

GEOL 3371-010

Geomapping Fundamentals

CAV 031 MWF 10:00 – 10:50 am

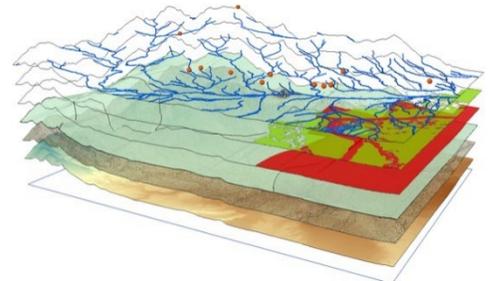


Instructor: Stephen Shields

Email: stephen.shields@angelo.edu

Phone: 325-486-6934

Office: VIN 135



Office Hours: Virtual and in-person hours are below

Monday: 1 – 4pm; Tuesday: 2 – 4pm; Friday 2 – 3pm

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. Due to the nature of this course, there are no lectures, it is imperative that you show up to class every week. The assignments can be completed outside of classroom hours, in computer labs on campus that have ArcGIS (CAV 031, VIN

Research Annex). I will make accommodations for those with letters from the office of student affairs (ADA).

You will also be expected to complete and turn in coursework via [Blackboard](#).¹

Required Texts and Materials

- Textbook: *Getting to Know ArcGIS, 4th edition, by Law, M. & Collins, A.*
- ASU email account which you check regularly
- Blackboard course site

Technology Requirements

To successfully complete this course, students should have access to their Angelo State OneDrive account. I highly recommend using a flash drive of at least 4GB of storage. Between the OneDrive account and the flash drive, you should have more than enough storage for all the data.

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
Weekly Lab Exercises	55%
Midterm Project	15%
Final Project	30%
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)

Assignment and Activity Descriptions

You are not automatically dropped if you stop attending class; **April 28th 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. I will recognize if you turn in the same work as another classmate; any plagiarism will result in an automatic zero grade for that assignment. There will be no make-ups for missed assignments or projects. You may lose points on assignments and projects if they are turned in late.

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](#)²
- [Angelo State University Catalog](#)³

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](#)⁴ (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. For more information about the application process and requirements, visit the [Student Disability Services website](#).⁵ 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
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](#)⁶ for more information.

Plagiarism

Plagiarism is a serious topic covered in ASU's [Academic Integrity Statement](#)⁷ 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](#).⁸

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](#)⁹ 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](#)¹⁰

Face to Face: Mayer Administration Building, Room 210

Phone: 325-942-2022

Email: 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](#).¹¹

Information About COVID-19

Please refer to ASU's [COVID-19 \(Coronavirus\) Updates](#)¹² web page for current information about campus guidelines and safety standards as they relate to the COVID-19 pandemic.

YOU CAN MAJOR OR MINOR IN GEOLOGY @ ASU!

See the [BS in Geoscience requirements](#)¹³. A Geology Minor requires 18 hours of geology courses. Good and rewarding careers exist for geologists, geophysicists, hydrogeologists, environmental geologists, secondary science teachers, and petroleum engineers. Talk to your professor and read information about [geoscience careers](#)¹⁴.

Modifications to the Syllabus

This syllabus, including grade evaluation and course schedule, is subject to modification. In particular, the COVID-19 pandemic may require significant changes in course delivery and content on potentially short notice.

Course Schedule

Date	Lab Topic	Lab Exercises	Lab Due Date
1/18 – 1/21	Intro to GIS, GIS Data	Chapters 3 & 4	1/26
1/24 – 1/28	Coordinate Systems	Chpt 6	2/3
1/31 – 2/4	Symbology and Displays	Chpts 7 & 8	2/9
2/7 – 2/11	Labels	Chpt 9	2/16
2/14 – 2/18	Final Map Products	Chpt 10	2/23
2/21 – 2/25	Creating and Editing	Chpt 12	3/7
2/28 – 3/4	Midterm Project	Project	3/11
3/7 – 3/11	Midterm Project	Project	3/11
3/14 – 3/18	Spring Break No Class	N/a	N/a
3/21 – 3/25	Geodatabases	Chpt 11	3/30
3/28 – 4/1	Creating and Editing	Chpt 13	4/6
4/4 – 4/8	Data Querying (No Class 4/6 and 4/8)	Chp 15 & 16	4/20
4/11 – 4/15	Data Analysis	Chp 17 & 18	4/27
4/18 – 4/22	Geoprocessing Vector and Raster	Chp 19 & 20	5/2
4/25 – 4/29	Final Project	Project	5/9
5/2 – 5/6	Final Project	Project	5/9
5/9 – 5/13	Presentations 5/9: 10:30 – 12:30	Presentations	5/9

¹ <https://blackboard.angelo.edu>

² <https://www.angelo.edu/current-students/student-handbook/>

³ <https://www.angelo.edu/academics/catalog/>

⁴ <https://www.angelo.edu/live/files/27603-student-handbook-2020-21#page=97>

⁵ <https://www.angelo.edu/current-students/disability-services/>

-
- 6 <https://angelo.policystat.com/policy/10659448/latest/>
 - 7 <https://www.angelo.edu/live/files/27603-student-handbook-2020-21#page=97>
 - 8 https://www.angelo.edu/current-students/writing-center/academic_honesty.php
 - 9 <https://angelo.policystat.com/policy/10659368/latest/>
 - 10 <https://www.angelo.edu/incident-form>
 - 11 <https://www.angelo.edu/title-ix>
 - 12 <https://www.angelo.edu/covid-19/>
 - 13 https://www.angelo.edu/physics/geoscience_degree.php
 - 14 http://www.angelo.edu/dept/physics/Geosciences/geoscience_careers.php