ENVS 300 Vascular Plants of Southern Ontario
Spring 2021

CONTACT INFORMATION:

<table>
<thead>
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<th>Name</th>
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<tbody>
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<td>TA</td>
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<tr>
<td>Office hours</td>
<td>Tuesdays</td>
<td>1:30-2:30pm on MS Teams</td>
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</tbody>
</table>

LECTURES: Asynchronous.

LABS: online virtual live Tuesdays 10:30am-11:50am on Microsoft Teams

COURSE DESCRIPTION:

This is an applied course where students will learn to identify vascular plants using botanical keys. Through lab work and field trips, students will understand vascular plant structure and associated terminology as the basis for plant identification. Students will also learn how to analyze citizen science data and take effective field notes.

LEARNING OUTCOMES:

- Identify vascular plants using keys and other botanical resources.
- Become familiar with common plants of Southern Ontario.
- Understand plant families, taxonomy.
- Explore issues affecting plant communities such as species at risk, invasive species, human impacts.
- Develop proficiency in field documentation.
- Distinguish between different plant communities.
- Synthesize and analyze citizen scientists field data.

UW-LEARN:

LEARN will be used for the following: course info, your grades, announcements, and course emails/discussion forums. Course emails will be sent through LEARN, which will forward to your uwaterloo account. Please check that your email address on WatIAM is either your uwaterloo account or a current personal account (https://watiam.uwaterloo.ca/idm/user/login.jsp) so that you receive course emails. If you are registered in the course and have checked your UW-ID AND WatIAM and still cannot access LEARN, please email Learn help learnhelp@uwaterloo.ca).
REQUIRED ITEMS:

- Paper book: Newcombs Wildflower Guide by Lawrence Newcomb ($20 at UW bookstore)
- Free online: Trees in Canada by John Laird Farrar
  - online: https://archive.org/details/treesincanada0000farr
  - UW library course e-reserves
- Free online: Shrubs of Ontario by James Soper and Margaret Heimburger
  - online: https://archive.org/details/shrubsofontario00sope/page/n3/mode/2up
- Field Notebook (paper writing notebook or if you have digital pen/tablet that is acceptable)

OPTIONAL RESOURCES:

- Woodlot Biodiversity by Steven Newmaster et al.

SCHEDULE OF ACTIVITIES:

<table>
<thead>
<tr>
<th>Week</th>
<th>Lab Dates</th>
<th>Lecture asynchronous</th>
<th>Labs Tuesdays 10:30-11:50am</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>*note labs will be some form of interactive component, field sites may/may not be presented during this time</td>
</tr>
<tr>
<td>1</td>
<td>May 11</td>
<td>Introduction, course expectations</td>
<td>Lab: Plant terminology, taxonomy, field notebooks</td>
</tr>
<tr>
<td>2</td>
<td>May 18</td>
<td><em>Plant families:</em> Ranunculaceae, Papervaceae, Brassicaceae, Violaceae, Araceae</td>
<td>Lab: UW Urban Forest; interactive component</td>
</tr>
<tr>
<td>3</td>
<td>May 25</td>
<td><em>Plant families:</em> Apiaceae, Fabaceae, Lamiaceae, Liliaceae</td>
<td>Lab: Schneider’s Woodlot, Wilmot Township; interactive component</td>
</tr>
<tr>
<td>4</td>
<td>June 1</td>
<td><em>Tree Families:</em> Betulaceae, Fagaceae, Juglandaceae, Pinaceae, Salicaceae, Sapindaceae</td>
<td>Lab: On Campus; interactive component</td>
</tr>
<tr>
<td>5</td>
<td>June 8</td>
<td>Fern families</td>
<td>Lab: Stamm Woodlot, Waterloo; interactive component</td>
</tr>
<tr>
<td>6</td>
<td>June 15</td>
<td>none</td>
<td>Review of plant families</td>
</tr>
<tr>
<td>7</td>
<td>June 22</td>
<td><em>Shrub families:</em> Caprifoliaceae, Adoxaceae, Grossulariaceae, Cornaceae, Rosaceae, Ericaceae</td>
<td>Lab ENV Dorney Garden; interactive component</td>
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</table>
8  June 29  Wetland Plant Families: Juncaceae, Cyperaceae, Poaceae and other wetland plants  Lab: Spongy bog, Baden; interactive component

