SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ONTARIO



COURSE OUTLINE

COURSE TITLE: Wildlife Biology and Management

CODE NO.: NRT 205 SEMESTER: 16F

PROGRAM: Fish and Wildlife Conservation Technician

AUTHOR: Robert Routledge

DATE: May 2016 PREVIOUS OUTLINE DATED: June 2015

APPROVED:

Colin Kirkwood May 2016 DEAN/CHAIR DATE

TOTAL CREDITS: 4

PREREQUISITE(S): none

HOURS/WEEK: 4

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I. COURSE DESCRIPTION:

This course will introduce students to mammal identification, population ecology concepts, and wildlife management principles. Lab components include mammal anatomy and ageing, wildlife tracks and signs, and wildlife parasites and diseases.

II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

Upon successful completion of this course, the student will demonstrate the ability to:

1. Identify principle wildlife species in Ontario.

Potential Elements of the Performance:

- Identify and compare the pelts, skulls, and hairs of selected mammals (i.e., fur-bearers, game species, and non-game species) using field guides and dichotomous keys where appropriate.
- Identify wildlife tracks and signs:
 - by completing a photo collection of tracks and signs indicating species and key identification features and
 - by examining and differentiating the scat of wildlife species native to Ontario.
- Synthesize the following information on an assigned mammal species (or group of similar species) into a 1-page summary and PowerPoint presentation which will accompany an oral presentation:
 - biological life history and reproductive potential
 - habitat requirements
 - limiting factors on growth
 - behavioural traits
 - current and past management practices

2. Demonstrate knowledge of wildlife anatomy, sex and age determination, and determining the health status of wildlife populations.

Potential Elements of the Performance:

- Dissect, identify, and compare anatomical features among selected mammals.
- Identify and compare the components of the digestive tract and associated organs among selected mammals.
- Demonstrate the ability to apply standard practices to correctly sex and age selected game species.

- Participate in a white-tailed deer hunter check station.
- Describe major parasites/diseases of wildlife with emphasis on causative agent, animal groups affected, mode of transmission, clinical signs, severity, and prevention and control options.

3. Demonstrate an understanding of important aspects of population ecology in relation to the management of wildlife populations.

Potential Elements of the Performance:

- Describe how wildlife populations can be spatially organized (distribution and density).
- Describe how wildlife populations grow and factors that limit their growth:
 - primary parameters that control population growth
 - biotic potential or intrinsic growth rate (r)
 - generalized exponential and logistic models of growth
 - concept of carrying capacity (K)
 - generalized life history strategies (R- and K-selection)
 - limiting factors
 - density-independent and density-dependent limiting factors
- Describe and compare factors that affect the demographics of a population (e.g., semelparity vs. iteroparity, trade-offs between survival and reproduction, sex and age ratios).
- Participate in guest lectures on current aspects of wildlife management.

III. TOPICS:

- 1. mammalian anatomy
- 2. fur-bearer, game, and non-game mammal identification
- 3. wildlife management
- 4. Wildlife parasites and diseases
- 5. population dynamics
- 6. sex and age determination

IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

- Reflective vest, lab coat, dissection kit, safety glasses
- Mammals of the Great Lakes Region (Kurta) recommended
- Tracking and the Art of Seeing: How to Read Animal Tracks and Sign. (Rezendes) recommended

V. EVALUATION PROCESS/GRADING SYSTEM:

Lab Tests and Quizzes	27.5
Species Project & Presentation	7.5
Assignments and LMS Quizzes	32.5
Tracks & Signs Assignment (completed at Field Camp)	5.0
Reading Assignments	10.0
Final Exam	17.5
Overall	100

The following semester grades will be assigned to students:

		Grade Point	
Grade	<u>Definition</u>	Equivalent	
A+ A	90 – 100% 80 – 89%	4.00	
В	70 - 79%	3.00	
С	60 - 69%	2.00	
D	50 – 59%	1.00	
F (Fail)	49% and below	0.00	
CR (Credit) S	Credit for diploma requirements has been awarded. Satisfactory achievement in field /clinical placement or non-graded		
U	subject area. Unsatisfactory achievement in field/clinical placem subject area.	ent or non-graded	
X	A temporary grade limited to situations with extenuating circumstances giving a student additional time to complete the requirements for a course.		
NR	Grade not reported to Registrar's office.		
W	Student has withdrawn from the course without ac	ademic penalty.	

If a faculty member determines that a student is at risk of not being academically successful, the faculty member may confidentially provide that student's name to Student Services in an effort to help with the student's success. Students wishing to restrict the sharing of such information should make their wishes known to the coordinator or faculty member.

