Math 4321 College Geometry
Fall 2019 Syllabus

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

Instructor Information
Dr. David A. Huckaby
Office: MCS 219D
Phone: 486-5434
Email: david.huckaby@angelo.edu

Tests
We will have three tests and a cumulative final examination. The exact dates and coverage of these tests will be announced in class and posted to MyLab; however, as a planning guide, you may expect to take the first test the fifth week of the semester, the second test the ninth week of the semester, and the third test the thirteenth week of the semester. The final exam will be held as specified in the course schedule.

There are no make-up exams. To compensate for unavoidable circumstances, however, if it helps you, I will replace your lowest exam score with your final exam score.

Daily Work
Daily work will consist primarily of traditional homework problems and class activities, including group work and presentations. You will also maintain a portfolio of your work. Late work, including in-class activities for which you were absent, is not accepted. To compensate for unavoidable circumstances, however, I will drop your lowest four homework scores.

Project
We will have a group mini-project covering geometry and its pedagogy.
Calculations
Your score on homework will count 10%, each test 20%, and the final exam 30% (50% if it replaces your lowest test grade). Then 90 and above is an A, 80-89 is a B, 70-79 is a C, 60-69 is a D, and less than 60 is an F. I reserve the right, however, to adjust grades upwards from these percentages.

Student Learning Outcomes
1. Students will read, interpret, and use the vocabulary, symbolism, and basic definitions used in college geometry including logic and proof; points, lines, and angles; planar figures; congruence; similarity; space figures; coordinate and transformational geometry; constructions; and non-Euclidean geometry.
2. Students will identify and apply the laws and formulas that result directly from the definitions; for example, methods of proof, properties of parallel lines, properties of congruent and similar figures, properties of planar figures, formulas for and relationships among perimeter, (surface) area, and volume, analytic geometry, and the parallel postulate and non-Euclidean geometries.
3. Students will use the facts, formulas, and the techniques learned in this course to prove theorems in geometry, tackle problems involving geometric constructs, and teach children to do the same.
4. Students will acquire a level of proficiency in the fundamental concepts and applications necessary for further study in academic fields requiring a solid background in geometry as a prerequisite, or for work in occupational fields requiring a solid background in geometry. These fields might include teaching mathematics in the middle and secondary schools; engineering; architecture; graphic media; art; physical sciences; computer science; finance; life sciences; and social sciences, as well as mathematics. Students who are future educators in particular will acquire the understanding and skills to teach logical and geometrical reasoning, to work with peers in group activities to promote both listening skills and oral communication skills, and to analyze ideas, different points of view, and various approaches to problem solving.
5. Students will acquire a level of proficiency in particular in using Geometer’s Sketchpad to solve geometrical problems and to illustrate geometrical ideas.
6. Students will acquire an appreciation for the role of proof in mathematics, in geometry in particular, and a proficiency in logical reasoning in the context of formal geometry proofs and in other contexts.

Subject Matter
We will be studying the basics of geometry and its pedagogy.

The subject matter schedule listed below is tentative, and subject to change and adaptation. For current, updated information about course topics, contact the instructor.
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<td>Right Triangles</td>
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<td>Volume and Surface Area</td>
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<td>29</td>
<td>Non-Euclidean Geometry</td>
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Required Texts or Readings
Geometry for Pre-Service Middle School and High School Teachers, by Moreland and Huckaby. (The text may be downloaded from Blackboard.)

Office Hours
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<td>Tuesday</td>
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<td>Wednesday</td>
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<td>Thursday</td>
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ASU Statements

Student Disability Services

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.

The Office of Student Affairs is the designated campus department charged with the responsibility of reviewing and authorizing requests for reasonable accommodations based on a disability, and it is the student’s responsibility to initiate such a request by contacting:

Dallas Swafford
Director of Student Disability Services
Office of Student Affairs
325-942-2047
dallas.swafford@angelo.edu

Title IX
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 Boone, J.D. You may submit reports in the following manner:

Online: Title IX Incident Form
Face to Face: Mayer Administration Building, Room 210
Phone: 325-942-2022
E-Mail: michelle.boone@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 ASU Title IX website.

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. (OP 10.19)

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 Conduct Policies
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 Statement of Academic Integrity.

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 via Turnitin. Resources to help you understand this policy better are available at the ASU Writing Center.
Copyright Policy

Students officially enrolled in this course should make only one printed copy of the given articles and/or chapters. You are expressly prohibited from distributing or reproducing any portion of course readings in printed or electronic form without written permission from the copyright holders or publishers.

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

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i mailto:david.huckaby@angelo.edu
ii mailto:david.huckaby@angelo.edu
iii http://www.angelo.edu/incident-form
iv http://www.angelo.edu/title-ix
v https://www.angelo.edu/content/files/14206-op-1019-student-absence-for-observance-of
vi http://www.angelo.edu/content/files/14197-op-1011-grading-procedures
vii http://www.angelo.edu/student-handbook/community-policies/academic-integrity.php
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