# Course Outline Form: Fall 2017

## General Information

**Course Code:** ENVS\*4350

**Course Title:** Forest Ecology

**Course Description:** This course will explore aspects of forest ecology with an emphasis on the ecological principles needed for sound forest management. Biotic and abiotic components of forest ecosystems will be discussed in the context of energy flow, nutrient cycling, forest succession and appropriate silvicultural systems.

**Credit Weight:** 0.5

**Academic Department (or campus):** School of Environmental Sciences

**Campus:** Guelph

**Semester Offering:** Fall

**Class Schedule and Location:**

Lectures – Tuesdays and Thursdays, 1:00pm – 2:20pm, ALEX 218

Labs – Wednesdays, 2:30pm-5:20pm, ALEX 218 (or field locations)

## Instructor Information

Instructor Name: Dr. Shelley Hunt

Instructor Email: shunt@uoguelph.ca

Instructor Phone and Extension: ext. 52356/53065

Office location and office hours: ALEX 220, or Arboretum Centre 103, office hours TBD

## GTA Information

GTA Name: Marcel Van Heijst

GTA Email: mvanheij@uoguelph.ca

GTA office location and office hours: TBD

GTA Name: Leah Blechschmidt

GTA Email: lblechsc@uoguelph.ca

GTA office location and office hours: TBD

## Course Content

### Specific Learning Outcomes:

On completion of this course, students will be able:

1) to understand the complexity of forest ecosystems at scales from individual organisms to landscapes;

2) to appreciate the importance of time to processes at work in forested systems;

3) to understand the processes of nutrient cycling and energy flow in the forest;

4) to appreciate how forest structure and function is affected by disturbance, both natural or anthropogenic;

5) to evaluate the potential for different forest management regimes to maintain forest functioning in various forest types;

6) to collect, analyze and interpret forest ecosystem-related field data; and

7) to appreciate the rigours of field work in the forest, through the practice of protocols designed to evaluate forest structure and processes.

### Lecture Content:

Week 1: Introduction; Terminology; Forests as part of the global ecosystem

Week 2: Forests in space – variation across scales

Week 3: Forests in time – temporal change

Weeks 4 & 5: Forest structure and biodiversity

Week 6: Forest soils

Week 7: Forest productivity

Weeks 8 & 9: Forest nutrition and nutrient cycling

Week 10: Forest ecosystem stability

Week 11: Forest ecosystem management – past and future

Week 12: course wrap-up

### Labs:

There are 5 labs to be completed over the course of the semester, at the rate of approximately 1 lab every two weeks. Some labs can be completed in 1 lab period; others are stretched out over the semester. This will be explained to you in detail. Please refer to lab manual (this will be made available on Courselink). Most labs will take place outdoors, in local forested areas. Students are advised to dress appropriately for the weather (including footwear) – no labs will be cancelled because of bad weather. Later in the semester, some lab periods may be used for presentation of student work.

### Course Assignments and Tests:

| **Assignment or Test** | **Due Date** | **Contribution to Final Mark (%)** | **Learning Outcomes Assessed** |
| --- | --- | --- | --- |
| Mid-Term Examination | Tuesday, October 17, in class | 15 | 1,2,3 |
| Laboratory Exercises | Refer to Lab Manual | 35 | 2,3,6,7 |
| Final Paper or Presentation | Variable | 25 | 1,2,3,4,5 |
| Final Examination | Monday, December 11, 7:00pm – 9:00pm | 25 | 1,2,3,4,5 |

### Final examination date and time: 7:00pm-9:00pm, December 11th

### Final exam weighting: 25%

## Course Resources

### Required Texts:

Perry, D.A., Oren, R., and Hart, S.C. 2008. Forest Ecosystems 2nd Edition. Johns Hopkins University Press. 606p.

### Lab Manual:

The lab manual will be made available on Courselink.

