ENV 252A - Regional Plant Identification
3 Credits, 2 hours lecture and 2 hours lab per week

This course covers identification and classification of native vascular plants, bryophytes, and lichens. Topics include plant identification, taxonomy, species concept, morphology, sampling, pressing, mounting, plant collections, voucher sets, herbarium specimens, and relevant resource material. A plant collection is required.

Instructor
Dr. David Smith
S209B
780-791-4997
david.smith@keyano.ca

Office Hours
Monday, Tuesday, Wednesday and Thursday 12:00 PM – 12:50 PM
Friday 11:00 AM – 11:50 AM

Hours of Instruction
Lecture: Friday 1:00 PM – 2:50 PM
Laboratory: Tuesday 2:00 PM – 3:50 PM

Required Resources


Full outdoor apparel for fall and winter weather including suitable footwear

Course Outcomes

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

- Collect, identify and mount plant specimens from diverse taxa emphasizing local flora
- Practice keying plants using a variety of information sources,
- Demonstrate familiarity with local plants especially with regard to identification, morphology, plant life cycles, and evolutionary history using oral presentations and written work,
- Work effectively in groups by managing group projects such as plant collections and oral presentations.
Evaluation

Plant collection  25% due week of December 4
Assignments -  15% due one week after each lab
Oral presentation  10% due week of November 27
Midterm Exam -  15% week of October 17
Final Exam -  35%
Total  100%

A grade of C- is required for progression or transfer.

Grading System

<table>
<thead>
<tr>
<th>Descriptor</th>
<th>Alpha Grade</th>
<th>4.0 Scale</th>
<th>Percent</th>
<th>Rubric for Letter Grades</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent</td>
<td>A+</td>
<td>4.0</td>
<td>&gt; 92.9</td>
<td>Work shows in-depth and critical analysis, well developed ideas, creativity, excellent writing, clarity and proper format.</td>
</tr>
<tr>
<td></td>
<td>A</td>
<td>4.0</td>
<td>85 – 92.9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A-</td>
<td>3.7</td>
<td>80 – 84.9</td>
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<tr>
<td>Good</td>
<td>B+</td>
<td>3.3</td>
<td>77 – 79.9</td>
<td>Work is generally of high quality, well developed, well written, has clarity, and uses proper format.</td>
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<tr>
<td></td>
<td>B</td>
<td>3.0</td>
<td>74 – 76.9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>B-</td>
<td>2.7</td>
<td>70 – 73.9</td>
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<tr>
<td>Satisfactory Progression</td>
<td>C+</td>
<td>2.3</td>
<td>67 – 69.9</td>
<td>Work has some developed ideas but needs more attention to clarity, style and formatting.</td>
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<tr>
<td></td>
<td>C</td>
<td>2.0</td>
<td>64 – 66.9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>C-</td>
<td>1.7</td>
<td>60 – 63.9</td>
<td></td>
</tr>
<tr>
<td>Poor Minimum Pass</td>
<td>D+</td>
<td>1.3</td>
<td>55 – 59.9</td>
<td>Work is completed in a general way with minimal support, or is poorly written or did not use proper format.</td>
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<tr>
<td></td>
<td>D</td>
<td>1.0</td>
<td>50 – 54.9</td>
<td></td>
</tr>
<tr>
<td>Failure</td>
<td>F</td>
<td>0.0</td>
<td>&lt; 50</td>
<td>Responses fail to demonstrate appropriate understanding or are fundamentally incomplete.</td>
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Proposed Schedule of Topics

