

Course Outline

Course Title:	Ecosystem Skills		
Course Number:	ECOS13	Approval Date:	2020/9/3
Course Hours:	60 hours	Academic Year:	2020
Academic School:	School of Environmental& Natural Resource Sciences		
Faculty:	Braden Evans - Braden.Evans@flemingcollege.ca		
Program Co-ordinator or Equivalent:	Geoff Clark - Geoff.Clark@flemingcollege.ca		
Dean (or Chair):	Lisa Kraemer - lisa.kraemer@flemingcollege.ca		

Course Description

This course outline may reflect alternative deliveries and assessments in response to the Ontario Government health and safety requirements for COVID-19. Course and Program Learning Outcomes shall not be impacted by any changes.

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.

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. Identify specific examples from the following categories: amphibians, birds, fish, mammals, reptiles, and invertebrates; in order to survey and/or monitor populations and habitat.
5. Use a compass and Global Positioning Systems (GPS) under field conditions.
6. Identify specific drilling equipment and methods that can be used to address resources drilling needs in a variety of ecosystems.
7. Use aerial photography to identify objects and calculate scale, distance and area and to determine azimuths.

N.A.

Learning and Technology Resources

Required:

Fleming College. (2020). Components of Common First Semester resource kit.

Assessment Summary

Assessment Task	Percentage
Labs	21%
Assignments	8%
Tests	71%

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:	2021 Winter
Faculty:	Barbara Merchant - barbara.merchant@flemingcollege.ca Braden Evans - Braden.Evans@flemingcollege.ca
Program Co-ordinator or Equivalent:	Geoff Clark - Geoff.Clark@flemingcollege.ca

Dean (or Chair): Lisa Kraemer - lisa.kraemer@flemingcollege.ca

Learning Plan

Wks/Hrs Units	Topics, Resources, Learning, Activities	Learning Outcomes	Assessment
Week 1 Classes Begin	Lecture(s): Orientation & Dendrology Lab: No scheduled lab	1, 4	Health & Safety Module (8%)
Week 2	Lecture: Mammal ID Lab: Tree ID	4	
Week 3	Lecture: Bird ID Lab: Mammal ID	4	Mammal ID lab (1%), Tree ID Test (6%)
Week 4	Lecture: Reptile & Amphibian ID Lab: Bird ID	4	Bird ID lab (1%), Mammal ID Test (5%)
Week 5	Lecture: Fish ID & Anatomy Lab: Reptile & Amphibian ID	4	Reptile & Amphibian ID lab (1%), Bird ID Test (5%)
Week 6	Lecture: Invertebrate ID Lab: Fish ID	4	Fish ID lab (1%), Reptile & Amphibian ID Test (5%)
Week 7	Lecture: Drilling Industry & On- campus lab preview Lab: Invertebrate ID	1, 4, 6	Invertebrate ID lab (1%), Fish ID Test (5%)
Week 8	Independent Learning Week. Program Oriented, self-directed studies		
Week 9	Lecture: Photogrammetry Lab: Drilling (Group B), Photogrammetry (Group A)	1, 3, 5, 6, 7	Invertebrate ID test (5%)
Week 10	Lecture: No Lecture Lab: Drilling (Group A), Photogrammetry (Group B)	1, 6, 7	Drilling test (6%)
Week 11	Lecture: Compassing Lab: Compassing (Group B), No lab (Group A)	5, 7	Photogrammetry (5%)
Week 12	Lecture: No Lecture Lab: Compassing (Group A), No lab (Group B)	5	Compassing (6%)
Week 13	Lecture: Biological Measurement Lab: Biological Measurement (Group B), No lab (Group A)	2, 3, 4	Field ID Assignment (8%)

Wks/Hrs Units	Topics, Resources, Learning, Activities	Learning Outcomes	Assessment
Week 14	Lecture: Skills Showcase Review Lab: Biological Measurement (Group A), No lab (Group B)	1, 2, 3, 4, 5, 6, 7	Biological Measurement (6%)
Week 15	LEC: No Lecture LAB: No lab	1, 2, 3, 4, 5, 6, 7	Skills Showcase - First Attempt (25%) & Second Attempt (if a passing grade of 50% was not achieved on first attempt)

Assessment Requirements

Assessment Task	Date/Weeks	Course Learning Outcome	Percentage
Week 1 - Complete on D2L before your week 2 lab	Safety Module	1	8%
Week 3 - D2L	Tree ID Test	4	6%
Weeks 3 & 4 - D2L	Mammal ID Lab & Test	4	6%
Weeks 4 & 5 - D2L	Bird ID Lab & Test	4	6%
Weeks 5 & 6 - D2L	Reptile & Amphibian ID Lab & Test	4	6%
Weeks 6 & 7 - D2L	Fish ID Lab & Test	4	6%
Weeks 7 & 9 - D2L	Invertebrate ID Lab & Test	4	6%
Week 10 - D2L	Drilling Test	1, 6	6%
Week 11 - D2L	Photogrammetry Assignment	3, 5, 7	5%
Week 12 - on-campus	Compassing Field Exercise	1, 3, 5, 7	6%
Week 13 - submitted online	Field ID Assignment	2, 4	8%
Week 14 - on-campus	Biological Measurement Field Exercise	1, 2, 3	6%
Week 15 - D2L, 2 attempts	Skills Showcase Challenge	1, 2, 3, 4, 5, 6, 7	25%

The Skills Showcase is the only MANDATORY assessment in this course.

The Skills Showcase is a competency test that all students MUST PASS (50%).

ID Tests and 80% Accuracy

- All ID tests will be marked based on an expected level of 80% accuracy.
- If students do not achieve 80% accuracy, the mark posted for that ID test will be 49% or less.
- All students who do not pass ID tests will have one (1) opportunity to rewrite.

Exemption Contact

Braden Evans, Course Leader

Email: 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. Skills Showcase is a **MANDATORY** competency test **ALL** students must complete **AND PASS** with a mark of at least **50%**.

- A final overall course grade of 50% **AND** a **MINIMUM** score of 50% in the Skills Showcase are required for students to pass this course.
- A final grade of 50% **AND** a score of **LESS THAN 50%** on the Skills Showcase will result in the student having to re-attempt the assessment in week 15
- **Failing to pass the skills showcase after two attempts will result in the student having to repeat the entire course regardless of their average grade in other assessments.**

2. Assessments

ID Tests and 80% Accuracy Requirement

- All ID tests will be marked based on an expected level of 80% accuracy.
- If students do not achieve 80% accuracy, the mark posted for that ID test will be 49% or less.
- All students who do not pass ID tests will have one (1) opportunity to rewrite.

3. Student Attire for Field Work:

- Appropriate attire, as determined by the course professor, is mandatory for field trips and field exercises.
- 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.

4. 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.

4.1 Scheduling

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

4.2 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.

4.3 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.

4.4 Evaluation Criteria

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

4.5. 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.