

PS 1317 Physical Science

Summer II 2022

Section D10

Online



Instructor: Stephen Shields

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Office Hours: Online by appointment only.

Course Information

Course Description

An introduction to the foundations of physical science, including selected areas of physics, chemistry, earth science, and space science. Upon completion of this course, the student will gain factual knowledge in science, learn fundamental principles of science, and gain a broader understanding and appreciation of science. Learning outcomes will be assessed through weekly discussion board and journal submissions, quizzes, at-home labs and demonstrations, and online exams.

Prerequisite and Co-requisite Courses

None

Prerequisite Skills

None

Student Learning Outcomes

Upon completion of this course, the student will gain factual knowledge in science, learn fundamental principles of science, and gain a broader understanding and appreciation of science.

Attendance Policy

You will not be required to attend any live sessions of lectures, demonstrations, experiments, or exam reviews. Nor will you lose or miss out on any points for not attending a live session. All videos will be recorded and posted to Blackboard. You are expected to keep up with material. Lectures, assignments, and activities will be posted at the beginning of each week. You will have deadlines to keep up with throughout each week. Please inform me well ahead of time if you will need to be absent for any reason including religious holidays. NOTE: You are not automatically dropped if you stop “attending” class. August 2 is the last day to drop a course.

Required Texts and Materials

“The Physical Universe”, by Krauskopf and Beiser (McGraw Hill, 2017) available in blackboard is supplemental reading for this course. A calculator is needed to complete activities and questions on exams. *A student of this institution is not under any obligation to purchase a textbook from the university-affiliated bookstore. The same textbook may also be available from an independent retailer, including an online retailer.*

Other **required** materials for at-home activities and assignments:

- Water
- Ice Cubes
- Salt
- Pepper
- Baking Soda
- Ziploc Bag (sandwich size)

Communication

Faculty 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

Course grades will be determined as indicated in the table below.

Assessment	Percent of Total Grade
Midterm Exam	20%
Final Exam	20%
Weekly Quizzes (2 per week)	20%
Discussion Board or Journal (1 to 2 per week)	20%
Weekly Activities (1 to 2 per week)	20%
Total	100%

Grading System

Course grades will be dependent upon completing course requirements and meeting the student learning outcomes.

The following grading scale is in use for this course:

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

(Grades may be rounded up)

Exams, Quizzes, Assignments, and Activity Descriptions

All course materials will be made available on Blackboard, in .pdf, .ppt, and .doc file types. All graded materials will be submitted through Blackboard. **Submitted assignments must be turned in as a pdf or a Microsoft file; any other file types must be converted before submitting.** Any late submittals may be subject to point deductions. No exams will be accepted after the due date.

SYLLABUS CHANGES

The faculty member reserves the option to make changes as necessary to this syllabus and the course content. If changes become necessary during this course, the faculty will notify students of such changes by email, course announcements and/or via a discussion board announcement. It is the student's responsibility to look for such communications about the course on a daily basis.

COURSE EVALUATION

Students are provided the opportunity and are strongly encouraged to participate in a course evaluation at the end of the semester.

GEOLOGIC EXHIBITION ORGANIZATION (GEO)

GEO, the student organization of all interested in geology (not just majors/minors). GEO is a student chapter of the American Association of petroleum Geologists (www.aapg.org). Sigma Gamma Epsilon, the national honor society of the earth sciences is related to GEO.

YOU CAN MAJOR OR MINOR IN GEOLOGY @ ASU!

See the BS in Geoscience requirements at

https://www.angelo.edu/physics/geoscience_degree.php. *A Geology Minor requires 18 hours of geology courses. Good and rewarding careers exist for geologists, geophysicists, hydrogeologists, secondary science teachers, and petroleum engineers.*

Talk to your professor and read

http://www.angelo.edu/dept/physics/Geosciences/geoscience_careers.php.

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](#)¹
- [Angelo State University Catalog](#)²

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](#).³

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. For more information about the application process and requirements, visit the [Student Disability Services website](#).⁴ The employee charged with the responsibility of reviewing and authorizing accommodation requests is:

Dallas Swafford
Director of Student Disability Services
Office of Student Affairs
325-942-2047
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](#)⁵ for more information.

