## SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

## SAULT STE. MARIE, ONTARIO



## CICE COURSE OUTLINE

| COURSE TITLE:  | Construction Projects & Facilities Maintenance                      |                  |             |                  |
|--|---|------------------|-------------|------------------|
| CODE NO. :<br>MODIFIED CODE:   | NRT258<br>NRT0258   |                  | SEMESTER:   | Fall             |
| PROGRAM:   | Adventure Recreation and Parks Technician                           |                  |             |                  |
| AUTHOR:<br>MODIFIED BY:  | Lawrence Foster<br>Karen Lapointe, Learning Specialist CICE Program |                  |             |                  |
| DATE:  | Sept. 2010  | PREVIOUS OUT     | LINE DATED: | Sept.            |
| APPROVED:  |   | "Angelique Lemay | ,,          | 2009<br>Sept. 10 |
|  | CHAIF   | R, COMMUNITY SE  | ERVICES     | DATE             |
| TOTAL CREDITS:   | 4   |                  |             |                  |
| PREREQUISITE(S):   | None  |                  |             |                  |
| HOURS/WEEK:  | 4 hours per   | week             |             |                  |
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NRT0258

**Construction Projects & Facilities** Maintenance

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.

#### П. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

Upon successful completion of this course, the CICE student with the assistance of the Learning Specialist, 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.

Recognize various building materials used in construction and 2. 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.

Explain the significance of the building code of Canada when 3. constructing outdoor structures. This outcome is worth approximately 5% of final grade.

Potential Elements of the Performance:

Demonstrate awareness of the building code of Canada as it impacts on the construction of outdoor facilities and structures.

Demonstrate awareness of local bylaws and building permit requirements.

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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.

 Construct, repair and maintain outdoor wooden structures. This outcome is worth approximately 40% of final grade. <u>Potential Elements of the Performance</u>: 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:

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

The following semester grades will be assigned to students:

| Grade    | Definition            | Grade Point<br><u>Equivalent</u> |
|----------|-----------------------|----------------------------------|
| A+<br>A  | 90 – 100%<br>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                             |

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| CR (Credit) | Credit for diploma requirements has been  |
|-------------|---|
| S           | Satisfactory achievement in field /clinical   |
| U           | placement or non-graded subject area.<br>Unsatisfactory achievement in  |
|             | field/clinical placement or non-graded  |
| Х           | A temporary grade limited to situations<br>with extenuating circumstances giving a<br>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:

#### 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. It is the departmental policy that once the classroom door has bee enclosed, the learning process has begun. Late arrivers will not be granted admission to the room.

#### 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.

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#### 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.

#### Dress Code and Conduct:

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. COURSE OUTLINE ADDENDUM:

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

#### 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.