

# **AG 002: ENVIRONMENTAL CONSERVATION**

Proposer:

Name:

**Charles Abee** 

Effective Term:

Spring 2021

**Credit Status:** Credit - Degree Applicable

Subject:

AG - Agriculture **Course Number:** 002

Catalog Title Environmental Conservation

#### **Catalog Description**

A study of the world's environment, including the study of food and fiber systems, ecology, populations, environmental pollution, bioterrorism, and conservation of natural resources. Students will participate in field tours to examine natural and altered habitats and threats to society and the environment.

#### Method of Instruction:

Distance Education Field Experience Lecture and/or Discussion

# **Course Units/Hours:**

**Course Units Minimum:** 

3

Lecture Hours Minimum (week) 3

0

Total Contact Hours Minimum (semester) 52.5

**Total Outside Hours Minimum (semester)** 105

**Total Student Learning Minimum Hours (semester)** 157.5

**Repeatability:** 

No

**Open Entry/Exit:** No

Field Trips: Required

Grade Mode: Standard Letter Email:

charlesa@cos.edu



#### TOP Code:

010100 - \* Agriculture Technology and Sciences, General

SAM Code:

C - Clearly Occupational

## **Course Content**

#### Methods of Assessment:

Essay quizzes or exams Oral presentations Problem solving assignments or activities Problem solving quizzes or exams Project Short answer quizzes or exams Written essays or extended papers

#### **Course Topics:**

	Course Topics
1	Environmental science and ecological principles Understanding the environment Species interaction and endangerment Ecosystems local, global
2	The Scientific Method
3	Society and the environment Solid, toxic and hazardous waste Urbanization Globalization
4	Phyical resources Air, climate and weather Air pollution Water pollution Conventional energy Energy cycles
5	Food, land and biological resources World hunger Food and fiber systems Sustainable agriculture Natural resources and soil conservation Biodiversity Land use forests and rangelands
6	Population and environmental health Population dynamics Environmental health and toxicology Bioterrorism
7	Environmental Cycles- Hydro logic Cycle, Carbon Cycle, and Nitrogen Cycle

### **Course Objectives:**

	Course Objectives
1	Define the role of a conservationist and ordinary citizen in protecting the environment.
2	Familiarize students with day-to-day environmental concerns in bioterrorism as it relates to human, plant, and animal health.
3	List and recommend sustainable methods for improving agricultural and natural resource systems.
4	List, identify, and give functions of natural ecosystems.
5	Propose and explain possible solutions for improving the environment.
6	Have an understanding of career opportunities in environmental conservation and natural resources.

#### **Course Outcomes:**

	Course Outcomes
1	1: Given energy flow and hydrologic cycles, students will be able to describe in written form the use and application of energy systems that are compatible with safe environmental practices.
2	AG 002: Given that students will interpret, identify, and evaluate energy flow and hydrologic cycles, students will be able to describe in written form the use and application of energy systems that are compatible with safe environmental practices.

#### Assignments:

5	
Assignment Type:	Details
Reading	Students may read a peer reviewed article about an environmental study
Writing	Students may have to summarize a peer reviewed article
Homework	Students may have to access their environmental impact by monitoring their fuel consumption, electricity consumption or solid waste production.



Books       Essential Environment: The Science Behind the Stories 6th Edition. Authors Jay Withgott, Matther         Laposata. Publisher Pearson Copyright 2019         Transferable to CSU         Ves - Approved         CSU Ge B2: Life Science         Transferable to UC         Yes - Approved         UC/IGETC General Education         Transferable to UC         IGETC 58: Biological Sciences         COS General Education         Transferable to UC         IGETC 58: Biological Sciences         COS General Education         Degree Applicable         Not a Basic Skills Course         Distance Learning Addendum         Ag 2 Enrionmental Conservation DLA 2020.pdf         Banner Title:         Environmental Conservation         Curriculum Committee Approval Date:         10/22/2020         Academic Senate Approval Date:         10/28/2020         District Governing Board Approval Date:         11/09/2020         Course Control Number:         Coccoou497768	Resource Type:	Details
Yes - Approved CSU General Education CSU GE B2: Life Science Transferable to CSU Transferable to UC Yes - Approved UC/ICETC General Education Transferable to UC CGETC 5B: Biological Sciences COS General Education COS GE B: Natural Sciences COS General Education COS GE B: Natural Sciences Distance Learning Addendum Ag 2 Enrionmental Conservation DLA 2020.pdf Banner Title Environmental Conservation Curriculum Committee Approval Date: 10/22/2020 Academic Senate Approval Date: 10/28/2020 District Governing Board Approval Date: 11/09/2020 Curuse Control Number:	Books	Essential Environment: The Science Behind the Stories 6th Edition. Authors Jay Withgott, Matthev Laposata. Publisher Pearson Copyright 2019
SU GE B2: Life Science   Transferable to CSU   Yes - Approved   UC/IGETC General Education   Transferable to UC   IGETC 5B: Biological Sciences   COS General Education   COS GE B: Natural Sciences   Other Degree Attributes   Degree Applicable   Not a Basic Skills Course   Distance Learning Addendum   Ag 2 Enrionmental Conservation DLA 2020.pdf   Banner Title:   Environmental Conservation   10/22/2020   Academic Senate Approval Date:   10/28/2020   District Governing Board Approval Date:   11/09/2020   Course Control Number:		
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