COURSE OUTLINE: NET105 - FISH/WILD STUDIES II

Prepared: Ryan Namespetra
Approved: Sherri Smith, Chair, Natural Environment, Business, Design and Culinary

Course Code: Title	NET105: FISH AND WILDLIFE STUDIES II
Program Number: Name	5212: ADVENTURE RECREATION 5220: NAT ENVIRONMENT TN 5221: NAT ENVIRONMENT TY
Department:	NATURAL RESOURCES PRG
Semesters/Terms:	21W
Course Description:	This course continues with the further development of fish and wildlife identification skills with particular reference to the biology and life history of featured species. Topics will include common fish and mammals of Ontario. Special emphasis will be placed on species at risk in Ontario and strategies for their protection and recovery. Wildlife tracks and sign will also be investigated and important wildlife parasites and diseases will be discussed.
Total Credits:	3
Hours/Week:	3
Total Hours:	45
Prerequisites:	There are no pre-requisites for this course.
Corequisites:	There are no co-requisites for this course.
Substitutes:	NRT137
Vocational Learning Outcomes (VLO's) addressed in this course: **Please refer to program web page for a complete listing of program outcomes where applicable.**	**5212 - ADVENTURE RECREATION** VLO 1 Demonstrate clear, concise and industry appropriate written, spoken and visual communication skills. VLO 2 Identify, discuss, organize and assess common Flora & Fauna species found throughout ON, including biological and physiological characteristics. **5220 - NAT ENVIRONMENT TN** VLO 1 Collect data from representative biological and environmental samples using routine test procedures. VLO 2 Utilize natural resources equipment and technology to accurately identify ecosystem components for purposes of conserving and managing natural resources. VLO 3 Apply the basic concepts of science to natural resource conservation and management. VLO 4 Conduct natural environment assessments according to standard field survey methods, including the use of appropriate equipment and materials. VLO 7 Work safely in adherence to occupational health and safety standards. VLO 11 Communicate technical information accurately and effectively in oral, written and visual forms.

In response to public health requirements pertaining to the COVID19 pandemic, course delivery and assessment traditionally delivered in-class, may occur remotely either in whole or in part in the 2020-2021 academic year.

SAULT COLLEGE | 443 NORTHERN AVENUE | SAULT STE. MARIE, ON P6B 4J3, CANADA | 705-759-2554

	VLO 12 Travel accurately in a timely manner in the outdoors using appropriate navigation aids and motorized transport equipment.
	5221 - NAT ENVIRONMENT TY
	VLO 1 Collect, analyze, interpret and report on data from representative biological and environmental samples.
	VLO 2 Utilize natural resources information technology equipment to assemble, analyze and present identified ecosystem components for purposes of conserving and managing natural resources.
Essential Employability Skills (EES) addressed in this course:	EES 1 Communicate clearly, concisely and correctly in the written, spoken, and visual form that fulfills the purpose and meets the needs of the audience.
	EES 2 Respond to written, spoken, or visual messages in a manner that ensures effective communication.
	EES 4 Apply a systematic approach to solve problems.
	EES 7 Analyze, evaluate, and apply relevant information from a variety of sources.
	EES 8 Show respect for the diverse opinions, values, belief systems, and contributions of others.
	EES 9 Interact with others in groups or teams that contribute to effective working relationships and the achievement of goals.
	EES 10 Manage the use of time and other resources to complete projects.
	EES 11 Take responsibility for ones own actions, decisions, and consequences.
Course Evaluation:	Passing Grade: 50%, D A minimum program GPA of 2.0 or higher where program specific standards exist is required for graduation.
Other Course Evaluation & Assessment Requirements:	Academic success is directly linked to attendance. Missing more than 1/3 of the course hours in a semester shall result in an `F` grade for the course.
Books and Required Resources:	Mammals of the Great Lakes Region by Kurta, A. Tracking & the Art of Seeing by Rezendes, P.
Course Outcomes and Learning Objectives:	(see table below)

Course Outcome 1	Learning Objectives for Course Outcome 1
1. Outline the role of the National Committee on the Status of Endangered Wildlife in Canada (COSEWIC) and the Provincial Committee on the Status of Species at Risk in Ontario (COSSARO), as they pertain to species at risk.	1.1 Discuss the risk categories as defined by COSEWIC. 1.2 Research and report on species at risk in Ontario. 1.3 Outline the process of determining if a species is at risk. 1.4 Review protection legislation for Ontario species at risk. 1.5 Discuss species at risk topics addressed by guest speakers. 1.6 Outline the role of recovery plans, recovery teams and recovery action groups to improve the status of a species at risk.
Course Outcome 2	**Learning Objectives for Course Outcome 2**

In response to public health requirements pertaining to the COVID19 pandemic, course delivery and assessment traditionally delivered in-class, may occur remotely either in whole or in part in the 2020-2021 academic year.

SAULT COLLEGE | 443 NORTHERN AVENUE | SAULT STE. MARIE, ON P6B 4J3, CANADA | 705-759-2554

	2. Identify selected fish species and discuss their biology, life cycles, and ecological value.	2.1 Correctly identify both internal and external anatomical structures of fish and describe their purpose. 2.2 Demonstrate the effective use of bifurcated (dichotomous) keys in order to identify common Ontario fish species. 2.3 Discuss scientific techniques of determining fish age. 2.4 Discuss the ecology of fishes and their role as indicator species.
	Course Outcome 3	**Learning Objectives for Course Outcome 3**
	3. Identify common mammals in Ontario based on tracks and signs, scat, study furs, specimens and skulls.	3.1 Identify many Ontario mammal species using images, study furs and specimens. 3.2 Identify skulls of Ontario mammals using keys. 3.3 Distinguish between common species within an order based on tracks, movements, browsing, droppings, remains of food, method of kill, claw marks or antler scrapes, dens or nests. 3.4 Discuss scat characteristics, track formula and trail patterns of common wildlife. 3.5 Investigate and document 20 wildlife tracks & signs.
	Course Outcome 4	**Learning Objectives for Course Outcome 4**
	4. Discuss the biology, life cycles, ecology and interpretive value of many Ontario wildlife species.	4.1 Research and report on key biological and ecological features of selected orders/families of wildlife. 4.2 Relate the interpretative value of selected mammalian species. 4.3 Explain the lifecycles of parasites & diseases of Ontario fish and wildlife. 4.4 Identify select parasites & disease by their signs and symptoms, outlining the possible impact to human health.
	Course Outcome 5	**Learning Objectives for Course Outcome 5**
	5. Conduct field surveys to assess wildlife presence.	5.1 Use tracks and signs in the field to survey wildlife species presence. 5.2 Discuss the presence or absence of certain species based on habitat type surveyed. 5.3 Discuss and demonstrate knowledge of various types of field surveys used to determine wildlife species presence.

Evaluation Process and Grading System:

Evaluation Type	Evaluation Weight
Major Assignments	30%
Minor Assignment	15%
Participation	10%
Tests	45%

Date: June 17, 2020

Addendum: Please refer to the course outline addendum on the Learning Management System for further information.

SAULT COLLEGE | 443 NORTHERN AVENUE | SAULT STE. MARIE, ON P6B 4J3, CANADA | 705-759-2554