

Course Outline

Course Title:	Field Skills		
Course Number:	ECOS13	Approval Date:	2025/9/5
Course Hours:	60 hours	Academic Year:	2025
Academic School:	School of Environmental & Natural Resource Sciences		
Program Co-ordinator or Equivalent:	Braden Evans - Braden.Evans@flemingcollege.ca		
Dean (or Chair):	Jennifer Hermer - jennifer.hermer@flemingcollege.ca		

Course Description

This course will focus on three areas of study: identification, field and lab skills. Students will identify and classify the living and non-living components of the specific ecosystems described in the Ecology and Environment (ENVR 20) course. Field skills to be developed include the ability to navigate through the natural environment and use a variety of ecosystem inventory techniques. Special emphasis will be placed on safe work habits in lab and field.

Prerequisites: None.

Corequisites: None.

Experiential Learning: Field Experience

Course Delivery Type

Face to face.

All course hours are delivered in person at the delivery location specified on the academic timetable.

Learning Outcomes

Upon successful completion of this course, students will be able to:

1. Follow the prescribed lab and field health and safety guidelines and protocols in order to create a safe work environment for course activities.
2. Collect and record data and observations using a standardized protocol (SCAN: Specific, Complete, Accurate, Neat).

3. Operate specific instruments or equipment in order to perform given tasks in both field and laboratory settings.
4. Use a compass and Global Positioning Systems (GPS) under field conditions.
5. Identify specific drilling equipment and methods that can be used to address resources drilling needs in a variety of ecosystems.
6. Use aerial photography and satellite imagery to identify objects and calculate scale, distance and area.
7. Effectively use hand tools and troubleshoot small engines.
8. Present scientific information to peers.

N.A.

Learning Resources

Required:

Fleming College First Semester resource kit.

Costs for learning resources can be found on the Campus Store website, using the links below, or by visiting the Campus Store location at your campus.

- Sutherland: <https://www.bkstr.com/sfleming-sutherlandstore/home>
- Frost: <https://www.bkstr.com/sfleming-froststore/home>

Assessment Summary

Assessment Task	Percentage
In-class activities	5%
Labs	55%
Tests	40%

Student Success: Policies and Procedures

Mutually, faculty and learners will support and adhere to college Academic Regulations, and Student Rights and Responsibilities. The following policies and guidelines have been developed to support the learning process.

Please click on the link for information about:

- [Academic Integrity \(2-201A\)](https://department.flemingcollege.ca/hr/attachment/7750/download)
(<https://department.flemingcollege.ca/hr/attachment/7750/download>)
- [Accessibility for Persons with Disabilities \(3-341\)](https://department.flemingcollege.ca/hr/attachment/5619/download)
(<https://department.flemingcollege.ca/hr/attachment/5619/download>)

- [Grading and Academic Standing \(2-201C\)](https://department.flemingcollege.ca/hr/attachment/7752/download)
(<https://department.flemingcollege.ca/hr/attachment/7752/download>)
- [Guidelines for Professional Practice: Students and Faculty](https://flemingcollege.ca/PDF/guidelines-for-professional-practice-students-faculty.pdf)
(<https://flemingcollege.ca/PDF/guidelines-for-professional-practice-students-faculty.pdf>)
- [Student Rights and Responsibilities \(5-506\)](https://department.flemingcollege.ca/hr/attachment/269/download)
(<https://department.flemingcollege.ca/hr/attachment/269/download>)

If you will need academic accommodations (for example if you have a learning disability, mental health condition such as anxiety or depression or if you had an IEP in high school), please contact the [Accessible Education Services \(AES\)](https://department.flemingcollege.ca/aes/) department (<https://department.flemingcollege.ca/aes/>) to meet with a counsellor.

Alternate accessible formats of learning resources and materials will be provided, on request.

Program Standards

The **Ministry of Colleges and Universities** oversees the development and the review of standards for programs of instruction. The **Ministry of Labour Training and Skills Development** oversees the development and the review of standards for programs of instruction for Apprenticeship training in the province of Ontario. Each college is required to ensure that its programs and program delivery are consistent with these standards, and must assist students to achieve these essential outcomes.

This course contributes to Program Standards as defined by the [Ministry of Colleges and Universities](#) (MCU). Program standards apply to all similar programs of instruction offered by colleges across the province. Each program standard for a postsecondary program includes the following elements:

- **Vocational standards** (the vocationally specific learning outcomes which apply to the program of instruction in question);
- **Essential employability skills** (the essential employability skills learning outcomes which apply to all programs of instruction); and
- **General education requirement** (the requirement for general education in postsecondary programs of instruction that contribute to the development of citizens who are conscious of the diversity, complexity and richness of the human experience; and, the society in which they live and work).

