

SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ONTARIO



Sault College

COURSE OUTLINE

COURSE TITLE: Construction Projects & Facilities Maintenance
CODE NO. : NRT 258 **SEMESTER:** 1
PROGRAM: Park Operations Skills Certificate
AUTHOR: John Clement
DATE: June 2008 **PREVIOUS OUTLINE DATED:** Dec 07
APPROVED: "Brian Punch"

Chair **DATE**

TOTAL CREDITS: 4
PREREQUISITE(S): None
HOURS/WEEK: 4 hours per week

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For additional information, please contact Brian Punch
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I. COURSE DESCRIPTION:

Students will gain hands on experience in basic construction and maintenance of wooden structures and shelters in the field and in the workshop by participating in various building and / or repairing projects. Basic construction principles, routine maintenance, repair of outdoor structures, moisture control, safe use of hand and power tools, building materials, Building Code of Canada, electrical and plumbing topics will be covered. In addition to the various construction projects, students will perform seminars on various aspects of construction and maintenance to enhance their learning.

II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

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

1. Safely use various construction tools when building and or maintaining outdoor structures. This outcome is worth approximately 10 % of final grade.
Potential Elements of the Performance:
 Participate in various building projects.
 Describe how to use various construction tools safely.
 Demonstrate the proper use of personal protective equipment when using various construction tools.
2. Recognize various building materials used in construction and maintenance of outdoor facilities and structures. This outcome is worth approximately 5 % of final grade.
Potential Elements of the Performance:
 Participation in various building projects.
 Review and explain different types of weather proofing systems used to maintain outdoor wooden structures.
 Describe various building materials by touring a building materials store.
 Research the potential limitations of various building materials used in construction of outdoor wooden structures.
3. Explain the significance of the building code of Canada when constructing outdoor structures. This outcome is worth approximately 5% of final grade.
Potential Elements of the Performance:
 Review and discuss the building code of Canada as it impacts on the construction of outdoor facilities and structures.
 Review and discuss local bylaws and building permit requirements.

4. Describe basic construction principles as they relate to building and maintaining outdoor structures and shelters. This outcome is worth approximately 40% of final grade.
Potential Elements of the Performance:
Participation in various building projects.
Review and present findings on basic construction principles in a seminar / workshop format.
5. Construct, repair and maintain outdoor wooden structures. This outcome is worth approximately 40% of final grade.
Potential Elements of the Performance:
Participation in various building projects.
Describe how wood rots, and explain the steps require to prevent and or delay decay.
Explain the role of moisture in the decaying of wooden structures.
Explain ultraviolet degradation in outdoor structures.
Describe how to construct various outdoor structures.

III. TOPICS:

1. Tools Types and Safety
2. Building Materials
3. Building Code of Canada
4. Construction Principles
5. Wood Structure Repairs and Maintenance
6. Construction Projects

IV. REQUIRED RESOURCES/TEXTS/MATERIALS: None**V. EVALUATION PROCESS/GRADING SYSTEM:**

| | |
|---|-------------------|
| <i>Construction Projects Participation</i> | <i>50%</i> |
| <i>Construction Principles Seminars (2 @ 20%)</i> | <i>40%</i> |
| <i>Final Test</i> | <u><i>10%</i></u> |
| | <i>100%</i> |

The following semester grades will be assigned to students:

| Grade | <u>Definition</u> | <i>Grade Point Equivalent</i> |
|--------------|--------------------------|--------------------------------------|
| A+ | 90 – 100% | 4.00 |
| A | 80 – 89% | 3.00 |
| B | 70 - 79% | 2.00 |
| C | 60 - 69% | 1.00 |

| | | |
|-------------|--|------|
| 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:

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 703 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.

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*. 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.

A significant component of the learning in this course will come from participation in the construction and repairing of various outdoor structures. Ability to dress for and work in all kinds of weather is required. Hard hats, steel toed boots, reflective vests and work gloves are required. Due to the potentially dangerous nature of some of the tools used in this course, horseplay, use of alcohol, or illegal drugs while participating in construction projects will not be tolerated and may result in dismissal. If you are on medication that may impair your performance, it is strongly recommended that you contact your professor prior to participation.

VII. 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.

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