

Department of Environment and Geography, University of Manitoba
Environmental Field Investigations
ENVR 4020 (3 ch) or ENVR 4010 (1.5 ch)
Winter 2018

Instructor: Rick Baydack (Rick.Baydack@umanitoba.ca) 255 Wallace 474-6776
Classes: Workshops generally off-campus on dates/times listed in schedule

A. Goals:

Environmental Field Investigations is a 3 or 1.5 credit hour field course in the Department of Environment and Geography that will be offered over the Winter 2018 term. The intent is to provide students with an understanding of, observational experience with, and adaptive management opportunities for, a wide range of field-oriented topics related to the environment and its management. The course will draw upon the expertise of various environmental specialists from government agencies, the private sector, and non-government organizations.

B. Objectives:

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

1. Understand and participate in the design and delivery of field investigations for various environmental issues.
2. Assess and summarize perspectives about various environmental field investigations (6 or 3, depending on course in which student is enrolled) using an adaptive management approach.
3. Present a detailed oral description and adaptive strategies for an environmental field investigation of particular interest to you.

C. Course Content:

The course will consist of visits to a number of optional 'field' activities in which students will take an active role in observing, examining, and assessing various approaches and strategies being used to investigate environmental parameters and issues. The schedule for these field activities will be dependent upon the availability of personnel from cooperating agencies and interest from students, and additional details or cancellations of activities will be updated throughout the term. Students should therefore become familiar with the UM Learn website (<https://universityofmanitoba.desire2learn.com>) in order to determine the most up-to-date information on activities. Sign-up for each activity is to be provided by email to the Instructor, with a **minimum of 3 days advance notice of attendance**. In addition, note that each activity in the course outline has a website to which students are directed for additional information and in some cases, for personal registration, especially if the activity is organized by a non-University agency. Students are encouraged to try to attend as many activities as possible that do not conflict with their other academic and personal commitments (note that attendance at any activity is optional, but that at least 6 activities must be attended for the 3 ch courses, 3 for the 1.5 ch course). For all reports, the connection of the topic to the course title (i.e., Environmental Field Investigations) must be apparent. In addition, students are encouraged to locate and/or plan and attend other field-related environmental activities, and email the Instructor with details. Students should provide notice of their transportation requirements and/or details of their personal vehicle availability to/from various activities outside of the City of Winnipeg. For any on-campus or public events off campus (e.g. Fort Whyte, Nature Manitoba, Oak Hammock, etc.), students are able to register, and then simply attend and participate in the activity. You will not receive confirmation of

your registration in such a case. However, for field-related events where there are logistical considerations (e.g., University transportation, meals, accommodations), students who have registered will receive details roughly three days prior to the event. Therefore do not be alarmed if you have registered for an event, and have not received any feedback. You will receive information in due course. Note that some events may require a registration fee that students are responsible for paying.

The course will emphasize observational experience with various environmental field investigations generally in a field workshop format, although some activities will be seminar or conference-based. Students will learn how to consider possible alternative management approaches by using an ‘adaptive assessment process.’ Discussion on the adaptive assessment process will take place in the first class, and also will be available as a video that is on Reserve and can be viewed in the Science and Technology Library in Machray Hall. In particular, students are required to determine if (more effective) alternative strategies might be applied to the various field situations under study, and also to explain why the current approach is likely used. Students are expected to locate background literature and/or web-based sources of information for each field investigation that will be summarized in their report. Students will be evaluated through participation, reports, and an oral presentation. Electronic submission of all reports and Powerpoints for the oral presentation should be done using the UM Learn site, and are due by April 9, 2018.

Note that the University of Manitoba Animal Care Committee requires that for any activity involving live animals, students are only to observe the activity and not participate in the handling, capture, killing, or pursuit of live animals in any way.

The organizational meeting of the class will be held on Monday January 8 at 400 pm in 217 Wallace. If students are unable to attend, the Instructor should be contacted.

D. Evaluation

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| • Participation | 10% |
| • Summary and adaptive assessment of activities (1 ‘free’ Mar 16/Apr9) | 60% |
| • Oral Presentation on 1 activity (Apr 6 or 9) | 30% |

E. General

Requirements for this course and rules regarding plagiarism may be found in the General Academic Regulations and Policy Section of the University of Manitoba Graduate and Undergraduate Calendars. Evaluative feedback will be provided upon request of the individual student before the voluntary withdrawal deadline date of March 16, 2018.