VI. SPECIAL NOTES:

Attendance:

Sault College is committed to student success. There is a direct correlation between academic performance and class attendance; therefore, for the benefit of all its constituents, all students are encouraged to attend all of their scheduled learning and evaluation sessions. This implies arriving on time and remaining for the duration of the scheduled session.

Evaluation:

- To be eligible to write a <u>missed test</u>, the instructor must be contacted via phone
 or email ASAP to discuss options. Students not contacting the instructor prior to
 a missed class or <u>within a day</u> afterwards will get a zero except under
 extenuating circumstances as in the case of a medical excuse.
- <u>Late assignments</u> will only be accepted within 24 hours past the due date and will be penalized 20% except under extenuating circumstances as in the case of a medical excuse.
- Changes to the Course Evaluation scheme may be considered during the semester if approved by the majority of the class (majority = approval by 75% of students present at time of vote).
- The instructor cannot guarantee responses to questions in the 24-hour period prior to assignment deadlines and tests via phone message or email.

VII. COURSE OUTLINE ADDENDUM:

1. Course Outline Amendments:

The faculty member reserves the right to change the information contained in this course outline depending on the needs of the learner and the availability of resources.

2. Retention of Course Outlines:

It is the responsibility of the student to retain all course outlines for possible future use in acquiring advanced standing at other postsecondary institutions.

3. Prior Learning Assessment:

Students who wish to apply for advance credit transfer (advanced standing) should obtain an Application for Advance Credit from the program coordinator (or the course coordinator regarding a general education transfer request) or academic assistant. Students will be required to provide an unofficial transcript and course outline related to the course in question. Please refer to the Student Key Dates Calendar for the deadline date by which application must be made for advance standing.

Credit for prior learning will also be given upon successful completion of a challenge exam or portfolio. Student Services can provide information regarding the Prior Learning Assessment and Recognition policy or it can be viewed on the student portal.

Substitute course information is available in the Registrar's office.

4. Student Portal:

The Sault College portal allows you to view all your student information in one place. **mysaultcollege** gives you personalized access to online resources seven days a week from your home or school computer. Single log-in access allows you to see your personal and financial information timetable, grades, records of achievement, unofficial transcript, and outstanding obligations. In addition announcements, news, academic calendar of events, class cancellations, your learning management system (LMS), and much more is available. Go to https://my.saultcollege.ca.

5. <u>Communication:</u>

The College considers **Desire2Learn (D2L)** as the primary channel of communication for each course. Regularly checking this software platform is critical as it will keep you directly connected with faculty and current course information. Success in this course may be directly related to your willingness to take advantage of this Learning Management System (LMS) communication tool.

6. Accessibility Services:

If you are a student with a disability (e.g. physical limitations, visual impairments, hearing impairments, or learning disabilities), you are encouraged to discuss required accommodations with the Accessibility Services office. Call Ext. 2703 or email studentsupport@saultcollege.ca so that support services can be arranged for you.

7. Audio and Video Recording Devices in the Classroom:

Students who wish to use electronic devices in the classroom will seek permission of the faculty member before proceeding to record instruction. Students with disabilities who require audio or visual recording devices in the classroom as an accommodation will receive approval from their counsellor once the Audio and Video Recording Devices in the Classroom Policy has been reviewed by the student. Recorded classroom instruction will be used only for individual academic use and will not be used for any other purpose. Recordings may only be used for individual study of materials presented during class and may not be published or distributed. Intentional misuse of audio and video recordings or intentional misrepresentation when requesting the use of a device for recording shall constitute a violation of this policy and laws protecting intellectual property.

8. <u>Academic Dishonesty</u>:

Students should refer to the definition of "academic dishonesty" in the *Student Code of Conduct*. Students who engage in academic dishonesty will be issued a sanction under the Student Code of Conduct which could lead to and include expulsion from the course/program. In order to protect students from inadvertent plagiarism, to protect the copyright of the material referenced, and to credit the author of the material, students must use a documentation format for referencing source material.

9. Tuition Default:

Students who have defaulted on the payment of tuition) as of the first week of November (fall semester courses), first week of March (winter semester courses) or first week of June (summer semester courses) will be removed from placement and clinical activities due to liability issues. This may result in loss of mandatory hours or incomplete course work. Sault College will not be responsible for incomplete hours or outcomes that are not achieved or any other academic requirement not met as of the result of tuition default. Students are encouraged to communicate with Financial Services with regard to the status of their tuition prior to this deadline to ensure that their financial status does not interfere with academic progress.