SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ONTARIO



COURSE OUTLINE

COURSE TITLE: Industrial Health and Safety

CODE NO.: ENV 102 SEMESTER: 1

PROGRAM: Pre-Trades & Technology

and Mechanical Programs

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DATE: Sept. 2009 **PREVIOUS OUTLINE** Jan.

DATED: 2009

APPROVED:

"Corey Meunier" CHAIR

DATE

TOTAL CREDITS: 2

PREREQUISITE(S): None

HOURS/WEEK: 2

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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:

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 students 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 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 six categories of controlled substances
- 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

III.

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:

Carswell 2008 Pocket guide to OHS, Ontario, Access to Internet, E Laws\current consolidated law\Occupational Health and Safety Act, Regulations for Industrial Establishments

V. EVALUATION PROCESS/GRADING SYSTEM:

Activities and assignments 20% Attendance, Attitude and tests 50% Final exam 30%

The following semester grades will be assigned to students:

Grade	Definition	Grade Point Equivalent
A+ A	90 – 100% 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.	
X	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:

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.

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.

Prior Learning Assessment:

Students who wish to apply for advance credit transfer (advanced standing) should obtain an Application for Advance Credit from the program coordinator (or the course coordinator regarding a general education transfer request) or academic assistant. Students will be required to provide an unofficial transcript and course outline related to the course in question. Please refer to the Student Academic Calendar of Events for the deadline date by which application must be made for advance standing.

Credit for prior learning will also be given upon successful completion of a challenge exam or portfolio.

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

Disability Services:

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

Communication:

The College considers **WebCT/LMS** as the primary channel of communication for each course. Regularly checking this software platform is critical as it will keep you directly connected with faculty and current course information. Success in this course may be directly related to your willingness to take advantage of the **Learning Management System** communication tool.

Plagiarism:

Students should refer to the definition of "academic dishonesty" in *Student Code of Conduct*. A professor/instructor may assign a sanction as defined below, or make recommendations to the Academic Chair for disposition of the matter. The professor/instructor may (i) issue a verbal reprimand, (ii) make an assignment of a lower grade with explanation, (iii) require additional academic assignments and issue a lower grade upon completion to the maximum grade "C", (iv) make an automatic assignment of a failing grade, (v) recommend to the Chair dismissal from the course with the assignment of a failing grade. 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.

Student Portal:

The Sault College portal allows you to view all your student information in one place. **mysaultcollege** gives you personalized access to online resources seven days a week from your home or school computer. Single log-in access allows you to see your personal and financial information, timetable, grades, records of achievement, unofficial transcript, and outstanding obligations. Announcements, news, the academic calendar of events, class cancellations, your learning management system (LMS), and much more are also accessible through the student portal. Go to https://my.saultcollege.ca.

Electronic Devices in the Classroom:

Students who wish to use electronic devices in the classroom will seek permission of the faculty member before proceeding to record instruction. With the exception of issues related to accommodations of disability, the decision to approve or refuse the request is the responsibility of the faculty member. Recorded classroom instruction will be used only for personal use and will not be used for any other purpose. Recorded classroom instruction will be destroyed at the end of the course. To ensure this, the student is required to return all copies of recorded material to the faculty member by the last day of class in the semester. Where the use of an electronic device has been approved, the student agrees that materials recorded are for his/her use only, are not for distribution, and are the sole property of the College.

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.