

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

Office Hours*Paul*

Monday 3:30 pm – 4:30 pm Online

Christa

Day TBD Online

Hours of Instruction*Lecture*

Thursday 3:00 pm – 5:00 pm Online

Lab

Thursday Asynchronous Online

Required Resources

1. National Geographic Field Guide to Birds. 7th Edition. 2017. ISBN: 978-1426218354
2. Peterson Field Guide to Mammals of North America, 4th Edition, Reid. ISBN 978-03959355965
3. Fishes of Alberta, 3rd Edition, Derlukewich and Critchley. Order by emailing: derlukew@ualberta.ca.
4. Moodle (<http://ilearn.keyano.ca>). The course outline, lecture notes and other resources will be made available on Moodle.
5. Keyano College email address. We will not correspond with students using their personal email addresses.
6. Laptop capable of using Zoom and participating on Moodle assignments, quizzes, and exams.

Optional Resources

1. Peterson Field Guide to Animal Tracks. 3rd Edition. ISBN 9780618517435
2. Peterson Field Guide to Western Reptiles and Amphibians. 4th Edition. ISBN 9781328715500.

Course Outcomes

By the end of the course, students will be able to:

1. Explain the concepts and applications of natural history and wildlife field studies.
2. Classify animals using taxonomy, legal status, and conservation status.
3. Describe a species anatomy, morphology, behaviour, life cycle, signs, distribution, range, where relevant.
4. Describe the habitats that are important to certain animal species or guilds.
5. Explain wild animal conservation status (sub-national, national, international) and describe how status relates to proper identification
6. Identify by sight and/or sound 90+ bird species found in Alberta. Emphasis will be placed on species that breed in, or migrate through, the boreal forest.
7. Identify by sight, tracks, scat of 40+ species of large and small mammals found in Alberta.
8. Identify by sight and/or sound 15+ species of amphibians and reptiles found in Alberta.
9. Identify by sight 30+ species of fish found in Alberta.
10. Use field guides to identify wildlife seen in the field but not immediately recognized.
11. Identify by sight signs that animals have been in an area. This includes skulls, tracks, scat, nests, breeding areas, and other features.
12. Use binoculars, dissecting scopes, field guides, and other equipment used for identifying animals.

Evaluation

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

<i>Component</i>	<i>Percentage</i>
Labs	50%
Midterm	15%
Group Project	10%
Final Exam	25%

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 Sep-02	<ul style="list-style-type: none"> Natural History, Ecology, Taxonomy Landscape Regions, Subregions, Classes Conservation and Legal Status of Wild Species 	Paul Knaga
	Lab Sep-02	<ul style="list-style-type: none"> Field Safety, Tools and Equipment Landscape Elements & Features 	
2	Lecture Sep-09	<ul style="list-style-type: none"> Amphibians and Reptiles Morphology, Field Signs, Habitat Features 	Paul Knaga
	Lab Sep-09	<ul style="list-style-type: none"> Amphibian and Reptile Species Identification Herptile Taxonomy, Life Stage Morphology 	
3	Lecture Sept-16	<ul style="list-style-type: none"> Introduction to Birding, Passerines (1) Bird ID Clues, Birding by Ear, Passerine Families 	Christa MacNevin
	Lab Sept-16	<ul style="list-style-type: none"> Passerine ID 1 	
4	Lecture Sept-23	<ul style="list-style-type: none"> Passerines (2) Bird Topography 	Christa MacNevin
	Lab Sept-23	<ul style="list-style-type: none"> Passerine ID 2 	
5	Lecture Sept-30	<ul style="list-style-type: none"> Landbirds Nests and Eggs, Landbird Families 	Christa MacNevin
	Lab Sept-30	<ul style="list-style-type: none"> Landbird ID 	

