هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

اعتماد
NCAAA

2024
TP-154

Course Report
(Bachelor)

Course Title:	**Sustaining Natural Resources**
Course Code:	**EVS 1010**
Program:	**Bachelor of Science in Environmental Science**
Department:	**Biology**
College:	**Science**
Institution:	**Imam Mohammad Ibn Saud Islamic University**
Version:	**1**
Last Revision Date:	**-**

Table of Contents

A. General information about the course:

1. Course Identification

1. Credit hours: 2 (2 Lecture + 0 + 0)					
2. Course type					
A.	☐University	☐College	☒ Department	☐Track	☐Others
B.	☐ Required		☒ Elective		
3. Level/year at which this course is offered: (Not determined)					
4. Course General Description:					

This course will highlight the proficient administration of natural resources as an essential element in addressing the difficulties associated with resource depletion and global environmental change. The primary objective of the Sustaining Natural Resources specialization is to equip students with comprehensive expertise in strategies for efficiently managing natural resources within the broader framework of sustainability concerns and environmental governance. This specialization is well-suited for individuals aspiring to pursue careers as environmental scientists and natural resource managers, as it equips them with the necessary skills and knowledge to effectively address the sustainability challenges and capitalize on the opportunities presented by the current century. The curriculum will facilitate the acquisition of knowledge and skills about the natural and social sciences that are pertinent to the administration of natural resources (NR). These acquired skills can subsequently be applied to various contexts, such as environmental conservation and sustainable resource management. The specialization focuses on hands-on and practical learning in real-world settings.

5. Pre-requirements for this course (if any)**:**

EVS 1110 EVS 1112

6. Co-requisites for this course (if any)**:**

None

7. Course Main Objective(s):

The objective of these courses is to provide students with the necessary knowledge and abilities to effectively and responsibly handle natural resources, while also comprehending the intricate interplay among natural resources, governments, industries, and citizens. They explore sustainable alternatives for the development of oil, gas, and minerals, and analyze the significance of policy and governance in attaining sustainable results. The curriculum is tailored to cater to a diverse range of individuals, encompassing sustainable development professionals, private sector stakeholders, extractive professionals, postgraduate students, and advocates for climate change.

2. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	√	100%
2	E-learning	-	-
3	Hybrid • Traditional classroom • E-learning	-	-
4	Distance learning	-	-

3. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	**Lectures**	30
2.	**Laboratory/Studio**	0
3.	**Field**	0
4.	**Tutorial**	0
5.	**Others (specify)**	0
Total		30

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Method

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
1.0	**Knowledge and understanding**			
1.1	**Outline the fundamental concepts of sustaining natural resource**	K1	Lecture and take-home research assignment	Quizzes, midterm exam and final exam
1.2	**Discuss resource management issues and strategies in Saudi Arabia and international contexts**	K2	Lecture and take-home research assignment	Quizzes, midterm exam and final exam
1.3	**Explain the main topics on natural resource management issues and their wider environmental context**	K3	Lecture and take-home research assignment	Quizzes, midterm exam and final exam
1.4	**Explain how wealth generated from natural resource development can be used to further sustainability.**	K3	Lecture and take-home research assignment	Quizzes, midterm exam and final exam
1.5	**Identify efforts to sustainably manage extractive industry investments and Understand the complex and interwoven aspects of natural resource governance.**	K4	Lecture and take-home research assignment	Quizzes, midterm exam and final exam

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
2.0	**Skills**			
2.1	**Analyze the generated data from natural resource development**	S1	field and take-home research assignment	Lab reports and field exam
2.2	**Interpret the natural resource data and theory at a range of scales, and apply knowledge and skills in management and policy contexts**	S2	field and take-home research assignment	Lab reports and field exam
2.3	**Test the sustainable options available for oil, gas, and mineral development**	S3	field and take-home research assignment	field reports and field exam
3.0	**Values, autonomy, and responsibility**			
3.1	**Show the ability to perform assigned work independently and cooperate with a team**	V1	Lecture, field and take-home research assignment	Quizzes, midterm exams, field reports, project presentations, field exams and final exam
3.2	**Share effectively in scientific discussions and present data through different modes**	V2	Lecture, l and take-home research assignment	Quizzes, midterm exam, , project presentations

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
3.3	**Demonstrate responsibility and follow ethical rules while performing work in the field of environmental science**	V3	Lecture, and take-home research assignment	Quizzes, midterm exam, , project presentations,

C. Course Content

No	List of Topics (Lectures)	Contact Hours
1.	Introduction Natural Resources Natural Resources in Saudi Arabia Concept of Sustainability	**4**
2.	Management of natural resources sustainably Dynamics between natural resources, governments, industries, and citizens	**4**
3.	Experience of countries translating natural resource wealth into sustainable development outcomes, the necessary policies for sustainable management of natural resource wealth, and how governance of extractive industries impacts long-term economic development.	**4**
4.	The challenges and opportunities of oil, gas, and mining, the decision chain of natural resource management, the political economy of natural resources, fundamentals of oil, gas, and mining, and legal frameworks for extractive industries.	**2**
5.	The challenges and opportunities of agriculture and mining, the decision chain of natural resource management, the political economy of natural resources, fundamentals of agriculture, and mining, and legal frameworks for extractive industries	**2**
6.	The challenges and opportunities of water and mining, the decision chain of natural resource management, the political economy of natural resources, fundamentals of water, and mining, and legal frameworks for extractive industries	**2**
7.	The challenges and opportunities of solar energy and mining, the decision chain of natural resource management, the political economy of natural resources, fundamentals of solar energy, and mining, and legal frameworks for extractive industries	**2**

8.	Challenges of governance (laws and contracts, policy and planning frameworks, sound resource management, effective institutions), infrastructure (arrangements for shared platforms, corridor development),.	**2**
9.	Economic diversification (industrial policy, training, local procurement),.	**2**
10.	Environmental management (climate change resilience and adaptation,	**2**
11.	Avoidance and management of catastrophic environmental events), and economic development (community engagement, investing in development).	**2**
12.	Selected topic	**2**
Total		**30**

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Midterm exam 1	Around 5th - 6th week	20%
2.	Midterm exam 2	Around 7th - 8th week	20%
3.	Quizzes, Participation, Attendance, Presentations, Data Search	During the semester	20%
4.	Final Exam	Around 13th week	40%
Total			**100%**

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.).

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	Kathy Wilson Peacock (2008) Natural Resources and Sustainable Development forwarded by Jermy Ceral. Kethy Wilson peacock, USA. Hannah.Ferguson (2024) Earthscan Studies in Natural Resource Management, Taylor & Francis Group, USA.
Supportive References	Paul Hawken (2017) The Most Comprehensive Plan Ever Proposed to Reverse Global Warming. New York Times bestseller.USA
Electronic Materials	20 Best Sustainable Development Books of All Time - BookAuthority
Other Learning Materials	Blackboard

2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	Classrooms and field
Technology equipment (projector, smart board, software)	Projector and Smart board
Other equipment (depending on the nature of the speciality)	-

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	Students	Direct
Effectiveness of Students assessment	Program Leader	Direct
Quality of learning resources	Peer Reviewer	Indirect
The extent to which CLOs have been achieved	Program Leader	Direct
Other	-	-

Assessors (Students, Faculty, Program Leaders, Peer Reviewers, Others (specify)

Assessment Methods (Direct, Indirect)

G. Specification Approval

COUNCIL /COMMITTEE	**Biology Department Council**
REFERENCE NO.	**2**
DATE	**21/02/1446 H**