

# BIOLOGY 1309.020

## Man and the Environment

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### Instructor: Dr. Michael Dixon

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Office: Cavness 101A

**Office Hours: Monday-Friday 9:00-11:00**

## Course Information

### Course Description

Your life relies on a diversity of natural resources: the food we eat, the clothes we wear, and the materials with which we build houses, cars, and electronics all come from the Earth. As the number of people on the planet grows, more resources are needed to meet just our basic needs and most Americans' desires are not very basic. "40 acres and a mule" or "a chicken in every pot" are no longer the standards for which we strive. Most of us want a car, a cell phone, and a comfortable place to live in an area that is not too crowded plus lots of good cheap food and clean water. All of these items come at a cost that is more than just money. Understanding how the Earth provides our needs and how our actions and decisions affect our planet is the topic for this semester.

### Prerequisite and Co-requisite Courses

There are no prerequisite courses. It is highly recommended that you take BIOL 1109 Man and the Environment lab concurrently.

### Prerequisite Skills

Accessing Internet websites, using ASU Library resources are expectations of BIOL 1309.

### Student Learning Outcomes

The objective of the study of a natural sciences component of a core curriculum is to focus on describing, explaining, and predicting natural phenomena using the scientific method. Courses involve the understanding of interactions among natural phenomena and the implications of scientific principles on the physical world and on human experiences.

The SLO's for this course and the associated activities include:

- Critical Thinking ○ (CT1) Students will gather, analyze, interpret and evaluate data.
  - Students will conduct experiments in the lab, gather data and then analyze their results.
- Communication ○ (CS1) Students will communicate information via written means on lab activities and projects.
  - Students will conduct lab experiments and communicate their findings in writing to each other and their instructor
- Empirical & Quantitative Skills ○ (EQS1) Students will collect and analyze quantitative data.
  - Students will take measurements as part of a lab experiment. They will analyze their data and generate conclusions.
  - (EQS2) Students will make observations to test a hypothesis and generate conclusions based on their observations.
    - Students will make directed observations, gather data and then analyze their results
- Teamwork
  - (TW2) Students will work together on applied learning activities and collaborate with one another to support course goals.
    - Students will conduct experiments in the lab in groups, gather data and then analyze their shared results.

## Course Delivery

This is a face-to-face course with online components that students are expected to access in Blackboard.

## Required Texts and Materials

*Environment: The Science Behind the Stories*, authors Withgott and Laposata, 6th Ed. (ISBN 978-0-13-420488-8)

## Technology Requirements

Some assignments and course materials will be available on the Blackboard web site <http://blackboard.angelo.edu/>.

All private communication will be done exclusively through your ASU email address. Check frequently for announcements and policy changes. In your emails to me, please include the course name and section number in your subject line.

## Communication

I will respond to email and/or telephone messages within 24 hours during working hours Monday through Friday. Weekend messages may not be returned until Monday.

**Written communication via email:** All private communication will be done exclusively through your ASU email address. Check frequently for announcements and policy changes. In your emails to faculty, include the course name and section number in your subject line.

## Grading

### Evaluation and Grades

The majority of your grade will be based on tests. There will be four exams given during the semester, including a comprehensive final exam. Each examination will include information presented in class and out of your textbook. Each test will be comprehensive - that is it will include material presented at any time during the course. This is unavoidable because early topics of discussion are built upon and expanded as the course progresses.

Exams will be mostly multiple-choice but may include a few short answer questions. Exams will cover material covered up through the last class day before the exam.

The final exam will be approximately twice the length and number of points as the previous exams.

Missing an exam is a very serious matter. If you have a documented legitimate excuse, such as severe personal illness, a death in your family, or a university-sponsored event, you must notify me before the exam or very promptly afterward. I will work with you if you act responsibly. If you miss an exam for any other reason or do not notify me promptly then I will use the score you get on the final exam to replace ONE missing exam grade. You will receive a zero if you miss more than one exam.

As a reward to those of you who put in the necessary work, the final exam is optional if you have an "A" average in all of your work at the end of the semester. This includes both the lab and lecture portions of this course.

Additional points will be earned through attendance, in-class quizzes, and homework assignments. In-class activities require you to be physically present in class. I do not allow make-ups of these assignments unless I have given you prior permission to miss a class or you provide me with written evidence of a health issue or similar event. Permission to make up assignments is at my discretion.

### Assessment

Test 1	Feb. 10
Test 2	Mar. 10
Test 3	Apr. 14
Final Exam	May 10 10:30am

## Grading System

Course grades will depend on completing course requirements and meeting the student learning outcomes.

This course uses the following grading scale:

- A = 90.00-100 points
- B = 80.00-89.99 points
- C = 70.00-79.99 points
- D = 60.00-69.99 points
- F = 0-59.99 points

## General Policies Related to This Course

All students are required to follow the policies and procedures presented in these documents:

- [Angelo State University Student Handbook](#)<sup>1</sup>
- [Angelo State University Catalog](#)<sup>2</sup>

## Academic Integrity

Students are expected to maintain complete honesty and integrity in all work. Any student found guilty of any form of dishonesty in academic work is subject of disciplinary action and possible expulsion from ASU.

The College of Science and Engineering adheres to the university's [Statement of Academic Integrity](#)<sup>3</sup> (Page 97).

## Accommodations for Students with Disabilities

ASU is committed to the principle that no qualified individual with a disability shall, on the basis of disability, be excluded from participation in or be denied the benefits of the services, programs or activities of the university, or be subjected to discrimination by the university, as provided by the Americans with Disabilities Act of 1990 (ADA), the Americans with Disabilities Act Amendments of 2008 (ADAAA) and subsequent legislation.