9  July 6  Plant Families: Boraginaceae, Iridaceae, Caryophyllaceae, Apocynaceae, Asteraceae  Lab: ENV North campus reserve; interactive component

10 July 13  iNaturalist; Plant ID skills in the workplace  Lab: UW Rockwood property, Rockwood; interactive component

11 July 20  Prairie species  Lab: Schneider’s Woods, Wilmot Township; interactive component

12 July 27  none  Review

### ASSESSMENT:

<table>
<thead>
<tr>
<th>Evaluation Format</th>
<th>Percentage of Final Mark</th>
<th>Test or Due Date</th>
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</thead>
<tbody>
<tr>
<td>Test 1</td>
<td>25%</td>
<td>Wed June 16 9am-Thurs June 17, 11:55pm</td>
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<tr>
<td>Test 2</td>
<td>25%</td>
<td>Wed July 28 9am-Thurs July 29, 11:55pm</td>
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<tr>
<td>Field Notebook check-in</td>
<td>10%</td>
<td>Tues June 1 by 11:55pm</td>
</tr>
<tr>
<td>Final Field Notebook</td>
<td>20%</td>
<td>Tues Aug 3 by 11:55pm</td>
</tr>
<tr>
<td>iNaturalist Project</td>
<td>20%</td>
<td>Tues Aug 3 by 11:55pm</td>
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- **Test 1**: This will cover content lab 1 and weeks 1-5 lectures, as well as plant identification.
- **Test 2**: This will cover weeks 7-11 lectures, as well as plant identification.
- **Field Notebook**: This will be used to record observations and information weekly in your defined sampling area, for a total of 7 entries. The notebook will be assessed based on neatness, detailed information and variety of recording techniques including sketches, diagrams, maps, written notes, references to photos, etc. In addition, you will complete 3 reflection assignments in your field notebook using questions provided on the lecture slides. A notebook “checkin” ensures you are on the right track with notetaking!
- **iNaturalist Project**: an assessment of plant observations within a defined natural area on iNaturalist

### Lateness and Penalties:
Failure to hand in the above-mentioned items on the respective due dates will result in a penalty of 5% per day. If it is more than 4 calendar days late it will receive a zero. You can be exempted from these penalties by a medical certificate or documentation by your undergraduate advisor or UW counseling services.

### COMMITMENT EXPECTATIONS:
- Students will be expected to study different plant families specified in course outline by reading content assigned ahead of each lab. Be prepared to contribute to the virtual live labs.

### FIELD SAFETY & REQUIREMENTS:
• Pay attention to the safety presentation provided in week 1. Exercise caution around the field site that you choose and follow safety instructions given by the instructors.

If you have any concerns about the physical activity required for this course, please contact us immediately.

COMMUNICATION WITH INSTRUCTORS:

All communication with students must be through either the student’s University of Waterloo email account or via Learn. If a student emails the instructor or TA from a personal account they will be requested to resend the email using their personal University of Waterloo email account.

ACADEMIC INTEGRITY AND OFFENCES:

This syllabus is a contract between us, so you must abide by the policies and schemes laid out here (as will I, for my part). If you have any questions or concerns, please speak with me as soon as possible.

Academic integrity and offences

In order to maintain a culture of academic integrity, members of the University of Waterloo community are expected to promote honesty, trust, fairness, respect and responsibility (http://uwaterloo.ca/academicintegrity/Students/index.html). You are expected to know what constitutes academic integrity, to avoid committing academic offences, and to take responsibility for your actions. If you are unsure whether an action constitutes an offence, or need help in learning how to avoid offences (e.g., plagiarism, cheating) or about “rules” for group work/collaboration, please complete the tutorial at http://www.lib.uwaterloo.ca/ait and seek guidance from the course professor, your Undergraduate Advisor, or the office of the Associate Dean – Undergraduate.

When misconduct has been detected, disciplinary penalties will be imposed under Policy 71 – Student Discipline (http://www.adm.uwaterloo.ca/infosec/Policies/policy71.htm). For information on categories of offences and types of penalties, refer to Policy 71. Within the Faculty of Environment, those committing academic offences (e.g. cheating, plagiarism) will be placed on disciplinary probation and will be subject to penalties that may include a grade of 0 on the affected course element, 0 in the course, suspension, and expulsion.

