

Course Specifications

Course Title:	Environmental Sustainability	
Course Code:	ENS 402	
Program:	Environmental Sciences and Technology Program	
Department:	Environmental Sciences	
College:	Faculty of Meteorology, Environment and Arid Land Agriculture	
Institution:		







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A. Course Identification

1. Credit hours: 2		
2. Course type		
a.UniversityCollegeDepartmentOthers		
b. Required Elective		
3. Level/year at which this course is offered: 8 th Level / 4 th year		
4. Pre-requisites for this course (if any): ENS100		
5. Co-requisites for this course (if any):		

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	21	75%
2	Blended		
3	E-learning	7	25%
4	Correspondence		
5	Other		

7. Actual Learning Hours (based on academic semester)

No	Activity	Learning Hours	
Contac	Contact Hours		
1	Lecture	28	
2	Laboratory/Studio		
3	Tutorial		
4	Others (specify)		
	Total	28	
Other Learning Hours*			
1	Study	10	
2	Assignments	8	
3	Library		
4	Projects/Research Essays/Theses	5	
5	Others (specify)		
	Total	23	

* The length of time that a learner takes to complete learning activities that lead to achievement of course learning outcomes, such as study time, homework assignments, projects, preparing presentations, library times



B. Course Objectives and Learning Outcomes

1. Course Description

This course aims to introduce students to the concepts of environmental sustainability, methods of caring for the environment and its natural resources in a manner that achieves the principle of sustainability in dealing with the environment.

2. Course Main Objective

By the end of this course it is expected that student will be able to:

- Recognize concept and application of environmental sustainability.
- Explain the impact of human activity on environmental sustainability.
- Identify global environmental sustainability standards and targets.

3. Course Learning Outcomes

CLOs		Aligned PLOs
1	Knowledge:	
1.1	describe the relationship between environmental sustainability and economical growth.	
1.2	Recognize concept and application of environmental sustainability.	
1.3	Explain the impact of human activity on environmental sustainability	
1.4	Identify Basics and methods of operating different ecosystems	
2	Skills :	
2.1	Assess problem definitions and conclusions in terms of environmental sustainability.	
2.2	Quantitatively evaluate 'green' or 'eco' claims made about products or policies.	
3	Competence:	
3.1	Construct a logical argument regarding a topic in environmental sustainability, e.g. the future of biofuel.	
3.2	Evaluate data for consistency with established facts, hypotheses, or methods	

C. Course Content

No	No List of Topics	
1	An overview of sustainability and its history.	3
2	Themes and Goals of Sustainability.	3
3	3 Introduction to the environment and natural systems.	
4	4 Environmental sustainability concept and application.	
5	Natural resources in terms of sustainability.	
6	Global environmental sustainability standards and targets.	
7	The concept of environmental economics and its relationship to environmental sustainability.	4
8 Innovative global experiences and research to achieve environmental sustainability.		3
	Total	28

D. Teaching and Assessment

1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	Knowledge		
1.1	describe the relationship between environmental sustainability and economical growth.	 Lectures and active discussion. Explanation and examples 	 In class short quizzes Midterm and final exams
1.2	Recognize concept and application of environmental sustainability.	 Lectures and active discussion. Explanation and examples 	 In class short quizzes Midterm and final exams
1.3	Explain the impact of human activity on environmental sustainability	 Lectures and active discussion. Explanation and examples 	In class short quizzes - Midterm and final exams -homework assignments
1.4	Identify Basics and methods of operating different ecosystems	 Lectures and active discussion. Explanation and examples reading assignments 	In class short quizzes - Midterm and final exams -homework assignments
2.0	Skills		
2.1	Assess problem definitions and conclusions in terms of environmental sustainability.	 Lectures and active discussion. Explanation and examples reading assignments -case studies 	 In class short quizzes Midterm and final exams homework assignments
2.2	Quantitatively evaluate 'green' or 'eco' claims made about products or policies.	 Lectures and active discussion. reading assignments case studies 	 In class short quizzes Midterm and final exams homework assignments
3.0	Competence		
3.1	Construct a logical argument regarding a topic in environmental sustainability, e.g. the future of biofuel.	 Lectures and active discussion. reading assignments case studies 	- Projects and Presentations - report writing
3.2	Evaluate data for consistency with established facts, hypotheses, or methods	 Lectures and active discussion. reading assignments 	- Projects and Presentations - report writing

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Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
		-case studies	

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	In class short quizzes	Every other	10%
		week	
2	Midterm	7 th	25%
3	Homework	$2^{\rm nd}, 6^{\rm th}, 8^{\rm th}, 10^{\rm th}$	15%
4	Oral presentations	12 th	10%
5	Final exam	15 th	40%
6			
7			
8			

*Assessment task (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice : Office hours for the professor and teaching assistants will be announced every semester. 2 hours a week will be scheduled.

F. Learning Resources and Facilities

1.Learning Resources

Required Textbooks	Fraser Smith (2018), Environmental Sustainability: Practical Global Implications. ISBN 1- 57444- 077- 2	
Essential References Materials	البيئة والتنمية (٢٠١٧)، د. نايف المكيشة، د. محمد المهنا	
Electronic Materials	Class presentations and materials will be posted on the course website	
Other Learning Materials	Ritu Singh, Sanjeev Kumar (2017), Green Technologies and Environmental Sustainability. ISNB 978-3-319-50653-1.	

2. Facilities Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	Classroom
Technology Resources (AV, data show, Smart Board, software, etc.)	Data show

Item	Resources
Other Resources	
(Specify, e.g. if specific laboratory	
equipment is required, list requirements or	
attach a list)	

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Effectiveness of teaching and assessment	Students	Surveys
Quality of learning resources	Peer reviewer	Consultation
Extent of achievement of course learning outcomes	Program leaders	Exit exam results

Evaluation areas (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)

Evaluators (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify) Assessment Methods (Direct, Indirect)

H. Specification Approval Data

Council / Committee	
Reference No.	
Date	April, 2021