### Other Resources:

Courselink will be used to distribute course materials such as lecture notes and assignment instructions.

## Course Policies

### Grading Policies:

Assignments are to be submitted in the Courselink dropbox before midnight on the due date. Each day that an assignment is late will result in a 10% reduction of the grade. If you are in need of an extension, contact Dr. Hunt before the assignment deadline.

### Course Policy on Group Work:

Group work will be allowed on laboratory assignments only.

### Course Policy regarding use of electronic devices and recording of lectures:

Electronic recording of classes is expressly forbidden without consent of the instructor. When recordings are permitted they are solely for the use of the authorized student and may not be reproduced, or transmitted to others, without the express written consent of the instructor.

## University Policies

### Academic Consideration:

The University of Guelph is committed to supporting students in their learning experiences and responding to their individual needs and is aware that a variety of situations or events beyond the student's control may affect academic performance. Support is provided to accommodate academic needs in the face of personal difficulties or unforeseen events in the form of Academic Consideration.

Information on regulations and procedures for Academic Consideration, Appeals and Petitions, including categories, grounds, timelines and appeals can be found in [Section VIII (Undergraduate Degree Regulations and Procedures) of the Undergraduate Calendar](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-ac.shtml).

### Academic Misconduct:

The University of Guelph is committed to upholding the highest standards of academic integrity and it is the responsibility of all members of the University community, faculty, staff, and students to be aware of what constitutes academic misconduct and to do as much as possible to prevent academic offences from occurring.

University of Guelph students have the responsibility of abiding by the University's policy on academic misconduct regardless of their location of study; faculty, staff and students have the responsibility of supporting an environment that discourages misconduct. Students need to remain aware that instructors have access to and the right to use electronic and other means of detection. Please note: Whether or not a student intended to commit academic misconduct is not relevant for a finding of guilt. Hurried or careless submission of assignments does not excuse students from responsibility for verifying the academic integrity of their work before submitting it. Students who are in any doubt as to whether an action on their part could be construed as an academic offence should consult with a faculty member or faculty advisor.

Detailed information regarding the Academic Misconduct policy is available in [Section VIII (Undergraduate Degree Regulations and Procedures) of the Undergraduate Calendar](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-amisconduct.shtml).

### Accessibility:

The University of Guelph is committed to creating a barrier-free environment. Providing services for students is a shared responsibility among students, faculty and administrators. This relationship is based on respect of individual rights, the dignity of the individual and the University community's shared commitment to an open and supportive learning environment. Students requiring service or accommodation, whether due to an identified, ongoing disability or a short-term disability should contact the Student Accessibility Services (SAS), formerly Centre for Students with Disabilities (CSD), as soon as possible.

For more information, contact SAS at 519-824-4120 ext. 56208 or email sas@uoguelph.ca or visit the [Student Accessibility Services website (http://www.uoguelph.ca/csd/)](http://www.uoguelph.ca/csd/).

### Course Evaluation Information:

End of semester course and instructor evaluations provide students the opportunity to have their comments and opinions used as an important component in the Faculty Tenure and Promotion process, and as valuable feedback to help instructors enhance the quality of their teaching effectiveness and course delivery.

While many course evaluations are conducted in class others are now conducted online. Please refer to the [Course and Instructor Evaluation Website](https://courseeval.uoguelph.ca/) **for more information.**

### Drop period:

The drop period for single semester courses starts at the beginning of the add period and extends to the Fortieth (40th) class day of the current semester (the last date to drop a single semester courses without academic penalty) which is listed in [Section III (Schedule of Dates) of the Undergraduate Calendar](https://www.uoguelph.ca/registrar/calendars/).

The drop period for two semester courses starts at the beginning of the add period in the first semester and extends to the last day of the add period in the second semester.

Information about Dropping Courses can be found in [Section VIII (Undergraduate Degree Regulations and Procedures) of the Undergraduate Calendar](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-drop.shtml).