



MAST-114 – Natural History

Business

Effective Term & Year: Fall 2022

Course Outline Review Date: 2024-03-01

Program Area: Tourism, Recreation, & Hospitality

Description:

This course provides an overview of the natural/cultural history of the Southern Canadian Rocky Mountains and develops interpretation techniques to communicate this information. Lectures, demonstrations, and hands-on field experiences will cover the topics of geology, ecology, botany, biology, human history, ecosystem-based management and heritage interpretation. Students develop skills in classification, identification, interpretive techniques, and stewardship of the environment.

Program Information:

This course is required for completion of the MAST certificate.

Delivery Methods: On-campus (Face-to-Face), Practicum

Credit Type: College of the Rockies Credits

Credits: 3

Instructional Activity and Hours:

Activity	Hours
Classroom, Directed Studies or Online Instruction	20
Seminar/Tutorials	
Laboratory/Studio	
Practicum/Field Experience	25
Co-op/Work Experience	

Other

Total	45
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Course Requisites:

None

Flexible Assessment: No**Course Transfer Credit:**

For information about receiving transfer credit for courses taken at other BC institutions, please see <http://www.bctransferguide.ca>. All requests for course transfer credit from institutions in BC or elsewhere should go to the College of the Rockies Enrollment Services office.

Textbook Resources:

Textbook selection varies by instructor and may change from year to year. At the Course Outline Effective Date the following textbooks were in use:

Gadd, Ben. (2009). *Handbook of the Canadian Rockies*. 2nd Edition. 4th Printing, Jasper, Alberta: Corax Press.

Please see the instructor's syllabus or check COTR's online text calculator <https://textbook.cotr.bc.ca/> for a complete list of the currently required textbooks.

Learning Outcomes:

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

- demonstrate competence in species identification;
- design an interpretation program/experience for clients based on the natural/human history topic of the Southern Canadian Rocky Mountains;
- describe personal actions of guides that contribute to sustainable tourism in the Rocky Mountains;
- define the non-living and living components of four general ecosystems – wetlands,

- grasslands, forest and old growth forests;
- list species of amphibians, reptiles, birds, mammals and invertebrates in each ecosystem and draw a food web to show how they are interrelated;
- list threats to ecosystems and suggest methods to reduce human impact when recreating commercially;
- identify the characteristics of healthy ecosystems;
- list threats to ecosystems and suggest methods to reduce human impact when recreating commercially;
- identify common trees, flowers, birds, mammals, fish, amphibians and reptiles of Southeastern BC;
- describe the basic geological processes forming the Rocky Mountains;
- key common plants and recall their use to humans; and
- describe the principles of ecotourism and issues of concern around sustainable tourism development and suggest solutions for problems facing the industry.

Course Topics:

- Creating memorable visitor experiences – value and benefit of natural history to the adventure tourism industry
- Introduction to the Ecosystems of BC and the East Kootenays
- Ecology – Ecosystems, living and nonliving elements, biogeoclimatic zones, biodiversity
- Wetlands and Grasslands
- Geology – Construction of the Rocky Mountains, Glaciation, Elk river watershed
- Wildlife of the Rocky Mountains
- Fauna – Birding, aquatic insects, wildlife, ethics of wildlife viewing
- Botany – identification of local species, human uses, natural processes
- Ecosystem Management – Purpose of Parks, Heritage Tourism Strategy, Role of guides
- Interpretive Guides Basic Knowledge Certification – To ensure professional standards of communication of the natural and human heritage of our mountain national parks.

See instructor's syllabus for the detailed outline of weekly readings, activities and assignments.

Evaluation and Assessments

Assessment Type: On-Campus (face-to-face)

Assessment Type	% of Total Grade
Natural History (Special Place Seasonal Journal)	20%
Student Action Project	10%
Visual flora/fauna/geology identification test	30%
Participation and attitude	20%
Final Project	20%
Total	100%

Grade Scheme

A+	A	A-	B+	B	B-	C+	C	C-	D	F
>=90	89-85	84-80	79-76	75-72	71-68	67-64	63-60	59-55	54-50	<50

Pass requirements: None

Evaluation Notes: A grade of “D” grants credit, but may not be sufficient as a prerequisite for sequential courses.

Exam Attendance:

Students must attend all scheduled exams at the appointed time and place. Instructors may approve an alternate exam to accommodate an illness or personal crisis. Department heads will consider other written requests. Any student who misses a scheduled exam without prior approval will receive a “0” on the exam.

Academic Policies:

College of the Rockies policies related to courses can be found at <https://cotr.bc.ca/about-us/college-policies/> and include the following:

- Policy 2.4.3 Students with Documented Disabilities
- Policy 2.4.4 Student Conduct (plagiarism, other cheating, behavioral misconduct)
- Policy 2.5.8 Academic Performance
- Policy 2.5.3 Grade Appeal
- Policy 2.4.9 Student Concerns Re Faculty

Equivalent Course(s) and Course Code Changes

Equivalent Course: Students who have received COTR credit for MAST 114 may not receive additional credit for ATBO 107.

Prior Course Code: MSTA 114 Natural History A & B

New Course Code: MAST 114 Natural History (MPHIA)

Date changed: March 2009

Course Changes:

The College of the Rockies updates course outlines regularly to meet changing educational,

employment and marketing needs. The instructor will notify students in writing of any updates to this outline during the semester. The instructor reserves the right to revise, add or delete material while meeting the learning outcomes of this course outline.