Collectively, these elements outline the essential skills and knowledge that a student must reliably demonstrate in order to graduate from the program. For further information on the standards for your program, follow the MCU link (www.tcu.gov.on.ca/pepg/audiences/colleges/progstan/).

Detail Plan

Term: 2025 Fall

Session 1
Code:

**Program Co-ordinator or
Equivalent:**

Braden Evans - Braden.Evans@flemingcollege.ca

Dean (or Chair):

Jennifer Hermer - jennifer.hermer@flemingcollege.ca

Learning Plan

Wks/Hrs Units	Topics, Resources, Learning, Activities	Learning Outcomes	Assessment
1 Classes Begin	Lecture(s): Course introduction Lab: No scheduled lab	1, 2	Health and Safety module (5%)
2	Lecture: Biological measurement (recorded and on D2L). Must be completed before the lab. Lab: Biological measurement	5	Biological measurement field activity (5%)
3	Lecture: Compassing Lab: Virtual trailering	1, 2, 3, 4, 6	Virtual trailering exercise pass/fail Drilling Safety module (5%).
4	Lecture: Drilling Lab: Compassing	1, 2, 3, 4, 6	Compassing field activity (5%),
5	Lecture: Dendrology Lab: Drilling	1, 2, 3, 4, 6	
6	Lecture: Field trip preparation Lab: On-campus Tree ID walk	1, 2, 3, 4, 6	
7	Week 7 Field Trip - No Lectures and Labs scheduled	1, 2, 3, 5	Compassing & biological measurement practical field test (15%)
8	Independent Learning Week		
9	Lecture: Vertebrate taxonomy Lab: Knot tying	2, 4	Tree ID test (2nd and 3rd hour of lab) (15%)
10	Lecture: Invertebrate taxonomy and life histories Lab: Vertebrate Presentation	8	Presentation (5%)
11	Lecture: Imagery and mapping Lab: Invertebrates	6	Invertebrate assignment (5%)
12	Lecture: Small engine theory Lab: Imagery and mapping	6,7	Imagery assignment (5%)
13	Lecture: Review for final exam Lab: Hand tools and small motors	1, 2, 3, 4, 5, 6, 7	
14	Lecture: None Lab: Skills test	1, 2, 3, 4, 5, 6, 7	Skills test (15%)
15	Lecture: None LAB: None	1, 2, 3, 4, 5, 6, 7	Final Exam on D2L (20%)

Assessment Requirements

Assessment Task	Date/Weeks	Course Learning Outcome	Percentage
Safety Module & Quiz (5%)	Week 1	1	5%
Biological measurement field exercise (5%)	Week 2	2, 3, 5	5%
Virtual trailing exercise. Need to complete exercise for a pass. This must be completed to pass the course. P/F Drilling Module & Quiz (5%)	Week 3	1, 6	5%
Compassing Field Exercise (5%)	Week 4	2, 3, 5	5%
Compassing & biological measurement practical field test (15%)	Week 7	1, 2, 3, 5	15%
Tree ID test (15%)	Week 9	2, 4	15%
Presentation on vertebrates (5%)	Week 10	4	5%
Invertebrate lab assignment (5%)	Week 11	4	5%
Imagery and mapping assignment (5%)	Week 12	6	5%
Skills test (15%)	Week 14	4	15%
Final exam on D2L (20%)	Week 15	4	20%

Artificial Intelligence (AI) Statement

NO USE. Use of generative AI tools (like ChatGPT) is not permitted in this course.

It is the responsibility of students to maintain a history of records and supporting documentation to demonstrate their efforts in all academic submissions, even if submission of these is not part of the final academic deliverable.

Turnitin Statement

Students agree that by taking this course all required papers may be subject to submission for textual similarity review to Turnitin.com in support of academic integrity. All submitted papers will be included as source documents in the Turnitin.com reference database solely for the purpose of detecting plagiarism of such papers. Use of the Turnitin.com service is subject to the Usage Policy posted on the Turnitin.com site.

If students choose to opt out of using the software, they must inform their faculty member at the time of the assignment, of their refusal and meet with the faculty to discuss their options. For further information on the use of Turnitin, please refer to the [Operating Procedure 2-201F](https://department.flemingcollege.ca/hr/attachment/10233/download) (<https://department.flemingcollege.ca/hr/attachment/10233/download>)

Exemption Contact

Paul Ashley

Email: paul.ashley@flemingcollege.ca, braden.evans@flemingcollege.ca

Prior Learning and Assessment and Recognition (PLAR)

PLAR uses tools to help learners reflect on, identify, articulate, and demonstrate past learning which has been acquired through study, work and other life experiences and which is not recognized through formal transfer of credit mechanisms. PLAR options include authentic assessment activities designed by faculty that may include challenge exams, portfolio presentations, interviews, and written assignments. Learners may also be encouraged and supported to design an individual documentation package that would meet the learning requirements of the course. Any student who wishes to have any prior learning acquired through life and work experience assessed, so as to translate it into a college credit, may initiate the process by applying through the Registrar's office. For more information please click on the following link: <http://flemingcollege.ca/admissions/prior-learning-assessment-and-recognition>

Course Specific Policies and Procedures

It is the responsibility of the student to retain this course outline for future reference. Course outlines may be required to support applications for advanced standing and credit transfer to other educational institutions, portfolio development, PLAR and accreditation with professional associations.

