



COURSE OUTLINE: NET102 - GLOBAL ENV ISSUES

Prepared: Brian Anstess

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

Course Code: Title	NET102: GLOBAL ENVIRONMENTAL ISSUES
Program Number: Name	5220: NAT ENVIRONMENT TN
Department:	NATURAL RESOURCES PRG
Academic Year:	2023-2024
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 earth's 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:	5220 - NAT ENVIRONMENT TN
Please refer to program web page for a complete listing of program outcomes where applicable.	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.
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.



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

	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 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.																
Course Outcomes and Learning Objectives:	<table border="1"> <thead> <tr> <th>Course Outcome 1</th> <th>Learning Objectives for Course Outcome 1</th> </tr> </thead> <tbody> <tr> <td>Understand the key issues affecting the earth and the threats associated with the present trends in resource consumption.</td> <td>1.1 Understand the cause and effect relationships of the major contributing factors leading to the largest 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.</td> </tr> <tr> <th>Course Outcome 2</th> <th>Learning Objectives for Course Outcome 2</th> </tr> <tr> <td>Introduce students to the history, present and future of population growth and its effect on the Earth.</td> <td>2.1 Identify and describe how population growth and food production are major contributors to increased CO2 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.</td> </tr> <tr> <th>Course Outcome 3</th> <th>Learning Objectives for Course Outcome 3</th> </tr> <tr> <td>Identify the main drivers of climate change and what actions can and need to be taken to address it.</td> <td>3.1 Identify and describe the main contributors and effects of 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.</td> </tr> <tr> <th>Course Outcome 4</th> <th>Learning Objectives for Course Outcome 4</th> </tr> <tr> <td>Describe the major efforts</td> <td>4.1 Outline the major policy initiatives, like the Paris Accord and</td> </tr> </tbody> </table>	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 largest 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 CO2 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 climate change and what actions can and need to be taken to address it.	3.1 Identify and describe the main contributors and effects of 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	4.1 Outline the major policy initiatives, like the Paris Accord and
	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 largest 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 CO2 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 climate change and what actions can and need to be taken to address it.	3.1 Identify and describe the main contributors and effects of 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	4.1 Outline the major policy initiatives, like the Paris Accord and																

	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.	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 positive changes to improve society's ability to deal with climate change.	5.1 Students will critically evaluate opinions to discern fact from fiction in climate science. 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 within climate change. 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:	<table border="1"> <thead> <tr> <th>Evaluation Type</th> <th>Evaluation Weight</th> </tr> </thead> <tbody> <tr> <td>Assignments</td> <td>35%</td> </tr> <tr> <td>Final Report</td> <td>25%</td> </tr> <tr> <td>Final Test</td> <td>25%</td> </tr> <tr> <td>Mid Term Test</td> <td>15%</td> </tr> </tbody> </table>		Evaluation Type	Evaluation Weight	Assignments	35%	Final Report	25%	Final Test	25%	Mid Term Test	15%
Evaluation Type	Evaluation Weight											
Assignments	35%											
Final Report	25%											
Final Test	25%											
Mid Term Test	15%											
Date:	July 20, 2023											
Addendum:	Please refer to the course outline addendum on the Learning Management System for further information.											