



<https://www.nrcan.gc.ca/our-natural-resources/forests/sustainable-forest-management/boreal-forest/13071>



UNIVERSITY
OF MANITOBA

**University of Manitoba
Clayton Riddell Faculty
Department of Environment and
Geography**

**Applications in Field Readiness
Course Syllabus
ENVR 3020 T01
Fall 2023**

TABLE OF CONTENTS

COURSE DETAILS.....	3
INSTRUCTOR CONTACT INFORMATION.....	3
COURSE DESCRIPTION	3
GENERAL COURSE INFORMATION.....	4
COURSE OBJECTIVES	4
COURSE GOALS	4
COURSE SCHEDULE	5
CISCO WEBEX.....	ERROR! BOOKMARK NOT DEFINED.
USING COPYRIGHTED MATERIAL	5
RECORDING CLASS LECTURES	5
TEXTBOOK, READINGS, MATERIALS	5
COURSE TECHNOLOGY	6
CLASS COMMUNICATION.....	6
STUDENT EXPECTATIONS	6
PARTICIPATION CHECK STOPS.....	7
STUDENTS ACCESSIBILITY SERVICES	7
CLASS SCHEDULE.....	8
COURSE EVALUATION METHODS.....	10
GRADING	11
ASSIGNMENTS & ORAL PRESENTATIONS	11
SCHEDULE "A"	12

Course Details

Course Title & Number: Applications in Field Readiness ENVR 3020 T01

Number of Credit Hours: 3 Credit Hours

Class Times & Days of Week: Saturday 9:00 am – 12:00 pm (September 6 – December 11)

Location for classes/labs/tutorials: To be held in part at the University of Manitoba Fort Gary Campus Wallace Bldg. as well as Parkland Mews Falconry & Bird of Prey Education Centre. There may be other destinations included (e.g., Assiniboine Zoo) which are outlined in this course syllabus and will be discussed in class.

Instructor Contact Information

Instructor(s) Name:	Dr. Erin McCance
Office Hours or Availability:	Online Office hours via Cisco WebEx Thursday 4:00 pm – 6:00 pm (by appointment only)
Office Phone No.	(204) 232-2941
Email:	E-mail: erin.mccance@umanitoba.ca Communication with students is only conducted through @myumanitoba.ca email accounts. All email communication will be responded to within 24 hours
Contact:	Students should contact me by email.
Specialists:	Robert Wheeldon: rewheeldon51@gmail.com Robert Weaver: Robert.weaver@dfo-mpo.gc.ca
Professional Engagement:	This course will expose students to a number of professionals that have extensive field-based and specialty experience to include: Robert Wheeldon (PLMs), Tim Poole (Gov. of MB), Robert Weaver (DFO), Victoria Dearborn (UofM), Jim Fisher (Delta Waterfowl), Dr. Charlene Berkvens (Assiniboine Park Zoo), and Dr. Richard Baydack (UofM).

Course Description

Applications in Field Readiness is a course open to all undergraduate students in the C.H. Riddell Faculty of Environment, Earth, and Resources and particularly those in ENVR 2900 who intend to join the Co-operative Education Option. The intent of the course is to expose students to essential and practical hands-on learning opportunities to assist students in becoming field ready

and safe. The course is designed to provide participants with an understanding of important safety measures and building foundational technical skills for working in a field setting. Lectures consist of both classroom style learning and outdoor practical hands-on applications.

General Course Information

The course is designed to provide participants with an understanding of important safety measures and foundational technical skills for working in a field setting. This course aims to expose students to a hands-on practical learning experience in a safe and monitored environment, so skills can be practiced prior to deployment into the field for research or future employment purposes. The course is held in part at the University of Manitoba, Fort Gary Campus, as well as at Parkland Mews Falconry & Bird of Prey Education Centre (Map provided on U of M Learn), located 10 minutes south of the University of Manitoba. Students will each be responsible to make their way to the lecture destination. For those who may be interested in carpooling, students may connect with each other to arrange. The course is held weekly, during a 3-hour time slot which will allow for in-classroom lecture-based learning as well as practical application of that learning in a hands-on field setting. Evaluation metrics in the course include written submissions, oral presentations, and hands-on completion of foundational skills learned.

