Environmental Science 1110G
Spring 2022

Dr. Blair Stringam

Office Hrs: MWF 10:30 to 12:00 or by appointment

Skeen Hall Room N330

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Course Description:

ENVS 1110G will introduce you to the scientific study of how humans impact the environment and how the environment impacts humans. About half of the course focuses on mechanisms operating at multiple scales, including connections, cycles, and feedback loops of environmental systems. These deal with how things work, such as chemical principles, food webs, and the carbon cycle. The other half of the course deals with environmental phenomena and the search for solutions. It deals with topics like human population growth, agriculture and the future of food supply, toxicology, waste management, and human use of the oceans, forests, fossil fuels, and creating "livable cities."

Textbook:

The required textbook is *Essential Environment: The Science Behind the Stories* 6th addition by and J. Withgott and M. Laposata © 2018 by Pearson Edu., Inc. San Francisco.

Lab Description:

The ES 1110G lab is required for this course. The instructors are Cheyenne Stice and Hana Hernandez. There are two lab sections. The labs consist of experiments, demonstrations, team projects, and field trips to illustrate the concepts of Environmental Science.

Learning Objectives:

The goal of the course is to give a broad exposure of the scientific and social aspects of environmental science. We will use the scientific method (including the multiple working hypothesis method) to critically analyze cause-and-effect relationships.

Classroom discussion is encouraged. In order to sharpen mathematical skills, lab exercises will routinely involve calculations. During class periods as well, quantitative relationships, graphs, will be presented for essentially all aspects of the course. Basic scientific principles will also be given in the lectures. These include the primary principles of ecology, genetics, chemistry, soil science, atmospheric science, oceanography, hydrology, and geology.

Schedule of Topics, Quizzes and Exams:

Introduction

Science and Sustainability: An Introduction to Environmental Science

Earth's Physical Systems: Matter, Energy, and Geology

Environmental Systems and Ecosystem Ecology

Environmental Ethics and Economics: Values and Choices

Human Population

Soil and Agriculture

Agriculture, Biotechnology, and the Future of Food

Forests, Forest Management, and Protected Areas

Freshwater Systems

Atmospheric Science and Air Pollution

Global Climate Change

Fossil Fuels

Conventional Energy Alternatives

New Renewable Energy Alternatives

Schedule of Quizzes and Exams:

Quiz January 21st	25 pts
Quiz January 28th	25 pts
Quiz February 4th	25 pts

Quiz February 11th	25 pts
Quiz February 18th	25 pts
Quiz February 25th	25 pts
Quiz March 4th	25 pts
Quiz March 18th	25 pts
Quiz March 25th	25 pts
Quiz April 1st	25 pts
Quiz April 8th	25 pts
Quiz April 13th	25 pts
Quiz April 22nd	25 pts
Quiz April 29th	25 pts

Drop the 2 lowest quizzes **300 pts total**

Term assignments **100 pts**

Final Exam **100 pts**

Grading:

Lecture Grades

Lecture grades will be based on the course work, quizzes, water arguments and extra credit work. The final exam is a comprehensive exam given during final exam week. Lecture grade is worth 75% of the total grade. You will have the opportunity to complete extra credit assignments throughout the semester. (300 pts for quizzes, 50pts water arguments, 50pts assignments, 100 pts final exam)

Lab Grades

The lab is worth 25% of your grade. Quizzes will be given at the beginning of every lab over the material from the previous week, as well as questions taken from the Pre-lab resource section of the upcoming lab. A total of 500 points can be earned in the lab:

10 quizzes worth 10 points each = 100 points

12 lab reports worth 30 points each = 360 points

Final group presentation worth 40

Overall Class Grade

The overall class grade will be based on both the lecture and lab grades. Letter grades will be based on the following scale.

A = 90-100% (90-94 = A and 95-100 = A+)

B = 80-89% (80-84 = B and 85-89 = B+)

C = 70-79% (70-74 = C and 75-79 = C+)

D = 60-69% (60-64 = D and 65-69 = D+)

F = 0-59%

Attendance:

Students are expected to attend and participate in class and labs. The exams will be based on lecture material and the homework will involve classroom activities.

Late work, Make-up Policy, Withdrawals, Incompletes, and ADA Statement:

Late homework assignments lose 5% per day. All quizes must be taken at the date and time indicated on this syllabus. No make-up quizes will be given except for reasons accepted under university policy, which includes illness or family crisis. A note from your physician is required. University policies, as stated in the fall schedule of classes, indicate that withdrawals are the responsibility of the student. Students who do not officially withdraw from a course and fail to attend class may receive a failing grade. Incomplete grades may only be given if the student has passed the first half of the course and is unable to complete the course because of documented illness or family crisis. Other information dealing with the Code of Conduct is contained in the Student Handbook.

For information on Discrimination & Disability Accommodation, Academic Misconduct, Important Dates and Student Support Services use the following address.

https://provost.nmsu.edu/faculty-and-staff-resources/syllabus/policies.html

Other NMSU Resources:

NMSU Police Department:	(575) 646-3311	www.nmsupolice.com
NMSU Police Victim Services:	(575) 646-3424	
NMSU Counseling Center:	(575) 646-2731	
NMSU Dean of Students:	(575) 646-1722	
For Any On-campus Emergencies:	911	