AccessAbility

AccessAbility Services (https://uwaterloo.ca/accessability-services) collaborates with all academic departments to arrange appropriate accommodations for students who require them without compromising the academic integrity of the curriculum. If you require accommodation for any reason, please discuss with AccessAbility Services and register at the beginning of each academic term.

Assignment submission

Please refer to the course schedule and LEARN documents for detailed instructions on submission of all assignments and assessments.

Intellectual Property:

Students should be aware that this course contains the intellectual property of their instructor, and/or the University of Waterloo. Intellectual property includes items such as:

- Lecture content, spoken and written (and any audio/video recording thereof);
- Lecture handouts, presentations, and other materials prepared for the course (e.g., PowerPoint slides);
- Questions or solution sets from various types of assessments (e.g., assignments, quizzes, tests, final exams); and
- Work protected by copyright (e.g., any work authored by the instructor or TA or used by the instructor or TA with permission of the copyright owner).

Course materials and the intellectual property contained therein, are used to enhance a student's educational experience. However, sharing this intellectual property without the intellectual property owner’s permission is a violation of intellectual property rights. For this reason, it is necessary to ask the instructor and/or the University of Waterloo for permission before uploading and sharing the intellectual property of others online (e.g., to an online repository).

Permission from an instructor, or the University is also necessary before sharing the intellectual property of others from completed courses with students taking the same/similar courses in subsequent terms/years. In many cases, instructors might be happy to allow distribution of certain materials. However, doing so without expressed permission is considered a violation of intellectual property rights.

Please alert the instructor if you become aware of intellectual property belonging to others (past or present) circulating, either through the student body or online. The intellectual property rights owner deserves to know (and may have already given their consent).

**Definition of grades**
Please see the following link for descriptions of the standards required for different grades: [https://uwaterloo.ca/environment/current-undergraduate-students/student-handbook#exams](https://uwaterloo.ca/environment/current-undergraduate-students/student-handbook#exams).

**Mental health**
Along with the University of Waterloo and the Faculty of Environment and its Departments, I consider your well-being to be extremely important. We recognize that many students face health challenges, physical and/or emotional. Please note that help is available. Mental health is a serious issue for everyone and can affect your ability to do your best work. Counselling Services ([www.uwaterloo.ca/counselling-services](http://www.uwaterloo.ca/counselling-services)) is an inclusive, non-judgmental, and confidential space for anyone to seek support. They offer confidential counselling for a variety of areas including anxiety, depression, grief, relationship issues, sexuality, stress management, substance use, and much more.

**Religious observances**
Please email me at the beginning of term if you require special accommodation for religious observances that are not otherwise accounted for in the scheduling of classes and assignments.

**Grievance**
A student who believes that a decision affecting some aspect of his/her university life has been unfair or unreasonable may have grounds for initiating a grievance. See Policy 70 - Student Petitions and Grievances, Section 4, [www.adm.uwaterloo.ca/infosec/Policies/policy70.htm](http://www.adm.uwaterloo.ca/infosec/Policies/policy70.htm). When in doubt please contact your Undergraduate Advisor for details.

**Appeals**
A decision made or penalty imposed under Policy 70 - Student Petitions and Grievances (other than a petition) or Policy 71 – (Student Discipline) may be appealed if there is a ground. A student who believes he/she has a ground for an appeal should refer to Policy 72 (Student Appeals) [www.adm.uwaterloo.ca/infosec/Policies/policy72.htm](http://www.adm.uwaterloo.ca/infosec/Policies/policy72.htm).
Writing

The Writing and Communication Centre (WCC) works with students as they develop their ideas, draft, and revise. Writing and communication specialists offer one-on-one support in planning assignments, synthesizing and citing research, organizing papers and reports, designing presentations and e-portfolios, and revising for clarity and coherence. You can make multiple appointments throughout the term, or you can drop in at the Library for quick questions or feedback. To book a 25- or 50-minute appointment and to see drop-in hours, visit uwaterloo.ca/wcc.

Please note that communication specialists guide you to see your work as readers would. They can teach you revising skills and strategies, but will not change or correct your work for you.