The course consists of a number of field activities in which students will take an active role in observing, examining, and assessing various approaches to becoming field ready and safe. Please note that the University of Manitoba Animal Care Committee requires that for any activity involving live animals, students have the option not to attend.

Course Objectives

The intent of this course is to:

1. Expose students to important considerations for being field ready & safe.
2. Allow students to practice, in a monitored and safe environment, skills required for working in a field setting.
3. Gain practical experiences using techniques to assess and monitor wildlife.
4. Present students with an array of techniques commonly used by environmental professionals in a field setting.

Course Goals

Upon completion of this course, students should be able to:

- Apply survival skills required for working in a field setting;
- Better understand the importance of communication;
- Be wildlife safe and smart;
- List approaches used, relative to legislation, for assessing avian and terrestrial species population abundance;
- Identify a diversity of waterfowl and avian species by sight; and
- Appreciate the pathology and common diseases found in local ungulate species in Manitoba.

Course Schedule

Class will be held each week on Saturday mornings from 9:00 am – 12:00 pm. Students must plan appropriately to ensure they arrive early with time to get settled before class begins promptly at 9:00 am. Students must check the course syllabus for information as to whether the class is held at the University of Manitoba, Fort Gary Campus or whether class will take place at Parkland Mews Education Centre (map provided on U of M learn). Any variation to the schedule provided in this course syllabus (i.e., weather day) will be communicated to students by 4:00 pm on the Friday prior to class on Saturday. This communication will be posted on the announcements page for the course on U of M Learn as well as emailed to all student U of M email accounts. Students are required to check U of M Learn and their U of M email accounts regularly.

The voluntary withdrawal date for this course is November 21, 2023. By the voluntary withdrawal date, students will have completed approximately 45% of their course grade as well as have a good idea of their performance relative to the participation/practical skill execution evaluation metrics.

Office Hours

Instructor office hours will be held following each lecture as well as during scheduled office hours (by appointment only) using Microsoft Teams. Should a student wish to meet with the instructor, the student should email the Instructor to request a meeting time and the Instructor will provide a mutually agreeable time and the associated meeting link.

Using Copyrighted Material

Please respect copyright. This course will use copyrighted content. I have ensured that the content I use is appropriately acknowledged and is presented in accordance with copyright laws and University guidelines. Copyrighted works, including those created by me, are available for your private study and research, and you must not distribute them in any format without permission. Do not upload copyrighted works to a learning management system (e.g., UofM Learn), or any website, unless an exception to the *Copyright Act* applies or written permission has been confirmed. For more information, see the University's Copyright Office website at <http://umanitoba.ca/copyright/> or contact um_copyright@umanitoba.ca.

Recording Class Lectures

Dr. McCance and the University of Manitoba hold copyright over the course materials, presentations and lectures which form part of this course. No audio or video recording of lectures or presentations is allowed in any format, openly or surreptitiously, in whole or in part without the permission of Dr. McCance. Course materials (both paper and digital) are for the participant's private study and research.

Textbook, Readings, Materials

Required readings and research are a requirement in this course. Required readings will be posted on UofM Learn. Students may be required to use libraries, the media, the internet, and other sources to complete assignments outlined within this course.

Course Technology

It is the general University of Manitoba policy that all technology resources are to be used in a responsible, efficient, ethical, and legal manner. Student may use technology in classroom setting only for educational purposes as approved by instructor and/or the University of Manitoba Disability Services. Students should not participate in personal direct electronic messaging / posting activities (e-mail, texting, video or voice chat, wikis, blogs, social networking (e.g., Facebook) online and offline “gaming” during scheduled class time.

