ENV 252 Regional Plant Identification

3 Credits, 14 weeks, 2 hours lecture and 2 hours lab per week
An examination of plant diversity in western Canada with a focus on the boreal forest of northern Alberta. Identification skills gained in this course will rely on the integration of information from the field, lecture and laboratory in plant taxonomy, plant anatomy, plant physiology and plant ecology. Students are required to submit a plant collection of approximately 100 specimens. An oral presentation on an applied topic related to botany in western Canada is required.

Must have completed BIOL 108 – An Introduction to Biodiversity

Instructor

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

Office Hours

Monday, Tuesday and Thursday 12:00 PM – 12:50 PM
Wednesday and Friday 1:00 PM – 1:50 PM

Hours of Instruction

Lecture: Monday 1:00 PM – 2:50 PM
Laboratory: Wednesday 11:00 AM – 12:50 PM

Required Resources


Full outdoor apparel for Fall and Winter weather including suitable footwear

Course Outcomes

The student 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 November 23
Assignments - 15% due one week after each lab
Oral presentation - 10% due week of November 23
Midterm Exam - 15% week of October 19
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>
<td></td>
</tr>
<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>
<td></td>
</tr>
<tr>
<td>Satisfactory</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>
</tr>
<tr>
<td>Progression</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</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>
</tr>
<tr>
<td>Minimum Pass</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>
</tr>
</tbody>
</table>
### Proposed Schedule of Topics

#### LECTURES AND LABORATORIES, ENVT 252, FALL 2015

<table>
<thead>
<tr>
<th>Week of</th>
<th>Lectures</th>
<th>Labs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aug. 31</td>
<td>Introduction</td>
<td>NO LAB</td>
</tr>
<tr>
<td>Sep 7</td>
<td>Science of taxonomy</td>
<td>LAB 1 Bryophytes and liverworts</td>
</tr>
<tr>
<td>Sep 14</td>
<td>Mosses</td>
<td>LAB 2 Fungi and lichens</td>
</tr>
<tr>
<td>Sep 21</td>
<td>Fungi, lichens, liverworts</td>
<td>LAB 3 Horsetails, Clubmosses, Ferns</td>
</tr>
<tr>
<td>Sep 28</td>
<td>Seedless vascular plants</td>
<td>LAB 4 Gymnosperms</td>
</tr>
<tr>
<td>Oct 5</td>
<td>Gymnosperms</td>
<td>LAB 5 Angiosperms</td>
</tr>
<tr>
<td>Oct 12</td>
<td>Angiosperms</td>
<td>LAB 6 Roots, stems and leaves</td>
</tr>
<tr>
<td>Oct 19</td>
<td>Fruit ID</td>
<td>LAB 7 Plant Collection (introduction)</td>
</tr>
<tr>
<td>Oct 26</td>
<td>Wildflower ID</td>
<td>LAB 8 Plant Collection (forbs)</td>
</tr>
<tr>
<td>Nov. 2</td>
<td>Shrub and Tree ID</td>
<td>LAB 9 Plant Collection (forbs/shrubs)</td>
</tr>
<tr>
<td>Nov. 9</td>
<td>Sedge, rush and grass ID</td>
<td>No Lab – Holiday Plant Collection</td>
</tr>
<tr>
<td>Nov 16</td>
<td>Plant Collection</td>
<td>LAB 10 Plant Collection (graminoids)</td>
</tr>
<tr>
<td>Nov 23</td>
<td>Plant Collection</td>
<td>LAB 11 Plant Collection</td>
</tr>
<tr>
<td>Nov 30</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. 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.

### Performance Requirements

#### 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 student's 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.

Attendance of lectures and laboratories is mandatory and will be monitored and reported to the Chair. Missing two or more labs will result in failure.

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 2015-2016 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 at https://www.indiana.edu/~istd/. 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 Disability 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                  Date Authorized

__________________________  ____________________________
Guy Harmer, Dean                  Date Authorized

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