Student Disability Services is located in the Office of Student Affairs, and is the designated campus department charged with the responsibility of reviewing and authorizing requests for reasonable accommodations based on a disability. It is the student's responsibility to initiate such a request by contacting an employee of the Office of Student Affairs, in the Houston Harte University Center, Room 112, or

contacting the department via email at [ADA@angelo.edu](mailto:ADA@angelo.edu). For more information about the application process and requirements, visit the [Student Disability Services website](#).<sup>4</sup> The employee charged with the responsibility of reviewing and authorizing accommodation requests is:

Dr. Dallas Swafford  
Director of Student Disability Services  
Office of Student Affairs  
325-942-2047  
[dallas.swafford@angelo.edu](mailto:dallas.swafford@angelo.edu)  
Houston Harte University Center, Room 112

## **Incomplete Grade Policy**

It is policy that incomplete grades be reserved for student illness or personal misfortune. Please contact faculty if you have serious illness or a personal misfortune that would keep you from completing course work. Documentation may be required. See ASU Operating Policy 10.11 [Grading Procedures](#)<sup>5</sup> for more information.

## **Plagiarism**

Plagiarism is a serious topic covered in ASU's [Academic Integrity Statement](#)<sup>6</sup> in the Student Handbook. Plagiarism is the action or practice of taking someone else's work, idea, etc., and passing it off as one's own. Plagiarism is literary theft.

In your discussions, it is unacceptable to copy word-for-word without quotation marks and the source of the quotation. It is expected that you will summarize or paraphrase ideas giving appropriate credit to the source both in the body of your paper and the reference list.

Papers are subject to be evaluated for originality. Resources to help you understand this policy better are available at the [ASU Writing Center](#).<sup>7</sup>

## **Student Absence for Observance of Religious Holy Days**

A student who intends to observe a religious holy day should make that intention known in writing to the instructor prior to the absence. See ASU Operating Policy 10.19 [Student Absence for Observance of Religious Holy Day](#)<sup>8</sup> for more information.

## **Title IX at Angelo State University**

Angelo State University is committed to providing and strengthening an educational, working, and living environment where students, faculty, staff, and visitors are free from sex discrimination of any kind. In accordance with Title VII, Title IX, the Violence Against

Women Act (VAWA), the Campus Sexual Violence Elimination Act (SaVE), and other federal and state laws, the University prohibits discrimination based on sex, which includes pregnancy, and other types of Sexual Misconduct. Sexual Misconduct is a broad term encompassing all forms of gender-based harassment or discrimination and unwelcome behavior of a sexual nature. The term includes sexual harassment, nonconsensual sexual contact, nonconsensual sexual intercourse, sexual assault, sexual exploitation, stalking, public indecency, interpersonal violence (domestic violence or dating violence), sexual violence, and any other misconduct based on sex.

You are encouraged to report any incidents involving sexual misconduct to the Office of Title IX Compliance and the Director of Title IX Compliance/Title IX Coordinator, Michelle Miller, J.D. You may submit reports in the following manner:

Online: [Incident Reporting Form](#)<sup>9</sup>

Face to Face: Mayer Administration Building, Room 210

Phone: 325-942-2022

Email: [michelle.miller@angelo.edu](mailto:michelle.miller@angelo.edu)

Note, as a faculty member at Angelo State, I am a mandatory reporter and must report incidents involving sexual misconduct to the Title IX Coordinator. Should you wish to speak to someone in confidence about an issue, you may contact the University Counseling Center (325-942-2371), the 24-Hour Crisis Helpline (325-486-6345), or the University Health Clinic (325-942-2171).

For more information about resources related to sexual misconduct, Title IX, or Angelo State's policy please visit the [Title IX website](#).<sup>10</sup>

### **Information About COVID-19**

Please refer to ASU's [COVID-19 \(Coronavirus\) Updates](#)<sup>11</sup> web page for current information about campus guidelines and safety standards as they relate to the COVID-19 pandemic.

## **Modifications to the Syllabus**

This syllabus, including grade evaluation and course schedule, is subject to modification on potentially short notice based on developing circumstances.

# Lecture Topics

<b>Topic</b>	<b>Chapter</b>
Introduction, Syllabus	1
Methods and limitations of science	1
Chemistry and Energy	2
Life and It's Interactions	3 & 4 (maybe some 5)
Human Populations	8
Agriculture, Biotechnology	9, 10
Biodiversity	11
Additional chapters, pages and readings will be announced	

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<sup>1</sup> <https://www.angelo.edu/current-students/student-handbook/>

<sup>2</sup> <https://www.angelo.edu/academics/catalog/>

<sup>3</sup> <https://www.angelo.edu/live/files/27603-student-handbook-2020-21#page=97>

<sup>4</sup> <https://www.angelo.edu/current-students/disability-services/>

<sup>5</sup> <https://angelo.policystat.com/policy/10659448/latest/>

<sup>6</sup> <https://www.angelo.edu/live/files/27603-student-handbook-2020-21#page=97>

<sup>7</sup> [https://www.angelo.edu/current-students/writing-center/academic\\_honesty.php](https://www.angelo.edu/current-students/writing-center/academic_honesty.php)

<sup>8</sup> <https://angelo.policystat.com/policy/10659368/latest/>

<sup>9</sup> <https://www.angelo.edu/incident-form>

<sup>10</sup> <https://www.angelo.edu/title-ix>

<sup>11</sup> <https://www.angelo.edu/covid-19/>