Class Communication

The University requires all students to activate an official University email account. For full details of the Electronic Communication with Students please visit:

http://umanitoba.ca/admin/governance/media/Electronic_Communication_with_Students_Policy_-_2014_06_05.pdf

Please note that all communication between me and you as a student must comply with the electronic communication with student policy:

(http://umanitoba.ca/admin/governance/governing_documents/community/electronic_communication_with_students_policy.html). You are required to obtain and use your U of M email account for all communication between yourself and the university.

Student Expectations

The lecture material covered each week will be provided on UofM Learn. Since the notes are made available to you, each student should be actively involved in class discussions and participate fully with each exercise. Given this is a course aimed at exposing students to a ‘real-world’ scenario, 25% of your grade is allocated to your participation in the course and successful completion of field skills. Therefore, you are required to attend every class. Please come to class each week prepared to discuss the topics outlined. You may use your computer to take notes during class. Further, each student is asked to:

- Know course and university policies.
- Read and understand the course syllabus.
- Be courteous and respectful. Policies on Respectful Work and Learning Environment (RWLE) and Inappropriate and Disruptive Student Behavior below.
- Remain available for all classes.
- Maintain academic integrity and copyright according to the University of Manitoba guidelines.
- Inform instructor promptly if there is a conflict with the course schedule or course deliverables.
- Consult your *UM* email account regularly. This is how the instructor and university will communicate with you. Since there may be weather that may impact the schedule, please check your U of M Learn and U of M email accounts each week prior to class.

Outdoor Attire: Given this is a field course rooted in experiential learning, students will be spending time outdoors. Students need to ensure that they come prepared in the proper winter outdoor clothing to be comfortable and safe during the outdoor-based learning exercises.

I will treat you with respect and would appreciate the same courtesy in return. See [Respectful Work and Learning Environment Policy](#).

Inappropriate and Disruptive Student Behavior:

Inappropriate and disruptive behavior that interferes with the learning of other students, or the instructor's ability to teach will not be tolerated. Such behaviors would include but would not be limited to the following:

- threats to the physical safety of the individuals or others;
- verbal threats to or abuse of students or University personnel;
- recurring and willful damage of University and Parkland Mews property, including equipment;
- inappropriate or disruptive behavior as a result of misuse of drugs or alcohol on University or Parkland Mews property; and
- actions which habitually interfere with the learning environment or requires the inordinate time and attention of faculty and staff.

Other disruptive activities include (but are not limited to) the use of texting in class, wearing headphones, talking during lecture, using technology such as computers, tablets, and mobile devices to view material that is not related to the class.

Please see the Inappropriate or Disruptive Student Behavior Policy: <http://bit.ly/2iRbHKU>

Please see the Student Discipline Bylaw: <http://bit.ly/2b3RL3p>

Academic Integrity:

Students are responsible for ensuring they understand the University of Manitoba's policy on Academic Integrity (plagiarism, cheating, and examination impersonation). These policies are available in the University Catalog 2016-2017, General Academic Regulations

<http://bit.ly/2Dz50DX>. The penalties for plagiarism and cheating are severe and range from receiving a grade of zero on an assignment, to academic suspension. For more information on Cheating, Plagiarism, and Fraud: <http://bit.ly/2b63fBP> & <http://bit.ly/2b63ywR>.

All work is to be completed independently unless otherwise specified.

Participation Check Stops

This is a field-based course designed for experiential learning. Students are exposed to various field skills that are essential for being field ready and safe in remote field locations. Students are provided with the opportunity to practice using equipment and techniques in a controlled, monitored, and safe environment. Each student is asked to participate in the field-based skills taught in each lecture. Students can practice these skills until they feel comfortable in performing the skill. In a "Participation Check Stop" students will be asked to execute the skill one-on-one with a course instructor/teaching assistant to show their ability to perform the skill. Participation check-stops are outlined on the course syllabus schedule and will contribute to 20% of the student's course participation grade.