6	Lecture Oct-07	<ul style="list-style-type: none"> • Freshwater Fish (1) • Morphology, Age and Growth, Habitat 	Paul Knaga
	Lab Oct-07	<ul style="list-style-type: none"> • Sport Fish Identification • Fish Taxonomy, Fish and Wildlife Internet Mapping Tool 	
7	Lecture Oct-14	<ul style="list-style-type: none"> • Midterm Exam 	
	Lab Oct-14	<ul style="list-style-type: none"> • Work Period 	
8	Lecture Oct-21	<ul style="list-style-type: none"> • Waterfowl • Topography, Habitat, Migration, Surveys 	Christa MacNevin
	Lab Oct-21	<ul style="list-style-type: none"> • Waterfowl ID 	
9	Lecture Oct-28	<ul style="list-style-type: none"> • Waterbirds and Shorebirds • Oiled Bird Monitoring, Conservation, Families 	Christa MacNevin
	Lab Oct-28	<ul style="list-style-type: none"> • Waterbird ID 	
10	Lecture Nov-04	<ul style="list-style-type: none"> • Owls and Raptors • Feet, Feathers, Features, Raptor Families 	Christa MacNevin
	Lab Nov-04	<ul style="list-style-type: none"> • Raptor ID 	
11	Nov-11	<ul style="list-style-type: none"> • Reading Week, No Classes 	
12	Lecture Nov-18	<ul style="list-style-type: none"> • Mammals (1) • Morphology, Skulls, Teeth, Life History 	Paul Knaga
	Lab Nov-18	<ul style="list-style-type: none"> • Ungulate, Carnivore, Bat Identification • Mammal Taxonomy, Aging and Sexing 	
13	Lecture Nov-25	<ul style="list-style-type: none"> • Mammals (2) • Signs and Habitat, Field Surveys 	Paul Knaga
	Lab Nov-25	<ul style="list-style-type: none"> • Small-bodied Mammal Identification • Tracks and Scat, Skull Morphometrics 	
14	Lecture Dec-02	<ul style="list-style-type: none"> • Freshwater Fish (2) • Forage Fish, Habitat, Life History 	Paul Knaga
	Lab Dec-02	<ul style="list-style-type: none"> • Non-Game Fish Identification • Fish Community Diversity, Standard Measurements 	

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 and Student Services**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](#). The Keyano College credit

calendar also has information about Student Rights and Code of Conduct. It is the responsibility of each student to be aware of the guidelines outlined in the Student Rights and Code of Conduct Policies.

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

The Student Services Department is committed to Keyano students and their academic success. There are a variety of student supports available at Keyano. Due to the continuing situation with the Covid-19 pandemic, the offered support services will be implemented through a model to respond to the restrictions in force at the time. In-person and virtual services will be offered. All Alberta Health Services guidelines will be followed for in-person appointments—wear a mask, maintain two meters of physical distance, use hand sanitizer, and stay home if you are unwell.

All student services are available during Keyano business hours: Monday to Friday, 8h30-16h30. The College is closed for statutory holidays. If you require support outside of regular business hours, please inform the support service team, and we will do our best to accommodate your needs.

Accessibility Services: provides accommodations for students with disabilities. Students with documented disabilities, or who suspect a disability, can meet with a Learning Strategist to discuss

their current learning barriers and possible accommodations. Students who have accessed accommodations in the past are encouraged to contact us to request them for the semester. Please note that requesting accommodations is a process and requires time to arrange. Contact us as soon as you know you may require accommodations. For accessibility supports and to book an appointment, please contact accessibility.services@keyano.ca.

Accessibility Services also provides individual and group learning strategy instruction for all students, as well as technology training and supports to enhance learning. Meet with a Learning Strategist to learn studying and test-taking strategies for online classes. Schedule an appointment with the Assistive Technology Specialist to explore technology tools for learning. Book an appointment today by emailing accessibility.services@keyano.ca

Wellness Services: offers a caring, inclusive, and respectful environment where students can access free group and individual support to meet academic and life challenges. Mental Health Coordinators offer a safe and confidential environment to seek help with personal concerns. Students may access services virtually and in-person.

Wellness Services welcomes students to participate in any of the group sessions offered throughout the academic year addressing topics including mindfulness and test anxiety.

Individual appointments can be made by emailing wellness.services@keyano.ca.

Library Services: provides students with research and information supports as they engage in their studies. Library staff are available to support you both online and in-person throughout the semester. For a detailed list of library supports and services, go to www.keyano.ca/library. For all inquiries, please email askthelibrary@keyano.ca or chat with us online.

Begin your research with the [Library's FIND page](#). Search for information and sources for your assignments using the OneSearch, the Library's Catalogue, or by searching in a specific database selected from the [A-Z Database List](#).

Individual support with us is available. For support with citations, research and other information needs, appointments can be booked using the online [Book A Librarian Calendar](#). For support with Moodle, educational tools for assignments, Microsoft Office, Zoom, Teams and more, book an appointment using the online [Educational Technology Support Calendar](#).

Research and subject guides are helpful resources when beginning your research, assignment, using new educational technology, or addressing other information needs. To view a subject or course-specific guide, check out the complete listing of online [Subject Guides](#).

To access additional research resources, including Citation Guides (APA, MLA, Chicago, or IEEE), go to the [Research Help Library page](#).

The Loanable Technology collection is available to support students in their learning pursuits, whether online, in person or both. Items available for borrowing include mobile projectors, webcams, noise-cancelling headphones, Chromebooks, and laptops. For an up-to-date list of technology available for borrowing as well as support available, go to the Library's [Loanable Technology webpage](#).

