

Sul Ross State University
Course Syllabus
MATH 3301-001,MC1: Geometry
Spring 2019

Instructor: Dr. Angela Brown

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Office Hours: MW 2:30-4:00, W 10-12, TR 3:30-5, others by appointment.

Time and Place of Class Meetings: TTh 9:30-10:45 ACR 206

Prerequisites: MATH 2311, MATH 2318, or instructor consent

Required Textbooks: *College Geometry: A Discovery Approach, 2nd Ed.* by David C. Kay. ISBN 0321046242

Other Equipment Needed: paper and pencils, compass, straight edge

Course Content: Students will understand the formal development of Euclidean geometry and understand multiple different non-Euclidean geometries.

Mathematics Program Learning Objectives: The graduating student should be able to

- Apply knowledge of basic mathematics principles.
- Identify and provide valid proofs or solutions for theorems or problems.
- Recognize and dispute invalid mathematical statements by using counter-examples.

Grading Scale: 90-100 A, 80-89 B, 70-79 C, 60-69 D, 59-Below F

Grading Policy: The grade weighting will be as follows:

Participation/Presentations: 10%

Homework/Quizzes/In Class Work: 35%

Exams: 20%

Project: 15%

Final Exam: 20%

For each class period, you will be expected to read your the material we will be covering that day and work through any problems assigned to presented for that class period. After a lesson is presented for the day, in class quizzes over the actual material will be may given as well.

Homework will be assigned periodically throughout the semester. Homework assignments must be complete and will be turned in during class. Dates will be posted to Blackboard. Not all problems will be graded for content, but the assignment grade is contingent on completeness. If you use outside references, make sure to properly source the material.

There will be three exams in addition to the final exam. All exams will be closed notes, closed book, and no calculators allowed. No make-up exams will be given unless due to a school function. If you miss an exam with a valid excuse, the grade you make on the final exam can replace this grade.

We are covering chapter 1-4 in full detail. For the Class Project, you will pick topics from Chapters 5-7 or another geometric topic that has not been covered in the class (This could include finite or infinite projective geometry, finite affine geometry Riemannian geometry, etc) You will make a presentation for the entire class. These topics could be tested on on the final, so you need to make sure you attend and pay attention to everyone's presentations. The presentations should be 30 minutes each. For the presentation you will be expected to use more than your textbook as a source of material.

The final exam is on Monday May 13 at 8:00 am.

General Policies: Class will start at the designated time and run for 1 hour and 15 minutes with no breaks. You are expected to be on time, attend every class meeting, stay for the duration of class time and come to learn. Do not schedule any appointments that will conflict with class time; if you have done so then I need documentation of the appointments.

You are expected to bring all necessary materials and take notes and participate. You are expected to turn-off and not to access any electronic, non-task oriented device such as cell/smart phones, tablets, and i-pods. A cell phone cannot be used as a calculator. Devices for recording the lecture are permitted; either audio or video.

If you come to class without your materials then you will be released from class to go get the appropriate materials. Working on another class during this one is not allowed. If you are causing others around you to miss lecture material then you will be asked to leave.

Any personal business must be conducted during office hours or by appointment. I will only discuss grades and attendance issues in my office. Classroom time is for the entire class.

Attendance Policy: Students are expected to attend every class. If class must be missed, the student is expected to get the notes from a classmate, and to check with me or on Blackboard for announcements and updated assignments. You are expected to check your Sul Ross e-mail account. Absences due to school functions should be discussed with me ahead of time.

Students are expected to arrive to class on time. If a student is perpetually late, they will be asked to not attend class unless they arrive on time. If tardiness becomes a problem for the class as a whole, people who arrive late will not be permitted to enter the class. If this stricter policy becomes necessary, there will be an announcement made in class.

It is policy of the university to drop a student with a grade of "F" if 9 hours or more of class are missed. For this course that would be 6 or more class sessions missed.

Americans With Disabilities Act: As an instructor, I am required by law to provide "reasonable accommodations" to students with disabilities, so as not to discriminate on the basis of that disability. Student responsibility primarily rests with informing the instructor for MATH 3301 of their need for accommodation and in providing authorized documentation through designated administrative channels. If you need to request such accommodations, please contact the ADA Coordinator in Counseling and Accessibility Services, Ferguson Hall 112, 432-837-8203.

Important Dates:

January 22	First Day of Classes
January 25	Last Day for Late Registration and Schedule Changes
March 18-22	Spring Break
April 12	Last Day to Withdrawal from University or Drop Classes with a Grade of “W” (by 4 pm)
May 8	Last Day of Classes
May 10,13-15	Final Exams
May 17	Commencement

Tentative Schedule-Subject to Change

	Tuesday		Thursday
Jan 22	Exploring Geometry	Jan 24	Exploring Geometry
Jan 29	Exploring Geometry	Jan 31	Axioms and Proofs
Feb 5	Examples and Models	Feb 7	Incidence Axioms
Feb 12	Distance, Rays, Angles	Feb 14	Angle Measure
Feb 19	Triangles	Feb 21	Taxicab Geometry
Feb 26	Exam 1	Feb 28	SSS, ASA, SSS
Mar 5	Exterior Angle Inequality	Mar 7	Inequality Theorems
Mar 12	Congruence	Mar 14	Quadrilaterals
Mar 26	Circles	Mar 28	Exam 2
Apr 2	Parallelism and Rectangles	Apr 4	Parallelograms, Trapezoids, Projection
Apr 9	Similar Triangles, Trig	Apr 11	Polygons and Tiling
Apr 16	Circles	Apr 18	Coordinate Geometry
Apr 23	Exam 3	Apr 25	Project Presentation Day
Apr 30	Project Presentation Day	May 2	Project Presentation Day
May 7	Review/Catch Up Day		