



## COURSE OUTLINE: NRT235 - SUSTAIN RES MNGMNT

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

<b>Course Code: Title</b>	NRT235: SUSTAINABLE RESOURCE MANAGEMENT
<b>Program Number: Name</b>	5212: ADVENTURE RECREATION 5214: FISH/WILD CONSERVATN 5230: FORESTRY TECHNICIAN
<b>Department:</b>	NATURAL RESOURCES PRG
<b>Academic Year:</b>	2022-2023
<b>Course Description:</b>	This PROGRAM EMBEDDED GENERAL EDUCATION course will provide the learner with an appreciation of the essential interconnection of the values of integrated resource management from a Sustainable Resource Management perspective. Emphasis will be placed on how natural environment management practices impact on society. Understanding of natural systems and biodiversity will serve as a focal point of the course. Students will gain an understanding of the impact of cultural and social characteristics on sustainability of natural ecosystems and explore how the concepts and practices affect their lives.
<b>Total Credits:</b>	2
<b>Hours/Week:</b>	2
<b>Total Hours:</b>	28
<b>Prerequisites:</b>	There are no pre-requisites for this course.
<b>Corequisites:</b>	There are no co-requisites for this course.
<b>Substitutes:</b>	NET206, NRT220
<b>Vocational Learning Outcomes (VLO's) addressed in this course:</b>	<p><b>5212 - ADVENTURE RECREATION</b></p> <p>VLO 1 Demonstrate clear, concise and industry appropriate written, spoken and visual communication skills.</p> <p>VLO 7 Describe the scientific method and how it shapes our understanding of the ecology of the natural world.</p> <p>VLO 8 Demonstrate an understanding of sustainable development and apply the foundations in the natural environment.</p> <p>VLO 11 Analyze, evaluate and apply subjective and objective safety considerations for Adventure Recreation and Parks activities.</p> <p><b>5214 - FISH/WILD CONSERVATN</b></p> <p>VLO 1 Demonstrate clear, concise and industry appropriate written, spoken and visual communication skills</p> <p>VLO 3 Demonstrate the ability to follow standardized protocols to collect field data on fish and wildlife populations in a variety of weather and site conditions.</p> <p>VLO 7 Recognize the contributions and applications of various science disciplines in the understanding of natural environments.</p>
<b>Please refer to program web page for a complete listing of program outcomes where applicable.</b>	



	<p>VLO 8 Demonstrate an understanding of sustainable development and apply these principles to the natural environment.</p> <p>VLO 11 Analyze, evaluate and apply subjective and objective safety considerations.</p> <p><b>5230 - FORESTRY TECHNICIAN</b></p> <p>VLO 2 Assess soil characteristics, vegetation and wildlife habitats to identify their interactions within forest ecosystems.</p> <p>VLO 5 Contribute to sustainable forest management plans, including conservation and rehabilitation measures, taking into consideration the perspectives of a variety of stakeholders and the requirements of relevant legislation and regulations.</p> <p>VLO 6 Identify and analyze forest diseases, pests, invasive species and other disturbance events and implement mitigation strategies to maintain and improve forest ecosystems.</p> <p>VLO 8 Work independently and in a collaborative environment while applying effective teamwork, leadership and interpersonal skills.</p> <p>VLO 9 Communicate technical information to a variety of stakeholders in oral, written, visual and electronic forms.</p> <p>VLO 10 Develop strategies for ongoing professional development to enhance work performance in the forestry sector.</p>
<b>Essential Employability Skills (EES) addressed in this course:</b>	<p>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.</p> <p>EES 2 Respond to written, spoken, or visual messages in a manner that ensures effective communication.</p> <p>EES 4 Apply a systematic approach to solve problems.</p> <p>EES 5 Use a variety of thinking skills to anticipate and solve problems.</p> <p>EES 6 Locate, select, organize, and document information using appropriate technology and information systems.</p> <p>EES 7 Analyze, evaluate, and apply relevant information from a variety of sources.</p> <p>EES 8 Show respect for the diverse opinions, values, belief systems, and contributions of others.</p> <p>EES 9 Interact with others in groups or teams that contribute to effective working relationships and the achievement of goals.</p> <p>EES 10 Manage the use of time and other resources to complete projects.</p> <p>EES 11 Take responsibility for ones own actions, decisions, and consequences.</p>
<b>General Education Themes:</b>	<p>Civic Life</p> <p>Social and Cultural Understanding</p> <p>Personal Understanding</p> <p>Science and Technology</p>
<b>Course Evaluation:</b>	<p>Passing Grade: 50%, D</p>

	A minimum program GPA of 2.0 or higher where program specific standards exist is required for graduation.
<b>Other Course Evaluation &amp; Assessment Requirements:</b>	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.

<b>Course Outcomes and Learning Objectives:</b>	<b>Course Outcome 1</b>	<b>Learning Objectives for Course Outcome 1</b>
	Explain the principles of sustainable resource management and integrated resource management as they impact on natural ecosystems and society.	1.1 Distinguish between integrated resource management and sustainable resource management. 1.2 Differentiate between a forest use and a forest value. 1.3 Discuss the significance of integrated resource management and sustainable resource management on society.
	<b>Course Outcome 2</b>	<b>Learning Objectives for Course Outcome 2</b>
	Integrate the concepts of biodiversity and old growth into sustainable resource management and integrated resource management.	2.1 Define the concepts of biodiversity and old growth. 2.2 Understand the significance of biodiversity and old growth in relation to sustainable resource management and integrated resource management. 2.3 Adopt a perspective that respects the importance of the values provided by biodiversity and old growth. 2.4 Discuss ways that biodiversity can be maintained while carrying out resource management. Explain why the setting aside of large tracts of land for wilderness is important to society.
	<b>Course Outcome 3</b>	<b>Learning Objectives for Course Outcome 3</b>
Develop an informed opinion on the realities of past and present climate change events, relating them to future impacts on sustainable resource management and integrated resource management.	3.1 Explain the elements of competing theories on global warming and climate change. 3.2 Examine the impacts of climate change and global warming on sustainable resource management and integrated resource management. 3.3 Connect the impacts of global warming to the evolution of the forest ecosystem.	
<b>Course Outcome 4</b>	<b>Learning Objectives for Course Outcome 4</b>	
Justify the essential connections between timber management, wildlife management and outdoor recreational management in relation to sustainable resource management and integrated resource management.	4.1 Examine the impacts of timber management on sustainable resource management and integrated resource management. 4.2 Appreciate the role of forest management on wildlife management and outdoor recreation management. 4.3 Understand how the basic concepts of wildlife management relate to sustainable resource management and integrated resource management. 4.4 Integrate societal needs for outdoor recreation into sustainable resource management and integrated resource management. 4.5 Link natural resources protection practices to sustainable resource management and integrated resource management.	

<b>Evaluation Process and</b>	<b>Evaluation Type</b>	<b>Evaluation Weight</b>
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**Grading System:**

2 Quizzes	40%
3 Research Assignments	30%
Edge Biodiversity Significance	10%
Group flip chart assignment	20%

**Date:**

June 30, 2022

**Addendum:**

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

