length may be reduced and time allowed to complete test may be increased.

C. Assignments may be modified in the following ways:

- 1. Assignments may be modified by reducing the amount of information required while maintaining general concepts.
- 2. Some assignments may be eliminated depending on the number of assignments required in the particular course.

The Learning Specialist may:

- 1. Use a question/answer format instead of essay/research format
- 2. Propose a reduction in the number of references required for an assignment
- 3. Assist with groups to ensure that student comprehends his/her role within the group
- 4. Require an extension on due dates due to the fact that some students may require additional time to process information
- 5. Formally summarize articles and assigned readings to isolate main points for the student
- 6. Use questioning techniques and paraphrasing to assist in student comprehension of an assignment

D. Evaluation:

Is reflective of modified learning outcomes.