

## BIOLOGY 3JJ3 Field methods in ecology

An introduction to techniques in ecology, including restoration, population, community, functional, and behavioural ecology, based on field labs. Lectures provide background and data analysis.

2 lectures; 1 lab (four hours); fall term.

Prerequisite: Biology 2F03; and credit or registration in Stats 2B03 or EARTH SC/ENVIR SC/GEOG 3MB3; and credit or registration in one of Envir Sc 2B03, 2C03, 2EI3, 2Q03, 2W03

This course is based on experiential learning. It provides a field course experience during the fall term. Monday lecture time will be used for background for the Tuesday lab. Thursday lecture time will be used to analyze the results from the Tuesday lab. The lab is 4 hours to allow for travel time to and from the field sites. The actual lab activity will be 3 hours, between 9AM and 12AM on Tuesday.

Students will be responsible for travel to the week's lab site (10-15 minutes by bus (5C or 51), bicycle, or car from McMaster), bringing water and snacks, and dressing appropriately for the weather. We will go out in most types of weather.

**Syllabus is not yet finalized. The following can and will change! It is included to give you a vision of the course.**

**Potential labs** - order will depend on weather on the day of the lab

1. prairie plant identification - using keys, observing identified plants
2. tree identification
3. plant sampling
4. pollinator observation
5. deer census
6. bird census
7. restoration exercise
8. invasive plant control
9. ecological land classifications
10. natural selection on gall size

**Potential grading scheme**

Lab reports:	50%
attendance	
field work	
writeup	
Group project	20%
Participation	5%
Final take home exam	25%