F. Grading Scale

The grading scale to be used in this course is:

A+	90-100	C+	65-69
A	80-89	C	60-64
B+	75-79	D	50-59
B	70-74	F	0-49

G. Preliminary Winter 2018 Field Activities Schedule:

<u>Date</u>	<u>Theme</u>	<u>Location</u>	<u>Agency Rep</u>	<u>UM Rep</u>
Jan. 8 (4-530pm)	Course Introduction	217 Wallace		Baydack
Jan. 11 (12-1pm)	Ecological Insights from Camera Trap Data (www.wildlife.org/canada)	Webinar of The Wildlife Society, Canadian Section	Jason Fisher Preregistration webinars.cstws@gmail.com	Baydack
Jan. 14 (1-2pm)	Manitoba Warblers (www.oakhammockmarsh.ca)	Oak Hammock Marsh Centre	Paula Grieff Preregistration 204-467-3300	
Jan. 15 (730-10pm)	Solving Aquatic Whole Ecosystem Problems (http://www.naturemanitoba.ca)	Franco-Manitoban Centre	Michael Patterson	
Jan. 17 (1230-130pm)	Decision Support Tools for Forest Ecosystems (www.cfi-ifc.org)	Webinar of The Canadian Institute of Forestry	Guy LaRocque Preregistration lectures@cfi-ifc.org	Baydack
Jan. 18 (7-9pm)	Astronomy Workshop: The Night Sky (www.oakhammockmarsh.ca)	Oak Hammock Marsh Centre	Gerry Smerchanski Preregistration 204-467-3300	
Jan. 20 (1-3pm)	Ice Fishing for Beginners (http://www.fortwhyte.org)	FortWhyte Alive		
Jan. 20 (1-4pm)	Inuit Art Workshop (www.fortwhyte.org)	FortWhyte Alive	Preregistration 204-989-8355	
Jan. 20 (1-3pm)	Snowshoe Workshop (www.oakhammockmarsh.ca)	Oak Hammock Marsh Centre	Dusty Molinski Preregistration 204-467-3300	
Jan. 21 (1-4pm)	Open Fire Brewing (www.fortwhyte.org)	FortWhyte Alive	Preregistration 204-989-8355	
Jan. 25 (530-9pm)	MEIA Discovery Night and Mentoring Workshop	University Centre	MEIA Student Chapter Preregistration studentchapter@meia.mb.ca	
Jan. 26 (3-5pm)	Wildlife Diseases https://www.gov.mb.ca/sd/wildlife/disease/index.html	217 Wallace	Vince Crichton	McCance
Jan. 27 (9am-5pm)	Canadian Firearms Safety Course (http://www.rcmp-grc.gc.ca/cfp-pcaf/safe_sur/cour-eng.html)	243 Wallace	Bob Austman Preregistration rick.baydack@umanitoba.ca	Baydack

Jan. 31 (9am-3pm)	Manitoba Environmental Law (https://www.meia.mb.ca)	Norwood Hotel	Preregistration https://meia.mb.ca/event/145#registration
Feb. 2-4 (7 pm-4pm)	The Wildlife Society MB Chapter Get-Away	Camp Wannacumbac, Riding Mountain Park	Brian Kiss McCance (http://www.tws-mb.com/) Preregistration tws.manitoba.chapter@gmail.com
Feb. 3 (11am-4pm)	Fire and Ice Yoga Festival (www.fortwhyte.org)	FortWhyte Alive	Ash Bourgeois Preregistration 204-989-8355
Feb. 3 (7-10pm)	Banff Film Festival (http://www.accmanitoba.ca/)	Centennial Concert Hall	Tickets at 204-949-3999
Feb. 4 (10am-4pm)	Bannock Cooking Workshop (www.oakhammockmarsh.ca)	Oak Hammock Marsh Centre	
Feb. 4 (1-3pm)	Identifying Animal Tracks (www.fortwhyte.org)	Fort Whyte Alive	
Feb. 5 (730-10pm)	Living in the Boreal Forest for 6 Months (http://www.naturemanitoba.ca)	Franco-Manitoban Centre	Jennifer Ford Juan Pablo Quinonez
Feb. 6 (730-10pm)	Manitoba Ticks (http://www.naturemanitoba.ca)	Kelvin High School	Kateryn Rochon
Feb. 12 (1-4pm)	Lab Necropsy of White- Tailed Deer (http://www.iucn-whsg.org/node/768)	TRAMPP Farms St. Adolphe	Vince Crichton Paul and Michelle Campeau Preregistration rick.baydack@umanitoba.ca
Feb. 16 (3-5 pm)	Manitoba Museum of Nature (https://manitobamuseum.ca/main/)	190 Rupert Avenue	Randy Mooi McCance
Feb. 17 (10am-4pm)	Fly Tying Workshop (www.fortwhyte.org)	FortWhyte Alive	Preregistration 204-989-8355
Feb. 18 (1-2pm)	Anatomy of a Bird (www.oakhammockmarsh.ca)	Oak Hammock Marsh Centre	Paula Grief Preregistration 204-467-3300
Feb. 17&18 (10am-5pm)	Great Backyard Bird Count (www.fortwhyte.org)	FortWhyte Alive	
Feb. 18 (1-3pm)	Raising Backyard Ducks (www.fortwhyte.org)	FortWhyte Alive	Preregistration 204-989-8355
Feb. 20 (730-10pm)	Skull-duggery: How to 'read' skulls (http://www.naturemanitoba.ca)	Kelvin High School	Bill Watkins Sarah Watkins

