UNIVERSITY OF THE FRASER VALLEY

OFFICIAL UNDERGRADUATE COURSE OUTLINE (page 1)

COURSE IMPLEMENTATION DATE:	September 1999
COURSE REVISED IMPLEMENTATION DATE:	January 2013
COURSE TO BE REVIEWED:	October 2018
(six years after UEC approval)	*(month, year)*

OFFICIAL UNDERGRADUATE COURSE OUTLINE INFORMATION

Students are advised to keep course outlines in personal files for future use.

Shaded headings are subject to change at the discretion of the department – see course syllabus available from instructor

BIO 330	Biology	4
COURSE NAME/NUMBER	FACULTY/DEPARTMENT	UFV CREDITS

Plants and Animals of British Columbia
COURSE DESCRIPTIVE TITLE

CALENDAR DESCRIPTION:

This course is an introduction to some of the most common species of plants, birds, and mammals of British Columbia. Through lecture, laboratory experience, and field trips, students will learn systematic identification of major families of organisms. The ecology and distribution of organisms will be discussed in the context of the Biogeoclimatic Ecosystem Classification system currently used in British Columbia.

PREREQUISITES: BIO 210. Note: As of January 2014, a minimum of 60 university-level credits will be required, including BIO 210.
COREQUISITES: None
PRE or COREQUISITES:

SYNONYMOUS COURSE(S):
(a) Replaces: **N/A**
(b) Cross-listed with:
(c) Cannot take: **N/A** for further credit.

SERVICE COURSE TO: *(department/program)*

TOTAL HOURS PER TERM: **90**

STRUCTURE OF HOURS:

Lectures:	**45**	Hrs
Seminar:		Hrs
Laboratory:	**45**	Hrs
Field experience:		Hrs
Student directed learning:		Hrs
Other (specify):		Hrs

TRAINING DAY-BASED INSTRUCTION:
Length of course:
Hours per day:

OTHER:
Maximum enrolment: **36**
Expected frequency of course offerings: Annually
(every semester, annually, every other year, etc.)

WILL TRANSFER CREDIT BE REQUESTED? (lower-level courses only)	☐ Yes	☐ No
WILL TRANSFER CREDIT BE REQUESTED? (upper-level requested by department)	☐ Yes	☒ No
TRANSFER CREDIT EXISTS IN BCCAT TRANSFER GUIDE:	☐ Yes	☒ No

Course designer(s):	**Sharon Gillies**		
Department Head:	**Sharon Gillies**	Date approved:	**March 22, 2012**
Campus-Wide Consultation (CWC)		Date of meeting:	**March 30, 2012**
Curriculum Committee chair:	**Dave Fenske**	Date approved:	**Sept. 28, 2012**
Dean/Associate VP:	**Lucy Lee**	Date approved:	**October 5, 2012**
Undergraduate Education Committee (UEC) approval		Date of meeting:	**October 26, 2012**

LEARNING OUTCOMES:

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

1. Identify common B.C. plant species using correct scientific and common names.
2. Use correct botanical terminology to describe plants.
3. Organize plants into taxonomic families.
4. Identify by sight common birds of B.C.
5. Assign common birds to their correct Order and in most cases Family.
6. Analyze common mammals of B.C. with regard to local adaptations.
7. Assign common mammals to their correct Order and Family.
8. Use soil profiles and plant communities to identify Biogeoclimatic zones.
9. Relate distribution of organisms to the characteristics of the Biogeoclimatic Zones in which they occur.

METHODS: *(Guest lecturers, presentations, online instruction, field trips, etc.)*

The course will consist of a series of lectures, field trips, laboratory exercises, demonstrations, small group practice, and class discussion. For some aspects of the course audio-visual presentations, photographs, drawings, herbarioum samples, and museum specimens will be used.

METHODS OF OBTAINING PRIOR LEARNING ASSESSMENT RECOGNITION (PLAR):

☒ Examination(s) ☐ Portfolio assessment ☐ Interview(s) ☐ Other (specify):

☐ PLAR cannot be awarded for this course for the following reason(s):

TEXTBOOKS, REFERENCES, MATERIALS: *[Textbook selection varies by instructor. Examples for this course might be:]*

A required coursepack is available from the bookstore. Each student will also be expected to equip him or herself with field guides appropriate for British Columbia, dealing separately with plants and mammals. Suitable series include Western editions of Peterson Field Guides (Houghton-Miflin) or Audubon Society Field Guides (Alf Knoph, New York). From Lone Pine Publishing: MacKinnon, Pojar and Coupe (eds.) Plants of Northern British Columbia (1992), Poja MacKinnon eds. Plants of Coastal British Columbia (1994), and Parish, Coupe and Lloyd, eds. Plants of Southern Interior British Columbia.