Academic Success Centre: The Academic Success Centre is a learning space in the Clearwater Campus (CC-119) at Keyano College. Students can gather to share ideas, collaborate on projects, get new perspectives on learning from our Academic Content Specialists, or use the Centre's educational resources. The Academic Success Centre provides academic support services to students registered in credit programs at Keyano College in the form of individual tutoring, writing support groups, facilitated study groups, workshops, and study space. Services are **free** to Keyano students.

Academic Content Specialists are available in the areas of Math, Science, Human Services, and English/Humanities. This covers all courses offered at Keyano. The Academic Success Coach can also be found in the Academic Success Centre.

For the most up to date information on how to book a session, please view [the Keyano Academic Success Centre homepage](#).

Academic Integrity: The goal of the Academic Success Centre is to foster a student's ability to learn effectively and independently. Students registered at Keyano College are welcome to drop by the Centre to visit with any of our Academic Content Specialists to discuss their academic concerns.

Availability: Monday to Friday: 8:30 a.m. – 4:30 p.m. Flexible times may be available upon request. Virtual and in-person sessions, please email to get in contact with our Academic Content Specialists. For the most up to date information on how to book a session, please view the [Academic Success Centre homepage](#).

Academic Success Coach: offers you support and access to resources for your academic success to help you to find the Keys to your Success. The Academic Success Coach will work with you to develop an academic success plan, develop your study and time management skills, and connect you with the right resources here at Keyano. Academic.success@keyano.ca is the best way to access resources during blended service delivery. The Academic Success Coach is located in the Skill Centre in CC-119 at the Clearwater Campus.

E-Learning

Technology and internet will impact your online learning experience. It's important that you can watch an online video and other course materials, take online quizzes and participate in a live class with your instructor and other students. Live/virtual classes will be hosted in Microsoft Teams or Zoom.

For all course delivery types, you will access your course resources on Keyano's learning management system, **Moodle (iLearn)**. Login in using your [Keyano username and password](#).

Keyano College operates in a Windows based environment, and having the correct tools for online learning is important. Here's a list of recommended system requirements.

Internet Speed

Minimum Internet speeds of 10 Mbps.

Recommended Internet speeds of 25 Mbps (especially if you are sharing your internet at home).

Check your internet speed with Fast.com.

Microsoft Windows	Apple
<p>Minimum Requirements: A Windows 10 computer/laptop</p> <ul style="list-style-type: none"> · Minimum 4GB of RAM. · 10GB+ available hard drive storage. · Enough available hard drive space to install the Microsoft Office suite (approximately 3GB). <u>Microsoft Office</u> software is free to all Keyano students and employees. · Microphone, webcam and speakers. A headset with a microphone is recommended. · System updates must be regularly installed. · Anti-Virus / Anti-Malware software 	<p>Minimum Requirements: A Macintosh (V10.14 and above) computer/laptop</p> <ul style="list-style-type: none"> · Minimum 4GB of RAM. · 10GB+ available hard drive storage. · Enough available hard drive space to install the Microsoft Office suite (approximately 3GB). <u>Microsoft Office</u> software is free to all Keyano students and employees. · Microphone, webcam and speakers. A headset with a microphone is recommended. · System updates must be regularly installed. · Anti-Virus / Anti-Malware software.
<p>Recommended Requirements</p> <ul style="list-style-type: none"> · 8GB of RAM · A method of backing up/synchronizing to local or cloud-based storage such as OneDrive is highly recommended. This is included if you complete the setup of KeyanoMail and download MS Office using your Keyano email for free. 	<p>Recommended Requirements</p> <ul style="list-style-type: none"> · 8GB of RAM · A method of backing up/synchronizing to local or cloud-based storage such as OneDrive is highly recommended. This is included if you complete the setup of KeyanoMail and download MS Office using your Keyano email for free.
<p>Chromebooks are not recommended as they are not compatible with testing lockdown browsers. A Microsoft Surface or iPad or iPad Pro may be possible alternatives in some program areas.</p>	

Specific Department Requirements:

Business and OA programs require Windows 10.
 Other programs may utilize Windows based tools as well.

Computer Software

Students will be able to get access to Microsoft Office 365 for free using Keyano credentials by [clicking here](#).

Recording of Lectures and Intellectual Property

Students may only record a lecture if explicit permission is provided by the instructor or by Accessibility Services. Even if students have permission to record a lecture or lecture materials, students may not share, distribute, or publish any of the lectures or course materials, this includes any recordings, slides, instructor notes, etc. on any platform. Thus no student is allowed to share, distribute, publish or sell course related content (instructor, or students) without permission. It is important to recognize that the Canadian Copyright Act contains provisions for intellectual property. The [Academic Integrity Policy](#) provides additional information on Keyano College's expectations from students as members of the intellectual community.

ITS Helpdesk

If you are having issues with your student account, you can contact the ITS Helpdesk by emailing its.helpdesk@keyano.ca or calling 780-791-4965.