<table>
<thead>
<tr>
<th>Week of</th>
<th>Topic</th>
<th>LAB or Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week of Sep 4</td>
<td>Introduction</td>
<td>NO LAB</td>
</tr>
<tr>
<td>Week of Sep 11</td>
<td>Science of taxonomy</td>
<td>LAB 1 Bryophytes and liverworts</td>
</tr>
<tr>
<td>Week of Sep 18</td>
<td>Mosses</td>
<td>LAB 2 Fungi and lichens</td>
</tr>
<tr>
<td>Week of Sep 25</td>
<td>Fungi, lichens, liverworts</td>
<td>LAB 3 Horsetails, Clubmosses, Ferns</td>
</tr>
<tr>
<td>Week of Oct 2</td>
<td>Seedless vascular plants</td>
<td>LAB 4 Gymnosperms</td>
</tr>
<tr>
<td>Week of Oct 9</td>
<td>Gymnosperms</td>
<td>LAB 5 Angiosperms</td>
</tr>
<tr>
<td>Week of Oct 16</td>
<td>Angiosperms</td>
<td>LAB 6 Roots, stems and leaves</td>
</tr>
<tr>
<td>Week of Oct 23</td>
<td>Fruit ID</td>
<td>LAB 7 Plant Collection (introduction)</td>
</tr>
<tr>
<td>Week of Oct. 30</td>
<td>Wildflower ID</td>
<td>LAB 8 Plant Collection (forbs)</td>
</tr>
<tr>
<td>Week of Nov 6</td>
<td>Shrub and Tree ID</td>
<td>No Lab – Holiday Plant Collection</td>
</tr>
<tr>
<td>Week of Nov 13</td>
<td>Sedge, rush and grass ID</td>
<td>LAB 9 Plant Collection (trees/shrubs)</td>
</tr>
<tr>
<td>Week of Nov 20</td>
<td>Plant Collection</td>
<td>LAB 10 Plant Collection (graminoids)</td>
</tr>
<tr>
<td>Week of Nov. 27</td>
<td>Plant Collection</td>
<td>LAB 11 Plant Collection</td>
</tr>
<tr>
<td>Week of Dec 4</td>
<td>Plant Collection</td>
<td>LAB 12 Plant collection (submission deadline)</td>
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</tbody>
</table>

Please Note:
Date and time allotted to each topic is subject to change.

Performance Requirements

Student Responsibilities

It is your responsibility as a student to contact the Office of the Registrar to complete the forms for Withdrawal or Change of Registration, and any other forms. Please refer to the list of important dates as noted in the Academic Schedule in the Keyano College credit calendar.

More specific details are found in the Student Rights and Student Code of Conduct section of the Keyano College credit calendar. It is the responsibility of each student to be aware of the guidelines outlined in the Student Rights and Student Code of Conduct Policies.

Laboratory Safety

In the science laboratories, safety is important.

Students must complete the WHMIS for Students online training course on Moodle before entering the science laboratories.
Students must comply with the mandatory laboratory safety rules for this course as provided in the laboratory manual. Failure to do so will result in progressive discipline such as a verbal warning, refused entry into the laboratory, or suspension from the College.

**Student Attendance**

Class attendance is useful for two reasons. First, class attendance maximizes a students’ learning experience. Second, attending class is a good way to keep informed of matters relating to the administration of the course (e.g., the timing of assignments and exams). Ultimately, you are responsible for your own learning and performance in this course.

It is the responsibility of each student to be prepared for all classes. Students who miss classes are responsible for the material covered in those classes and for ensuring that they are prepared for the next class, including the completion of any assignments and/or notes that may be due.

**Academic Misconduct**

Students are considered to be responsible adults and should adhere to principles of intellectual integrity. Intellectual dishonesty may take many forms, such as:

- Plagiarism or the submission of another person’s work as one’s own
- The use of unauthorized aids in assignments or examinations (cheating)
- Collusion or the unauthorized collaboration with others in preparing work
- The deliberate misrepresentation of qualifications
- The willful distortion of results or data
- Substitution in an examination by another person
- Handing in the same unchanged work as submitted for another assignment
- Breach of confidentiality.

The consequences for academic misconduct range from a verbal reprimand to expulsion from the College. More specific descriptions and details are found in the Student Rights and Student Code of Conduct section of the Keyano College credit calendar. It is the responsibility of each student to be aware of the guidelines outlined in the Student Rights and Student Code of Conduct Policies.

In order to ensure your understanding of the concept of plagiarism, you must successfully complete the online tutorial found on ilearn.keyano.ca. Then print the certificate, sign it, and show it to each of your instructors. Your course work will not be graded until you show this signed certificate.

**Specialized Supports**

**Counselling and Accessibility Services**

Counselling Services provides a wide range of specialized counselling services to prospective and registered students, including personal, career and academic counselling.

**SKILL Centre**

The SKILL Centre is a learning space in the Clearwater Campus at Keyano College where students can gather to share ideas, collaborate on projects and get new perspectives on learning from our tutorial staff.

The SKILL Centre, through a variety of delivery methods, provides assistance in skill development to Keyano students. Assistance is provided by instructors, staff and student tutors. Individuals wishing to improve their mathematics, writing, grammar, study, or other skills, can take advantage of this unique service.
Authorization
This course outline has been reviewed and approved by the Program Chair.

Dr. David Smith, Instructor

Louis Dingley, Chair

Dr. Vincella Thompson, Dean

Signed copies to be delivered to:
Instructor
Registrar’s Office