Students Accessibility Services

If you are a student with a disability, please contact SAS for academic accommodation supports and services such as note-taking, interpreting, assistive technology and other

accommodations. Students who have, or think they may have, a disability (e.g., mental illness, learning, medical, hearing, injury-related, visual) are invited to contact SAS to arrange a confidential consultation. If you have any concerns with your ability to participate in the physical aspects of this course, please contact student accessibility services and/or your instructor so accommodations can be made for you. **Student Accessibility Services**
<http://umanitoba.ca/student/saa/accessibility/> 520 University Centre 204 474 7423
Student_accessibility@umanitoba.ca

Class Schedule

- Sept. 9 *Location: Parkland Mews Falconry & Bird of Prey Education Centre*
Introduction
 Review of course syllabus and course objectives and expectations
 Course scheduling, location offerings, and weather days – waivers
 Professional Ethics
 It starts at Home – Field Preparation/Equipment
 Professional Designations and Important Technical Skills – Richard Baydack
- Sept. 16 *Location: Delta Waterfowl Kirchoffer Lodge (OPTIONAL)*
 Hunter and Field Safety
 Safe handling and transportation of Firearms
 Safe navigation land and water
 Mentored hunt
 Waterfowl and Bird Identification
- Details for this module are located on U of M Learn**
- Sept. 23 *Location: Parkland Mews Education Centre*
“Bird Business”
 Tim Poole, Species at Risk Biologist, Government of Manitoba
 Bird identification and survey techniques
Essential Knots – Taught Line Knot
Participation Check Stop
- Hand out Assignment #1 (worth 15%)**
- Sept 30 **No Class**
TRUTH & RECONCILIATION DAY
- Oct. 7 *Location: Parkland Mews Education Centre*
Edible, Medicinal, Spiritual Plants
 Plant identification (scale and picture considerations)
 Introduction to Vegetation survey techniques
 Indigenous Elder presentation on medicinal and spiritual plants
 Which plants are safe and which plants can support you in the field?
Essential Knots – Clove Hitch
Participation Check Stop

- Oct. 14 ***Location: Parkland Mews Education Centre***
Field Readiness – “It Starts at Home”
Physical and Psychology of Survival
Considerations for field gear, field safety
“Life in the woods”
Bear Smart – Theory and Practical
Types of Equipment – Theory and Practical
Essential Knots – Bowline Knot
Participation Check Stop
- Oct. 21 ***Location: Parkland Mews Education Centre***
“Know your way”
Navigation GPS -Level 1
Identification and explanation of all components of a GPS
Benefits and challenges of using a GPS
Find your destination - GPS
Essential Knots – Falconer’s knot
Participation Check Stop

Written Assignment due by 4 pm
- Oct. 28 ***Location: Parkland Mews Education Centre***
“Know your way”
Navigation Compass – Level 1
Identification and explanation of all components of a compass
Benefits and challenges of using a compass
Understanding map symbology – how to read a map
Take a bearing and back-bearing
Essential Knots - Sheet Bend Knot
Participation Check Stop
- Nov. 4 ***Location: University of Manitoba***
TEST – Midterm Test – worth 20%

Introduction to Techniques, Tools, and Time Team Project
Team establishment and discipline selection
- Nov. 11 **No Class**
- Nov. 18 ***Location: Parkland Mews Education Centre***
“Techniques, tools, and time” Workshop
Objectives, methods, and approach
Legislation and Environmental Assessment Requirements
Equipment and safety
Essential Knots – Boat Knots - Cleat Knot/Highwayman’s Hitch Knot

Participation Check Stop

Nov. 21 **Voluntary Withdrawal**

Nov. 25 *Location: Parkland Mews Education Centre*
Wildlife Biology & Field Necropsy – Dr. Charlene Berkvens
Theory Lecture

Why is this important?

Basic pathology and common causes

Disease awareness – when is it ok to touch and when/what not to touch.

Essential Knots – Water Knot

Participation Check Stop

Dec. 2 *Location: Parkland Mews Education Centre*
“Fish Forum”

Aquatic Ecosystems

Fish necropsy (otolith extractions, tissue and visceral sampling)

How to interpret and understand stable isotopes

Essential Knots – TEST – execute all knots learned for instructor.