Feb. 21 (10am-4pm)	Manitoba GIS Users Group Annual Workshop (http://www.mgug.ca)	Red River College		Walker
Feb. 21 (1230-130pm)	Canada's Forests and the Bioeconomy (www.cfi-ifc.org)	Webinar of The Canadian Institute of Forestry	Suzanne Wetzel	Baydock Preregistration lectures@cfi-ifc.org
Feb. 22 (7-10pm)	Astronomy Workshop: Sketching the Night Sky (www.oakhammockmarsh.ca)	Oak Hammock Marsh Centre	Gerry Smerchanski	Preregistration 204-467-3300
Feb. 26 (730-10pm)	Manitoba's Endangered Plants (http://www.naturemanitoba.ca)	Franco-Manitoban Centre	Diana Bizecki Robson	
Feb. 27 (730-10pm)	Backyard Wildlife Habitat (http://www.naturemanitoba.ca)	Kelvin High School	Ted McLachlan	
Feb. 28 (830-1130am)	Outdoor Safety and Survival Workshop	218 Wallace	Mitch LeClaire	McCance Preregistration erin.mccance@umanitoba.ca
Mar. 2 (230-5pm)	Biogeography of Peregrine Falcons(http://www.parklandmews.com/)	217 Wallace	Robert Wheeldon	McCance Preregistration erin.mccance@umanitoba.ca
Mar. 3 (9am-5pm)	Canadian Firearms Safety Course (http://www.rcmp-grc.gc.ca/cfp-pcaf/safe_sur/cour-eng.htm)	243 Wallace	Bob Austman	Baydock Preregistration rick.baydock@umanitoba.ca
Mar. 5 (230-530pm)	GPS Usage and Triangulation	217 Wallace	Mitch LeClaire	McCance Preregistration erin.mccance@umanitoba.ca
Mar. 6 (730-10 pm)	The Dirty Dozen: Manitoba Tyrant Flycatchers (http://www.naturemanitoba.ca)	Kelvin High School	Christian Artuso	
Mar. 9 (245-5pm)	Manitoba's Peregrine Falcon Recovery Program(http://www.parklandmews.com)	Parkland Mews	Robert Wheeldon	McCance Preregistration erin.mccance@umanitoba.ca
Mar. 12 (7am-4pm)	Lake Winnipeg Commercial Fishing Industry Seminar and Net Lifting/Setting (http://www.gov.mb.ca/waterstewardship/fisheries/commercial/commercial.html)	Lakeview Resort, Gimli	Ken Campbell Geoff Klein	Baydock Preregistration rick.baydock@umanitoba.ca
Mar. 13 (730-10 pm)	Attracting Birds to Your Backyard (http://www.naturemanitoba.ca)	Kelvin High School	James Whitlaw	
Mar. 14 (830-1130am)	Animal Track and Sign Survey	218 Wallace	Mitch LeClaire	McCance Preregistration erin.mccance@umanitoba.ca

