COURSE OUTLINE: NET102 - GLOBAL ENV ISSUES

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Course Code: Title	NET102: GLOBAL ENVIRONMENTAL ISSUES
Program Number: Name	5220: NAT ENVIRONMENT TN 5221: NAT ENVIRONMENT TY
Department:	NATURAL RESOURCES PRG
Semesters/Terms:	19W
Course Description:	Global Environmental Issues will give students a background on the effects of human population on the landscape considering concepts like food production, water, energy, biodiversity, etc., in relation to global sustainability. It will include discussion on the basic principles of system stress, and the earths carrying capacity looking towards the tenets of Sustainable Development as the optimal management technique. The course will evolve into a comprehensive discussion on climate change, its major drivers and impacts. Strategies will be discussed for adaptation and mitigation to this global challenge. We will conclude by identifying steps people can take to insure a transition to a more sustainable lifestyle that can build community resilience and self-reliance, while stimulating economic development, and mitigating environmental damage.
Total Credits:	2
Hours/Week:	2
Total Hours:	30
Prerequisites:	There are no pre-requisites for this course.
Corequisites:	There are no co-requisites for this course.
Vocational Learning Outcomes (VLO's) addressed in this course: **Please refer to program web page for a complete listing of program outcomes where applicable.**	**5220 - NAT ENVIRONMENT TN** VLO 3 Apply the basic concepts of science to natural resource conservation and management. VLO 6 Practice principles and ethics associated with natural resource conservation and management issues. VLO 9 Contribute to the implementation of natural resource conservation and management. VLO 11 Communicate technical information accurately and effectively in oral, written and visual forms. VLO 13 Apply awareness of global environmental issues to conservation and management of natural resources. **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. VLO 3 Apply the basic concepts of science to natural resource conservation and management.

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	VLO 6 Practice principles and ethics associated with natural resource conservation and management issues.
	VLO 7 Ensure all work is safely completed in adherence to occupational health and safety standards.
	VLO 10 Communicate technical information accurately and effectively in oral, written, visual and electronic forms.
	VLO 11 Develop and present strategies for ongoing personal and professional development to enhance performance as an environmental technologist.
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 3 Execute mathematical operations accurately.
	EES 6 Locate, select, organize, and document information using appropriate technology and information systems.
	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.
General Education Themes:	Civic Life
	Social and Cultural Understanding
Course Evaluation:	Passing Grade: 50%, D

Course Outcomes and Learning Objectives:

Course Outcome 1	Learning Objectives for Course Outcome 1
Understand the key issues affecting the earth and the threats associated with the present trends in resource consumption.	1.1 Understand the cause and effect relationships of the major contributing factors leading to the #1 Environmental Issue affecting the planet. 1.2 Apply the tenets of Sustainable Development (economic, social, environment) as a development model to analyze past, present and future resource consumption trends.
Course Outcome 2	**Learning Objectives for Course Outcome 2**
Introduce students to the history, present and future of population growth and its effect on the Earth.	2.1 Identify and describe how population growth and food production are major contributors to increased CO_2 production. 2.2 Discuss human impacts on large terrestrial and marine landscapes for food production, including fish stocks, land conversion, pollution. 2.3 Relate how these transformations contribute to failing agricultural production, impacts on fish stocks from warming/acidification, and describe how oil production, water quality/quantity and food production are interrelated. 2.4 Assess what factors need attention sooner than later and what action is required.
Course Outcome 3	**Learning Objectives for Course Outcome 3**
Identify the main drivers of	3.1 Identify and describe the main contributors and effects of

	climate change and what actions can and need to be taken to address it.	climate change such as increased GHG concentrations, pollution, tropical forest deforestation and land use changes. 3.2 Outline how climate change is affecting water supply, warming and acidification of the oceans. 3.3 Understand and conceptualize methods to adapt and mitigate climate change. 3.4 Complete a GHG emissions accounting case study.
	Course Outcome 4	**Learning Objectives for Course Outcome 4**
	Describe the major efforts available to support the mediation of climate change, including policy and legislation, education and guidelines, economic development, grassroots movements, scientific rigor, etc., and be able to assess what course of action stands the best chance of success.	4.1 Outline the major policy initiatives, like the Paris Accord and describe how they are progressing. 4.2 Identify different legislated or volunteer approaches to limiting carbon emissions regionally/nationally and internationally and understand the pros and cons(cap and trade, carbon tax, conservation measures, etc.) 4.3 Be aware of key technologies and/or processes in use, or being considered to save the planet, including renewable energy alternatives, geo-engineering, nano-technology, etc. 4.4 Grasp the role of the Natural Environment and Ecosystem services in the fight against climate change.
	Course Outcome 5	**Learning Objectives for Course Outcome 5**
	Demonstrate an understanding of what needs to be done to rectify what some would say is an Ã¢â`¬ already too late scenarioÃ¢â`¬â¢.	5.1 Students will learn how a variety of misinformation, greed and politics are contributing to a relatively slow response in addressing climate change. 5.2 Demonstrate an understanding of what can and needs to be done by individuals, corporations and countries in dealing with climate change. 5.3 Understand the major components, timelines and players in the climate change war. 5.4 Learn what`s being done by the scientific community and the world at large to address climate change.

Evaluation Process and Grading System:

Evaluation Type	Evaluation Weight	Course Outcome Assessed
Assignments	35%	All
Final Report	25%	All
Final Test	25%	All
Mid Term Test	15%	All

Date: June 19, 2018

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