Participation Check Stop

Dec. 8 **Team Oral Presentations All due by 4:00 pm into dropbox**

Dec. 9 *Location: Parkland Mews Education Centre*
Team Oral Presentations

Final Term Assignments Due by 4 pm (one per team) into dropbox

Course Evaluation Methods

Students will be evaluated in this course based on attendance, practical execution of a skill, as well as written submissions and oral presentations. Practical testing will be completed vis-a-vis one-on-one sessions with the instructor. Students will be required to demonstrate the ability to complete the activities learned within course modules (noted in the course syllabus as Participation Check Stops). The course evaluation will be as follows:

Evaluation Metric	Due Date/Time	Grade Allocation
Participation Check Stops	As allocated in Course Schedule	25%
Assignment 1 Written Submission	Oct 21, 2023, by 4:00 pm	20%
Mid-Term Test	Nov. 4, 2023	20%
Team Oral Presentation	Due Dec. 8, 2023 at 4:00 pm and delivered on either Dec. 9	10%
Team Report	Dec. 9, 2023 by 4:00 pm	25%
TOTAL		100%

Grading

The grading scale used by the Department of Environment and Geography is:

Letter Grade	Percentage out of 100	Grade Point Range	Final Grade Point
A+	90-100	4.25-4.5	4.5
A	80-89	3.75-4.24	4.0
B+	75-79	3.25-3.74	3.5
B	70-74	2.75-3.24	3.0
C+	65-69	2.25-2.74	2.5
C	60-64	2.0-2.24	2.0
D	50-59	Less than 2.0	1.0
F	Less than 50		0

Assignments, Test, & Oral Presentation

Students are required to complete an assignment, write a mid-term test, as well as complete a larger term team assignment with an accompanying oral presentation. Each of these assignments will be fully articulated with an evaluation rubric provided on U of M Learn. We will discuss the assignments and their requirements in class.

Assignment #1 is due into the dropbox on U of M learn by 4:00 pm on October 21, 2023. The assignment must be in Microsoft word (docx) or PDF format. No other formats will be accepted. It is the student's responsibility to ensure that the correct file is uploaded and that it can be opened by the instructor and is the correct document. Failure to do so will result in a zero grade. Assignment #1 is worth 20% of the course grade.

A mid-term test will be delivered on November 4, 2023 and written at the University of Manitoba. The mid-term test is worth 20% of the overall course grade.

The final team assignment has both a written and an oral component. The written component of the assignment is due on Dec. 9, 2023 at 4:00 pm into the appropriate dropbox folder of U of M Learn. The assignment must be in Microsoft word format (docx) or PDF format (one report uploaded per team). No other formats will be accepted. It is the student's responsibility to ensure that the appropriate file has been uploaded and that it can be opened by the instructor. Failure to do so will result in a zero grade. The final assignment is worth 25% of the course grade.

Further to the written component of the final team assignment is the team oral component. The team oral component of the assignment must be in power point or PDF format. No other formats will be accepted. The oral component presentation must be submitted into the appropriate dropbox on U of M Learn by 4:00 pm on Dec. 8, 2023 (one file per team). It is the team's responsibility to ensure that the appropriate file has been uploaded and can be opened by the instructor. Failure to do so will result in a zero grade. Students will present their team oral component of the assignment Dec. 9, 2023. Determination of which students present on which day will be based on a first come, first serve basis. Students should email the course instructor to request their presentation date of choice. Once the presentation slots are filled by the first received requests, the remaining students will be scheduled by the instructor.

Late submission Policy for Assignments, Reports and Presentations: Late submissions will be awarded an automatic "F" without permission of the instructor and supporting documentation (e.g., medical certificate) or reasons provided. Failure to hand-in one or more assignments/reports will result in a grade of "F" for the course. Students will not be permitted to hand in assignments late, except for documented medical or compassionate reasons.