Plagiarism

Plagiarism is a serious topic covered in ASU's [Academic Integrity policy](#)⁶ 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 and/or your papers, 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](#).⁷

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](#)⁸ for more information.

Title IX at Angelo State University

The University prohibits discrimination based on sex, which includes pregnancy, sexual orientation, gender identity, and other types of Sexual Misconduct. Sexual Misconduct is a broad term encompassing all forms of gender-based harassment or discrimination including: sexual assault, sex-based discrimination, sexual exploitation, sexual harassment, public indecency, interpersonal violence (domestic violence and/or dating violence), and stalking. As a faculty member, I am a Responsible Employee meaning that I am obligated by law and ASU policy to report any allegations I am notified of to the Office of Title IX Compliance.

Students are encouraged to report any incidents of sexual misconduct directly to ASU's Office of Title IX Compliance and the Director of Title IX Compliance/Title IX Coordinator at:

Michelle Boone, J.D.
Director of Title IX Compliance/Title IX Coordinator
Mayer Administration Building, Room 210
325-942-2022
michelle.boone@angelo.edu

You may also file a report online 24/7 at www.angelo.edu/incident-form.

If you are wishing to speak to someone about an incident in confidence you may contact the University Health Clinic and Counseling Center at 325-942-2173 or the ASU Crisis Helpline at 325-486-6345.

For more information about Title IX in general you may visit www.angelo.edu/title-ix.

Course Schedule

ALL INFORMATION IS SUBJECT TO CHANGE.

Week	Lecture Topics	Exams and Assignments
#1: 7/11 – 7/15	<ul style="list-style-type: none"> - Intro to the Course and About Your Professor - Scientific Method & Origins of Chemistry - Periodic Table - Atomic Structure and Bonds - Crystals, Acids, Bases, and pH 	<p>Due Sunday 7/17 by 11:59 pm</p> <ul style="list-style-type: none"> - Journal #1 - Comprehension Quiz #1 and #2 - Periodic Table Activity - Saltwater and Ice Questions
#2: 7/18 – 7/22	<ul style="list-style-type: none"> - Chemistry of Water - Oxidation and Reduction - Hydrocarbons and Natural Resources 	<p>Due Sunday 7/24 by 11:59 pm</p> <ul style="list-style-type: none"> - Pepper, Water, Soap Demo and Questions - Salt vs Fresh Water and Ice Demo and Questions - Exo vs Endothermic Demo and Questions - Journal #2 - Comprehension Quiz #3 and #4
#3: 7/25 – 7/29	<ul style="list-style-type: none"> - Water Cycle - Atmosphere, Carbon Cycle - Climate Change and Evolution of Earth - Minerals and Rocks, and the Rock Cycle - Plate Tectonics 	<p>Exam 1: 7/29 – 8/1 at midnight</p> <p>Due Sunday 7/31 by 11:59 pm</p> <ul style="list-style-type: none"> - Water Resources Worksheet - Comprehension Quiz #5 and #6 - Journal #3 - Discussion Board #1 - Plate Tectonics Activity
#4: 8/1 – 8/5	<ul style="list-style-type: none"> - Earthquakes and Volcanoes - Groundwater and Texas Water Resources - Solar System - Sun, Stars, and Galaxies 	<p>Due Sunday 8/7 by 11:59 pm</p> <ul style="list-style-type: none"> - Groundwater Worksheet - Solar System Activity - Journal #4 - Discussion Board #2 - Comprehension Quiz # 7 and #8
#5: 8/8 – 8/12	<ul style="list-style-type: none"> - Search for Water and Life in Space - Final Exam 	<p>Final Exam: 8/11 - 8/12 at midnight</p> <p>Due Thursday 8/11 by 11:59 pm</p> <ul style="list-style-type: none"> - Journal #5

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

² <https://www.angelo.edu/catalogs/>

³ <https://www.angelo.edu/student-handbook/community-policies/academic-integrity.php>

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

⁵ <https://www.angelo.edu/content/files/14197-op-1011-grading-procedures>

⁶ <https://www.angelo.edu/student-handbook/community-policies/academic-integrity.php>

⁷ https://www.angelo.edu/dept/writing_center/academic_honesty.php

⁸ <https://www.angelo.edu/content/files/14206-op-1019-student-absence-for-observance-of>