



Course Code: Title	NRT0260: TRAIL CONSTRUCTION FACILITY MAINTENANCE	
Program Number: Name	1120: COMMUNITY INTEGRATN	
Department:	C.I.C.E.	
Semester/Term:	17F	
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 outdoor enthusiasts portage across parks, and urban cyclists find safe routes to work. A mixture of Art and Science, understanding the fundamentals of trail sustainability is an essential area of expertise for Adventure Recreation and Parks students. This course will examine the foundations of trails from organization and advocacy to the hard skills involved with building and maintenance.	
Total Credits:	4	
Hours/Week:	4	
Total Hours:	60	
Essential Employability Skills (EES):	<ul> <li>#3. Execute mathematical operations accurately.</li> <li>#4. Apply a systematic approach to solve problems.</li> <li>#5. Use a variety of thinking skills to anticipate and solve problems.</li> <li>#6. Locate, select, organize, and document information using appropriate technology and information systems.</li> <li>#8. Show respect for the diverse opinions, values, belief systems, and contributions of others.</li> <li>#9. Interact with others in groups or teams that contribute to effective working relationships and the achievement of goals.</li> </ul>	
General Education Themes:	Social and Cultural Understanding	
	Personal Understanding	
	Science and Technology	
Course Evaluation:	Passing Grade: 50%,	
Evaluation Process and Grading System:	Evaluation Type Evaluation Weight	





Prepared: Brian Anstess Approved: Sherri Smith

Assignments	60%
Final Test	20%
Participation	20%

### Course Outcomes and Learning Objectives:

Upon successful completion of this course, the CICE student, with the assistance of a Learning Specialist will acquire varying levels of skill development relevant to the following learning outcomes:

### Course Outcome 1.

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

## Learning Objectives 1.

- · 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

### Course Outcome 2.

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

# Learning Objectives 2.

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

#### Course Outcome 3.

Understand the many complex elements behind trail layout and design.



## Learning Objectives 3.

- 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

### Course Outcome 4.

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

## Learning Objectives 4.

- 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
- · Use various methods for erosion control
- · Evaluate need for trail reconstruction

### Course Outcome 5.

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

## **Learning Objectives 5.**

- Develop an understanding of the various types of trail amenities, their purpose, cost and
- · Understand the significance of trailhead structures choose an appropriate design and layout



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- 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

## Course Outcome 6.

Effectively digitize trail routes and produce meaningful, accurate maps.

## Learning Objectives 6.

- · 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.

#### **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 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. 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.

### B. 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
- 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.

### C. 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.
- Transcribe the student's verbal answer.
- 4. Test length may be reduced and time allowed to complete test may be increased.

### D. 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

#### E. Evaluation:

Is reflective of modified learning outcomes.

NOTE: Due to the possibility of documented medical issues, CICE students may require alternate methods of evaluation to be able to acquire and demonstrate the modified learning outcomes

#### Date:

Wednesday, September 6, 2017

Please refer to the course outline addendum on the Learning Management System for further information.



