SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ONTARIO



CICE COURSE OUTLINE

COURSE TITLE: Trail Construction and Facility Maintenance

CODE NO.: NRT260 SEMESTER: Fall

MODIFIED CODE: NRT0260

PROGRAM: Adventure Recreation and Parks

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MODIFIED BY: Katie Wakeley, Learning Specialist CICE Program

DATE: Sept PREVIOUS OUTLINE DATED: Sept 2014

2015

APPROVED: "Angelique Lemay" Sept 2015

Dean DATE

TOTAL CREDITS: Four

PREREQUISITE(S):

HOURS/WEEK: 4hrs/wk

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I. COURSE DESCRIPTION:

Trails have had a huge and historical impact on transportation, travel, tourism and recreation in Canada. Never has this been more evident than now. The Trans Canada Trail is unifying the nation, while recreationists portage across parks, and urban cyclists find safe routes to work. A mixture of Art and Science, developing a basic understanding in regard to the fundamentals of trail sustainability is an essential area of expertise for CICE students in the program area of study in Adventure Recreation and Parks. CICE students, with assistance from a learning specialist, will examine the foundations of trails from organization and develop an assistive role relative to the hard skills involved with building and maintenance.

II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

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

1. Understand the many types of trails, and their importance to parks, tourism, recreation, transportation and the economy.

Potential Elements of the Performance:

- Identify user communities and potential conflicts
- Learn about economic impacts of trails through an number of case studies
- Consider the value and impacts of various user groups including motorized and non-motorized
- Compare and contrast urban and forest / rural trail networks

This will constitute 10% of the course grade.

2. Recognize the importance of organization and advocacy to a community of trail users.

Potential Elements of the Performance:

- Identify various trail advocacy organizations
- Understand the importance of advocacy
- Consult with relevant stakeholders
- Join and participate with a local trails group

This will constitute 10% of the course grade.

3. Understand the many complex elements behind trail layout and design.

Potential Elements of the Performance:

- Consider the community of users to select appropriate route and materials
- Use sustainable trail building fundamentals to evaluate soil characteristics and topography to determine suitability for trail construction
- Identify positive areas on the landscape for structures amenities, lookouts and destinations
- Understand applicable legislation, and appropriate permission from private landowners
- Evaluate potential hazards to safety and the environment
- Consider suitable materials for construction
- Evaluate relevant accessibility considerations
- Use pertinent software

This will constitute 20% of the course grade.

4. Safely use tools and work as part of a team to build and maintain a trail.

Potential Elements of the Performance:

- Choose the right tools for the job, demonstrate safe use, and tool maintenance
- Wear appropriate PPE
- Practice the fundamental elements of trail sustainability including respect for flora and fauna
- Use various methods for erosion control
- Evaluate need for trail reconstruction

This will constitute 20% of the course grade.

5. Use appropriate tools to build and maintain Trail Structures and amenities.

Potential Elements of the Performance:

- Develop an understanding of the various types of trail amenities, their purpose, cost and maintenance.
- Understand the significance of trailhead structures choose an

- appropriate design and layout
- Evaluate stream crossings and build bridges and boardwalks over wet areas
- Use appropriate signage and markers to aid with navigation, indicate difficulty, and explain relevant information

This will constitute 20% of the course grade.

6. Effectively digitize trail routes and produce meaningful, accurate maps.

Potential Elements of the Performance:

- Use a GPS, map and compass to log trails
- Use relevant software including Google Earth Pro and Arc Map to make a variety of maps illustrating trailheads, trails, and points of interest.

This will constitute 20% of the course grade.

III. TOPICS:

- 1. The economic and social impacts of trails
- 2. Organization, advocacy and fundraising
- 3. Trail layout and design
- 4. Trail building fundamentals
- 5. Trail structures, and signage
- 6. Risk management, liability and insurance
- 7. Trail maps

IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

All required materials will be made available online, on reserve, or in class.

V. EVALUATION PROCESS/GRADING SYSTEM:

Assignments 60%
Participation 20%
Final Test 20%
100 %

The following semester grades will be assigned to students:

Grade	<u>Definition</u>	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.	

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.

VII. COURSE OUTLINE ADDENDUM:

The provisions contained in the addendum located 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

- 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 guizzes.)
- 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.