PS 1317 Physical Science  
Spring 2020  
Section 020 MWF 10:00 – 10:50 am  
VIN 158  

Instructor: Stephen Shields  
Email: stephen.shields@angelo.edu  
Phone: 325-486-6934  
Office: VIN 135  

Office Hours: MWF 11:00 am – 12:00 pm; MW 1:00 – 3:30 pm  

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 in-class activities, and 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
Attendance and possible quizzes will be completed within the first 5 minutes of all lecture meetings. You are expected to attend all scheduled class meetings. Missed lecture activity points cannot be made up. 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. March 26 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 required reading for this course. A calculator is needed to complete in-class activities. 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.

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.

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Percent of Total Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Three Exams</td>
<td>30%</td>
</tr>
<tr>
<td>Comprehensive Final Exam</td>
<td>15%</td>
</tr>
<tr>
<td>In-class activities</td>
<td>30%</td>
</tr>
<tr>
<td>Daily Attendance</td>
<td>10%</td>
</tr>
<tr>
<td>Group Project</td>
<td>15%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
</tr>
</tbody>
</table>

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)

Assignment and Activity Descriptions

Group project is subject to change*

• Design a simple experiment
• Record observations
• Make a graph
• Write a summary
  • 1-2 pages double spaced
  • Must contain
    • group member names
    • a graph
    • 3 references, one from a library database
• Cannot use the same experiment you used in PS 1315

Exams will be in Blackboard, including the final exam.

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), meets almost every Wednesday @ 6:00PM. 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

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
- Angelo State University Catalog

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.

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. The employee charged with the responsibility of reviewing and authorizing accommodation requests is:
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\(^6\) 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

**SCHEDULE:** ALL INFORMATION IS SUBJECT TO CHANGE.

<table>
<thead>
<tr>
<th>Course Overview</th>
<th>Blackboard, syllabus, and course requirements.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>The Periodic Law</strong></td>
<td>Elements, compounds, periodic law, atomic structure, and chemical bonds.</td>
</tr>
<tr>
<td><strong>Crystals, Ions, and Solutions</strong></td>
<td>Solids, Solutions, Acids, and Bases</td>
</tr>
<tr>
<td><strong>Exam #1 in Blackboard 2/7/2019</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Chemical Reactions</strong></td>
<td>Quantitative chemistry, chemical energy, reaction rates, oxidation, and reduction</td>
</tr>
<tr>
<td><strong>Organic Chemistry</strong></td>
<td>Carbon, structures, hydrocarbons, and the chemistry of life</td>
</tr>
<tr>
<td><strong>Atmosphere and Hydrosphere</strong></td>
<td>The atmosphere, weather, climate, and hydrosphere</td>
</tr>
<tr>
<td><strong>Exam #2 in Blackboard 3/6/2020</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Spring Break</strong></td>
<td>March 9-13</td>
</tr>
<tr>
<td><strong>The Rock Cycle</strong></td>
<td>Minerals, rocks, earthquakes, volcanism, and erosion</td>
</tr>
<tr>
<td><strong>The Evolving Earth</strong></td>
<td>Isostasy, Diastrophism, Tectonics, and historical geology</td>
</tr>
<tr>
<td><strong>The Solar System</strong></td>
<td>Sun, Inner planets, Outer planets, and the Moon</td>
</tr>
<tr>
<td><strong>The Stars</strong></td>
<td>Telescopes, the Sun, stars, and stellar evolution</td>
</tr>
<tr>
<td><strong>Exam #3 in Blackboard 4/15/2019</strong></td>
<td></td>
</tr>
<tr>
<td><strong>The Universe</strong></td>
<td>Galaxies, quasars, expansion, and the search for extraterrestrial life</td>
</tr>
<tr>
<td><strong>Final Exam Review/TBA</strong></td>
<td>Review for final exam.</td>
</tr>
<tr>
<td><strong>Final Exam Cumulative</strong></td>
<td>In Blackboard; <strong>Monday, May 4 2020</strong></td>
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</tbody>
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