Required texts downloadable from the Ministry of Forests:
Ecosystems of British Columbia by D. Meidinger and J. Pojar, Victoria, B.C.: Ministry of Forests Special Report #6, 1991.
A Field Guide for Site Identification and Interpretation for the Vancouver Forest Region,Land Management Handbook Number 28, 199

Materials available in the Library:
Native land mammals and amphibian of Haida Gwaii with management implications for Gwaii Haanas National Park Reserve and Haida Heritage Site, Burles, D. W. (Douglas William)
QL 721.5 B7 O45 2002 2002, Lexicon of British Columbia mammals , Ommundsen, Peter D.
ON ORDER 1999, Rare amphibians, reptiles and mammals of British Columbia, Cannings, Sydney G. (Sydney Graham)
QL 721.5 B7 N34 1990 1990, The mammals of British Columbia : a taxonomic catalogue, Nagorsen, D. W.
QL 721.5 B7 C36 1965 1965, The mammals of British Columbia [Rev.]., Cowan, Ian McTaggart
Plants of Haida Gwaii = _Xaadaa gwaay guud gina _k'aws (Skidegate) = _Xaadaa gwaayee guud ginn _k'aws (Massett) Turner, Nancy J.
QH 541.5 F6 P62 2003 2003, Plant indicator guide for northern British Columbia : the northern portion of the MS and ICH biogeoclimatic zones, Beaudry, L. J.
QK 86 C3 D68 2002 2002, Rare native vascular plants of British Columbia 2nd ed., Douglas, George W.
QK 203 B7 B36 2001 2001, Native woody plant seed collection guide for British Columbia, Banerjee, Satindranath Mishtu.
QK 203 B7 P497 1999 1999, Plants of northern British Columbia 2nd ed., MacKinnon, A. (Andrew)
QK 203 B7 Q53 1998 1998, Plants of British Columbia : scientific and common names of vascular plants, bryophytes, and lichens, Qian, Hong, 1957-
QK 203 B7 I55 1998 v.1 1998, Illustrated flora of British Columbia, Douglas, George W., 1938-
QK 98.5 B7 T953 1997 1997, Food plants of interior First Peoples Rev. ed., Turner, Nancy J., 1947-
QK 203 B7 P498 1996 1996, Plants of southern interior British Columbia, Parish, Roberta, 1948-
SB 439.26 N77 P47 1996, Native plants in the coastal garden : a guide for gardeners in British Columbia and the Pacific Northwest, Pettinger, April.
QK 98.5 B7 T95 1995 1995, Food plants of coastal First Peoples, Turner, Nancy J., 1947-

SUPPLIES / MATERIALS:

STUDENT EVALUATION: *[An example of student evaluation for this course might be:]*

Field book	5%
Final lecture exam	35%
Herbarium project	10%
Final lab exam	30%
Group BEC presentation	10%
Group BEC field work	10%

COURSE CONTENT: *[Course content varies by instructor. An example of course content might be:]*

Sample Lecture Topics

1. Introduction
2. Safety in the field
   - Common poisonous plants
   - Wildlife precautions
3. Introduction to plant characteristics
   - Leaves and stems
   - Flowers
   - Fruits and seeds
4. Introduction to Plant Families
   - Floral Diagrams
5. Biogeoclimatic Classification System for British Columbia (BEC)
   - Student Presentations
6. Biogeoclimatic Classification Site Identification Procedures
7. Bird Identification
8. Bird Families of BC
9. Mammal Orders and Families of BC
10. Mammal Identification
11. BEC Field work
12. Student Presentations
13. Student Presentations
14. Review

Laboratory Schedule

Lab #1 Introduction to plants and making herbarium specimens
- Leaves and stems

Lab #2 Flowers and fruits, identifying flower parts and plant families
Lab #3 Field trip to Derby Reach - Coastal Western Hemlock Zone, and bog
Lab #4 Field trip to Seymour Mountain - Mountain Hemlock Zone
Lab #5 Plant Identification - common plants and making floral diagrams
Lab #6 BEC site idenfication laboratory exercise
Lab #7 Bird Identification, museum samples and photographs
Lab #8 Field Trip to Riefel Migratory Bird Sanctuary
Lab #9 Mammal skulls - learning mammal families and characteristics
Lab #10 Plant identification quiz
Lab #11 Open lab for review
Lab #12 Open lab for review
Lab #13 Final Lab exam