Mar. 14 (or Mar. 23) (6-11am)	Wild Turkey Trapping and Banding (www.gov.mb.ca/conservation/wildlife)	SW Manitoba Specific location TBA	Frank Baldwin Don Sexton	Baydack
			Preregistration	rick.baydack@umanitoba.ca
Mar. 15 (9am-3pm)	Wastewater Reduction Workshop (https://www.meia.mb.ca)	Norwood Hotel		
			Preregistration	https://meia.mb.ca/event/147#registration
Mar. 16-17 (830am-9pm)	The Wildlife Society Annual Conference & General Meeting	Holiday Inn West (www.wildlife.org/manitoba)	Brian Kiss	Baydack
			Preregistration	tw.s.manitoba.chapter@gmail.com
Mar. 16 (230-5pm)	Manitoba Fishes (http://huntfishmanitoba.ca/go-fishing/what-youll-catch)	217 Wallace	Patrick Nelson	McCance
			Preregistration	erin.mccance@umanitoba.ca
Mar. 20 (730-10pm)	Sparrows in Migration (http://www.naturemanitoba.ca)	Kelvin High School	Ward Christianson	
Mar. 21 (7-11pm)	Nocturnal Owl Workshop	218 Wallace	Mitch LeClaire	McCance
			Preregistration	erin.mccance@umanitoba.ca
Mar. 25 (1-4pm)	Open Fire Brewing (www.fortwhyte.org)	FortWhyte Alive		
			Preregistration	204-989-8355
Mar. 31 (7-9pm)	Backwoods Snowshoeing (www.fortwhyte.org)	FortWhyte Alive		
			Preregistration	204-989-8355
Apr. 3 (730-10pm)	Learning to Identify Wildflowers (http://www.naturemanitoba.ca)	Kelvin High School	Marilyn Latta	

SCHEDULE 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

Mental Health

- **For 24/7 mental health support, contact the Mobile Crisis Service at 204-940-1781.**
- **Student Counseling 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. <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. <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. <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. <http://umanitoba.ca/student/health-wellness/welcome.html>; 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>

Copyright Information - All students are required to respect copyright as per Canada's *Copyright Act*. Staff and students play a key role in the University's copyright compliance as we balance user rights for educational purposes with the rights of content creators from around the world. The Copyright Office provides copyright resources and support for all members of the University of Manitoba community. For more information: <http://umanitoba.ca/copyright>

Rights and Responsibilities

- **Your rights and responsibilities:** As a student of the University of Manitoba you have rights and responsibilities. It is important for you to know what you can expect from the University as a student and to understand what the University expects from you. Become familiar with the policies and procedures of the University and the regulations that are specific to your faculty, college or school.
- The [Academic Calendar](http://umanitoba.ca/student/records/academiccalendar.html) <http://umanitoba.ca/student/records/academiccalendar.html> is one important source of information. View the sections *University Policies and Procedures* and *General Academic Regulations*.
- While all of the information contained in these two sections is important, the following information is highlighted.
- If you have questions about your grades, talk to your instructor. There is a process for term work and final **grade appeals**. Note that you have the right to access your final examination scripts. See the Registrar's Office website for more information including appeal deadline dates and the appeal form: <http://umanitoba.ca/registrar/>

- You are expected to view the General Academic Regulation section within the Academic Calendar and specifically read the **Academic Integrity** regulation. Consult the course syllabus or ask your instructor for additional information about demonstrating academic integrity in your academic work. Visit the Academic Integrity Site for tools and support <http://umanitoba.ca/academicintegrity/> View the **Student Academic Misconduct** procedure for more information.
- The University is committed to a respectful work and learning environment. You have the right to be treated with respect and you are expected conduct yourself in an appropriate respectful manner. Policies governing behavior are included in the next section.

Policies and Services Information

- **Respectful Work and Learning Environment:** http://umanitoba.ca/admin/governance/governing_documents/community/230.html
- **Student Discipline** http://umanitoba.ca/admin/governance/governing_documents/students/student_discipline.html and,
- **Violent or Threatening Behaviour** http://umanitoba.ca/admin/governance/governing_documents/community/669.html
 - If you experience **Sexual Assault** or know a member of the University community who has, it is important to know there is a policy that provides information about the supports available to those who disclose and outlines a process for reporting. The **Sexual Assault** policy may be found at: http://umanitoba.ca/admin/governance/governing_documents/community/230.html More information and resources can be found by reviewing the Sexual Assault site <http://umanitoba.ca/student/sexual-assault/>

Intellectual Property - For information about rights and responsibilities regarding **Intellectual Property** view the policy: http://umanitoba.ca/admin/governance/media/Intellectual_Property_Policy_-_2013_10_01.pdf