ENVT 170 – ANIMAL IDENTIFICATION

3 credits, 2 hours lecture, 2 hours lab

Course description:
Students will develop identification skills necessary for identifying vertebrates and invertebrates of Alberta, with a special emphasis on identifying provincially and/or federally listed species. Course topics include bird ID by sight and ear, mammal tracking, and aquatic invertebrate collection and identification.

Prerequisite/Co-requisite BIOL 108 or equivalent.

Instructors
Paul Knaga
Office location: TBD
Phone number: TBD

Christa MacNevin
Office location: TBD
Phone number: TBD

Laboratory Instructor
Camille Scheibner
Office location: TBD
Phone number: TBD

Office Hours
By appointment

Hours of Instruction

Lecture
Thursday   6:30 pm – 8:30 pm   Online

Lab
Thursday   11:00 am – 2:00 pm   Room S114 (ENVT lab)

Required Resources

1. Hard copy of completed WHMIS course certificates for first lab (online resource)

2. Birds of Alberta Paperback (New Edition) – Illustrated, Jan. 15 2020 ISBN: 9781772130676

3. Peterson Field Guide to Mammals of North America, 4th Edition, Reid. ISBN 97803959355965

4. Fishes of Alberta, 3rd Edition, Derlukewich and Critchley. Order by emailing: derlukew@ualberta.ca

5. Lab coat (full lab coats that go to the knees). Please note that separate lab coats are required for courses that meet in the ENVT lab (S114) such as ENVT 170, and courses such as CHEM 101 and BIOL 108 that meet in the upstairs labs.

6. Moodle (http://ilearn.keyano.ca). The course outline, lecture notes and other resources will be made available on Moodle.

7. Keyano College email address. We will not correspond with students using their personal email addresses.

Course Outcomes
1. Identify by sight and/or sound 90+ bird species found in northeastern Alberta, including species listed by provincial and/or federal agencies. Special emphasis will be placed on species that breed in, or migrate through, the boreal forest.
2. Identify by sight, tracks, scat of 40+ species of large and small mammals found in Alberta. Emphasis will be placed on species that are listed or managed by provincial and/or federal agencies.
3. Identify by sight and/or sound 15+ species of amphibians and reptiles found in Alberta. Emphasis will be placed on species that are listed or managed by provincial and/or federal agencies.
4. Identify by sight 30+ species of fish found in northeastern Alberta, with special emphasis on provincially and/or federally listed species, and species of significance to anglers and Aboriginal groups in Alberta.
5. Identify 10+ Orders of invertebrates by sight.
6. Link all species to range maps and habitat types. This will involve a general sense of the ecology each of the species, and as a result, an ability to group species into species assemblages one might expect to encounter at a particular habitat (e.g., a coniferous forest stand versus a wetland)
7. Use field guides to identify wildlife seen in the field but not immediately recognized. This will be accomplished by knowing which distinguishing characteristics to look for in these kinds of situations (e.g. shape of head, size of track, wing plumage, etc.)
8. Be technically skilled in the use of binoculars, dissecting scopes, field guides, and other equipment used for identifying wildlife.

Evaluation

Please note: It is a requirement that all assignments and tests must be submitted as a condition to passing this course.

Component	Percentage
Identification Quizzes (12 total)	60%
Wildlife Sweep Term Project	10%
Final Written	15%
Final Practical	15%

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

Grading System

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

Proposed Schedule of Topics

Week		Topic	Instructor
1	**Lecture** Sept-03	**Introduction** Natural History, Taxonomy, Habitat, Status	Paul Knaga
	Lab Sept-03	None	
2	**Lecture** Sept-10	**Ornithology 1** Introduction to Birding, Topography, Passerine Diversity and Identification 1	Christa MacNevin
	Lab Sept-10	**Field Studies** Field Safety, Field Equipment, Land Classification	
3	**Lecture** Sept-17	**Ornithology 2** Passerine Diversity and Identification 2	Christa MacNevin
	Lab Sept-17	**Bird Survey Standards** Birding by Ear, eBird, Bird ID clues	
4	**Lecture** Sept-24	**Ornithology 3** Waterfowl Diversity and Identification	Christa MacNevin
	Lab Sept-24	**Nests and Nightjars** Point Count Protocols, NestWatch Protocols, Nightjar Monitoring	
5	**Lecture** Oct-01	**Ornithology 4** Waterbird Diversity and Identification	Christa MacNevin
	Lab Oct-01	**Monitoring Flocks** Flock Size Estimation and Migration Monitoring	

6	**Lecture** Oct-08	**Herpetology** Amphibian and Reptile Diversity and Identification	Paul Knaga
	Lab Oct-08	**Bird Contact Monitoring** Oiled Bird Protocols	
7	**Lecture** Oct-15	**Invertebrates** Arthropod Diversity and Identification	Paul Knaga
	Lab Oct-15	**Amphibian and Reptile Monitoring** Visual Encounter Surveys, Nocturnal Surveys	
8	**Lecture** Oct-22	**Mammalogy 1** Rodents, Squirrels, Lagomorphs, Shrews, Bats	Paul Knaga
	Lab Oct-22	**Invertebrate Sampling** TBD	
9	**Lecture** Oct-29	**Ichthyology** Large-bodied Fish Diversity and Identification	Paul Knaga
	Lab Oct-29	**Remote Wildlife Monitoring** Cameras and Recording Units	
10	**Lecture** Nov-05	**Mammalogy 2** Ungulate and Carnivore Identification	Paul Knaga
	Lab Nov-05	**Fish Lab** TBD	
11	**Reading Week, No Classes**		
12	**Lecture** Nov-19	**Ornithology 5** Land Bird Diversity and Identification	Christa MacNevin
	Lab Nov-19	**Winter Surveys** Finnish Triangles and Snow Tracking	
13	**Lecture** Nov-26	**Ornithology 6** Raptor Diversity and Identification	Christa MacNevin
	Lab Nov-26	**Wildlife Tree** Wildlife Tree Identification and Assessments	
14	**Lecture** Dec-03	**Student Presentations**	
	Lab Dec-03	**Raptor Surveys** Migration, Nest, Diurnal Raptors, Nocturnal Owl	

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

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 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 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 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.