Math 6321: Geometry for Educators
Course Syllabus

This syllabus is current and accurate as of its posting date, but it will not be updated. For the most complete and up-to-date course information, contact the instructor.

Contact Information

Instructor: Dr. Dennis Hall
Office: Online
Office Hours: By Appointment
E-mail: dennis.hall@angelo.edu
Phone: 325-486-5426

Course Information

Course Description: Classical geometry taught from a historical prospective. Topics include a study of Euclid’s Elements, Euclid’s Axiomatic Method, coordinates, vectors, Euclidean spaces, perspective, and projective planes. Additional topics as time permits.

Textbook: Geometry with an Introduction to Cosmic Topology by Michael P. Hitchman. This is a free textbook available at http://www.mphitchman.com.

Course Content: The course will cover most of the content in the above textbook.

Course Evaluation

Your grade for this course will be determined by your performance on assignments and two examinations. The two (oral) examinations will be administered individually using video conferencing and will cover the material on the assignments from the previous half of the semester. The examinations will each be worth 15 points, and the assignments will be worth varying amounts, adding up to 70 points. The total number of points possible in this class is 100.
Other Information

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

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.

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 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.

Student Learning Outcomes

The students will demonstrate factual knowledge including the mathematical notation and terminology used in this course. Students will read, interpret, and use the vocabulary, symbolism, and basic definitions used in Finite Mathematics I including set theory, inequalities, linear and quadratic equations, number systems, polynomials, exponents, logarithms, matrices, probability, and mathematics finance.

The students will describe the fundamental principles arising from the mathematical ideas associated to business applications. Students will identify and apply the laws and formulas that result directly from the definitions; for example, the properties associated with probability models and probability experiments, the properties of exponents, logarithms, equations, and the formulas associated with the mathematics of finance.

The students will apply the course material along with techniques and procedures covered in this course to solve business related problems. Students will use the facts, formulas, and the techniques learned in this course to solve basic business problems. This includes applying probability models to business problems; solving annuity and interest problems; analyzing and interpreting graphs; converting logarithmic equations to exponential equations and vice-versa; using lines and their properties; performing matrix operations; graphing various function types; and employing the use of calculators and/or computers.

The students will develop specific skills, competencies, and thought processes sufficient to support further study or work in this field or related fields. Students will acquire a level of proficiency in the fundamental concepts and applications necessary for areas requiring Finite Mathematics I as a prerequisite. These areas might include business, marketing, finance, computer science, nursing, and the social sciences, as well as mathematics.
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 to disciplinary action and possible expulsion from ASU.

The College of Science and Engineering adheres to the university’s Statement of Academic Integrity. vi

How to Get Help

Angelo State University offers many free ways to get help in your classes, especially in math.

1. **Online Tutoring:** This summer, ASU is offering online tutoring. In particular, Upswing tutoring is an online tutoring service paid for by ASU. Schedule a session, or connect instantly with one-on-one tutors using a virtual whiteboard, audio, and (optionally) video.

   Location: [https://angelo.upswing.io/](https://angelo.upswing.io/) and click “New User”

   Hours: 24/7 or by appointment

   Click here for more information: [https://www.angelo.edu/dept/freshman-college/math-lab.php](https://www.angelo.edu/dept/freshman-college/math-lab.php)

2. **Online Office Hours:** I am available almost every day for an online meeting using Blackboard Collaborate, a video conferencing platform. To meet with me, send me an email with when you’d like to meet. I’ll reply with a link to the Blackboard Collaborate room.

3. **Email:** Almost every day, I am available via email at dennis.hall@angelo.edu. Feel free to email me anytime with questions. If possible, send a picture of any work you’ve done so far so that I can better see what you’re asking.

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i [https://www.angelo.edu/student-handbook/](https://www.angelo.edu/student-handbook/)

ii [https://www.angelo.edu/catalogs/](https://www.angelo.edu/catalogs/)

iii [https://www.angelo.edu/services/disability-services/](https://www.angelo.edu/services/disability-services/)

iv [https://www.angelo.edu/content/files/14197-op-1011-grading-procedures](https://www.angelo.edu/content/files/14197-op-1011-grading-procedures)

v [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)