Academic Supports: The University of Manitoba provides many services and supports to encourage good scholarship and overall health and wellness including instruction to improve writing skills, best use practices for copyrighted materials, and supports for studying for examinations etc., personal health (both mental and physical) including student advocacy, student counseling and health services, etc. and supports for assaults (both verbal and physical). These are designed to make each student's experience positive, safe and assist in successful completion of courses and programs of study. The University provides and encourages all members and students to maintain a respectful work and learning environment. Policies have been developed regarding threatening behavior, or assaults whether verbal or physical to support victims and discipline offenders. For more information on these see Schedule "A" found at the end of the course syllabus.

Schedule "A"

Section (a) Academic Supports

Writing and Learning Support: The Academic Learning Centre (ALC) offers services that may be helpful to you throughout your academic program. Through the ALC, you can meet with a learning specialist to discuss concerns such as time management, learning strategies, and test-taking strategies. The ALC also offers peer supported study groups called Supplemental

Instruction (SI) for certain courses that students have typically found difficult. In these study groups, students have opportunities to ask questions, compare notes, discuss content, solve practice problems, and develop new study strategies in a group-learning format.

You can also meet one-to-one with a writing tutor who can give you feedback at any stage of the writing process, whether you are just beginning to work on a written assignment or already have a draft. If you are interested in meeting with a writing tutor, reserve your appointment two to three days in advance of the time you would like to meet. Also, plan to meet with a writing tutor a few days before your paper is due so that you have time to work with the tutor's feedback.

These Academic Learning Centre services are free for U of M students. For more information, please visit the Academic Learning Centre website at: <http://umanitoba.ca/student/academiclearning/>

You can also contact the Academic Learning Centre by calling 204-480-1481 or by visiting 201 Tier Building.

University of Manitoba Libraries (UML): As the primary contact for all research needs, your liaison librarian (if they weren't recently fired by Central Administration) can play a vital role when completing academic papers and assignments. Liaisons can answer questions about managing citations, or locating appropriate resources, and will address any other concerns you may have, regarding the research process. Liaisons can be contacted by email or phone and are also available to meet with you in-person. A complete list of liaison librarians can be found by subject: <http://bit.ly/WcEbA1> or name: <http://bit.ly/1tJ0bB4>

In addition, general library assistance is provided in person at 19 University Libraries, located on both the Fort Garry and Bannatyne campuses, as well as in many Winnipeg hospitals. For a listing of all libraries, please consult the following: <http://bit.ly/1sXe6RA>. When working remotely, students can also receive help online, via the Ask-a-Librarian chat found on the libraries' homepage: www.umanitoba.ca/libraries

Section (b) Mental Health

For 24/7 mental health support, contact the Mobile Crisis Service at 204-940-1781.

Student Counselling Centre: Contact SCC if you are concerned about any aspect of your mental health, including anxiety, stress, or depression, or for help with relationships or other life concerns. SCC offers crisis services as well as individual, couple, and group counselling. **Student Counselling Centre:** <http://umanitoba.ca/student/counselling/> 474 University Centre S207 Medical Services (204) 474-8592

Student Support Case Management: Contact the Student Support Case Management team if you are concerned about yourself or another student and don't know where to turn. SSCM helps connect students with on and off campus resources, provides safety planning, and offers other supports, including consultation, educational workshops, and referral to the STATIS threat assessment team. **Student Support Intake Assistant** <http://umanitoba.ca/student/case-manager/index.html> 520 University Centre (204) 474-7423

University Health Service: Contact UHS for any medical concerns, including mental health problems. UHS offers a full range of medical services to students, including psychiatric consultation. University Health Service <http://umanitoba.ca/student/health/> 104 University Centre, Fort Garry Campus (204) 474-8411 (Business hours or after hours/urgent calls)

Health and Wellness: Contact our Health and Wellness Educator if you are interested in information on a broad range of health topics, including physical and mental health concerns, alcohol and substance use harms, and sexual assault. Health and Wellness Educator <http://umanitoba.ca/student/health-wellness/welcome.html> Katie.Kutryk@umanitoba.ca 469 University Centre (204) 295-9032

Live Well @ UofM: For comprehensive information about the full range of health and wellness resources available on campus, visit the Live Well @ UofM site: <http://umanitoba.ca/student/livewell/index.html>