Synchronous sessions may be recorded. As a result, your image, voice, name, personal views and opinions, and course work may be collected under legal authority of section 2 of the Ontario Colleges of Applied Arts and Technology Act, 2002. This information will be used for the purpose of supporting student learning. Any questions about this collection can be directed to the Privacy and Policy Officer at freedomofinformation@flemingcollege.ca or by mail to 599 Brealey Drive, Peterborough, ON K9J 7B1.

1. Student Attire for Field Work:

- Appropriate attire, as determined by the course professor, is mandatory for field trips and field exercises. Most labs will require wearing a hard hat and safety shoes.
- Scheduled field exercises are usually conducted regardless of weather conditions.
- For more specific information on requirements, please see the course outline or the professor responsible.

2. Class Attendance and Assignments:

- Attendance at all synchronously-delivered classes is strongly recommended.
- Regular class attendance is a key factor in students' success.
- Students must attend lecture, labs, and tests with their own group, to accommodate room timetabling and class size, unless prior arrangements have been made with a completed and signed Student Request Form.

3.1 Scheduling

- Rescheduling of course topics and evaluations may be necessary when unforeseen circumstances arise.
- Changes will be discussed and mutually agreed to in class.

3.2 Missed Field Trips and Field Exercises:

- Students must consult with the lab professor about any possible alternate arrangements for field trips and exercises missed.
- However, there is no guarantee that alternative arrangements can be made.
- Advance notice of absence may result in greater accommodation.

3.3 Missed Classes:

- It is the student's responsibility to get caught up from missed classes.
- The course manual contains all the notes required for the course
- Students are expected to keep themselves up-to-date on course material
- Please contact the course faculty only if notes and assignments are unavailable from classmates.

3.4 Evaluation Criteria

- All assignments will be graded on the basis of content, style, structure, and mechanics.

3.5. Final grades

- In this course, final grades are assigned based on the level of academic achievement which corresponds to the assessment components as cited in this course outline.
- Faculty member(s) will not offer additional evaluation activities beyond those cited in this course outline.

ACADEMIC BEHAVIOUR AND ACADEMIC INTEGRITY

- You, as a Fleming student, will conduct yourself in a courteous, responsible fashion.
- You are expected to work individually on assignments unless otherwise directed. Breaches of academic integrity such as plagiarism will result in a mark of zero (0) for the evaluated activity and will be reported in writing to the Registrar.
- You have the responsibility to support academic integrity.
- Please refer to your student handbook for the specific college regulations governing academic behaviour and academic integrity.
- Cell phone use is not allowed in the classroom unless it is required as part of the learning activity and identified as such by the course instructor.

Common First Semester Assessment Guidelines

Additional Assessment Comments:

- Tests/in-class assessments are submitted electronically or on the paper copied given in class while following the specific instructions of the professor/technologist.

- Any student who talks, is disruptive, is disrespectful, is suspected of cheating during a test/in-class assessment will have their test/in-class assessment removed and will be assigned a grade of 0. Further penalties can be applied as per the Fleming College Student Rights and Responsibilities document.
- Students must complete all of the mandatory assessments (if applicable) for the course to meet the learning outcomes and achieve a passing grade in the course.
- In this course, final grades are assigned based on the level of academic achievement which corresponds to the assessment components and due dates as cited in this course outline. Faculty member(s) will not offer additional evaluation activities beyond those cited in this course outline.

Please note the following circumstances where accommodation for **missed or late** assessments (tests/quizzes/in-class assessments/proctored assessments/submitted assignments) will/will not be given:

If circumstances arise that prevent attendance for an assessment in the student's assigned section; it is the student's responsibility to notify faculty at least 24 hours in advance for any documented reasons (court appearance, scheduled medical appointment etc). Early notification may result in greater accommodation.

If a student misses an assessment for an emergency situation, the student must notify faculty within 24 hours of the starting time for the assessment. If the student can provide DOCUMENTED support and rationale for missing the assessment, the student will be accommodated to complete the assessment at an alternate time for the full value of the assessment or provided with an alternate mechanism as per faculty discretion. Faculty reserves the right to decide on what constitutes appropriate documentation.

If a student fails to provide documentation and does not communicate with the faculty within 24 hours of the missed assessment, the **student is assigned a grade of 0 for the assessment**. However, the student can still attempt the assessment and receive informal feedback from faculty while still achieving a grade 0.