GEOL 3371-010
Geomapping Fundamentals
CAV 031 MWF 8:00 – 8:50 am

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 overview of geomapping concepts and terminology. Application of geomapping (GIS: Geographic Information Systems) software to analyze geological information. Topics include relational databases, spatial data analysis, and digital mapping.

Prerequisite and Co-requisite Courses
None

Student Learning Outcomes
Learning outcomes will be evaluated by lab assignments and projects. At the end of this course, the student will be able to:
1. Use ArcGIS software to create original final products.
2. Create, edit, and manage data using GIS.
3. Analyze datasets to identify if spatial patterns exist.
4. Design maps to visually communicate spatial relationships.
5. Create databases which are conducive to collaboration.

Course Delivery
This is a face-to-face course with learning resources and supplemental materials posted in Blackboard.
Required Texts and Materials
- ASU email account which you check regularly
- Blackboard course site

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>Weekly Lab Exercises</td>
<td>50%</td>
</tr>
<tr>
<td>Midterm Project</td>
<td>15%</td>
</tr>
<tr>
<td>Final Project</td>
<td>25%</td>
</tr>
<tr>
<td>Daily Attendance</td>
<td>10%</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)
Attendance, Assignment, and Activity Descriptions
There will be no make-ups for daily attendance; however, you will have 5 unexcused absences dropped from your grade. You are not automatically dropped if you stop attending class; March 26th is the last day to drop a course.

A typical class meeting will be a daily lab exercise with supplemental information and discussion to aid in understanding the material.

All assignments are to be turned in individually, but you can work together and ask each other questions. There will be no make-ups for missed assignments or projects.

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 (AAPG). 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. 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 information about geoscience careers.

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:

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 for more information.

Plagiarism

Plagiarism is a serious topic covered in ASU’s Academic Integrity policy 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.\textsuperscript{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\textsuperscript{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

<table>
<thead>
<tr>
<th>Date</th>
<th>Lab Topic</th>
<th>Lab Exercises</th>
<th>Lab Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/13 – 1/17</td>
<td>Intro to GIS, project examples</td>
<td>None</td>
<td>N/A</td>
</tr>
<tr>
<td>1/20 – 1/24</td>
<td>GIS Data</td>
<td>Chpts 3 &amp; 4</td>
<td>1/24</td>
</tr>
<tr>
<td>1/27 – 1/31</td>
<td>Coordinate Systems</td>
<td>Chpt 6</td>
<td>1/31</td>
</tr>
<tr>
<td>2/3 – 2/7</td>
<td>Symbology and Displays</td>
<td>Chpts 7 &amp; 8</td>
<td>2/7</td>
</tr>
<tr>
<td>2/10 – 2/14</td>
<td>Labels</td>
<td>Chpt 9</td>
<td>2/14</td>
</tr>
<tr>
<td>2/17 – 2/21</td>
<td>Final Map Products</td>
<td>Chpt 10</td>
<td>2/21</td>
</tr>
<tr>
<td>2/24 – 2/28</td>
<td>Midterm Project</td>
<td>Project</td>
<td>N/A</td>
</tr>
<tr>
<td>3/2 – 3/6</td>
<td>Midterm Project</td>
<td>Presentation</td>
<td>3/6</td>
</tr>
<tr>
<td>3/9 – 3/13</td>
<td>Spring Break</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>3/30 – 4/3</td>
<td>Creating and Editing</td>
<td>Chpt 13</td>
<td>4/3</td>
</tr>
<tr>
<td>4/6 – 4/10</td>
<td>Data Querying</td>
<td>Chp 15 &amp; 16</td>
<td>4/10</td>
</tr>
<tr>
<td>4/13 – 4/17</td>
<td>Data Analysis</td>
<td>Chp 17 &amp; 18</td>
<td>4/17</td>
</tr>
<tr>
<td>4/20 – 4/24</td>
<td>Geoprocessing Vector and Raster</td>
<td>Chp 19 &amp; 20</td>
<td>4/24</td>
</tr>
<tr>
<td>4/27 – 5/1</td>
<td>Final Project</td>
<td>Project</td>
<td>N/A</td>
</tr>
<tr>
<td>5/4 – 5/8</td>
<td>Final Project</td>
<td>Presentation</td>
<td></td>
</tr>
</tbody>
</table>

1. [https://www.angelo.edu/physics/geoscience_degree.php](https://www.angelo.edu/physics/geoscience_degree.php)
3. [https://www.angelo.edu/student-handbook/](https://www.angelo.edu/student-handbook/)
4. [https://www.angelo.edu/catalogs/](https://www.angelo.edu/catalogs/)
6. [https://www.angelo.edu/services/disability-services/](https://www.angelo.edu/services/disability-services/)
7. [https://www.angelo.edu/content/files/14197-op-1011-grading-procedures](https://www.angelo.edu/content/files/14197-op-1011-grading-procedures)
8. [https://www.angelo.edu/content/files/14206-op-1019-student-absence-for-observance-of](https://www.angelo.edu/content/files/14206-op-1019-student-absence-for-observance-of)