

# **MATH 301.1SE Introductory Geometry**

COURSE SYLLABUS: Fall 2024

### INSTRUCTOR INFORMATION

Instructor: Laura Beene Office Location: Binnion 311

Office Hours: MWF 11-12 pm, M 1 – 2 pm, T 8:30 – 9:30 am

Office Phone: 903-886-5946

University Email Address: laura.beene@tamuc.edu

Preferred Form of Communication: email

Communication Response Time: 24 hours except over a weekend or holiday

#### **COURSE INFORMATION**

Materials - Textbooks, Readings, Supplementary Readings

Textbook: Discovering Geometry 5th Edition by Michael Serra, Published Kendall Hunt Publishing

ISBN: 978-1465255020

Also, required: **GeoGebra**, a free online software package.

<u>Supplies Needed:</u> Students will need a three-ring binder or folder for notes and handouts. You may also want a ruler, protractor, scissors, glue stick, stapler, patty paper and colored pencils. **Please use ONLY pencil on all work that is turned in.** 

## **Course Description**

Topics will include plane and solid Euclidean geometry, including the properties of parallels, perpendiculars, triangles, and circles along with perimeter and formulas for area of plane regions and for the surface area and volume of solids. **Prerequisites: "C" or better in MATH 1351 or MATH 2414**.

## **Student Learning Outcomes**

Upon completion of Math 301, students will be able to:

- Develop understanding of geometric concepts and axiomatic structures of Euclidean Geometry.
- Connect ideas within and between mathematical concepts
- Develop mathematical thinking using inductive and deductive reasoning

- Develop understanding of transformational geometry
- Relate Algebra to Geometry and trigonometry using the Cartesian coordinate system
- Analyze properties of two- and three- dimensional figures
- Develop and understand measurement formulas

### **COURSE REQUIREMENTS**

#### Minimal Technical Skills Needed

A TI-83 or TI-84 calculator is highly recommended for this class. Students need to check their e-mail regularly with the address that they have provided to the instructor for class announcement. Access of computer with internet and D2L access, along with MS office software and a printer will be needed for some of the class projects.

#### Instructional Methods

Class time will be spent in lecture, demonstration and models, and hands-on activities in small and/or large group settings. Several types of manipulative will be demonstrated and used to solve problems. Cooperative learning, inquiry learning, and the use of technology will be incorporated into this class. All work should be completed in pencil.

## Student Responsibilities or Tips for Success in the Course

Students are encouraged to study and work in groups. In addition, the free tutoring on campus and from online is also highly recommended. **Math Skills Center** is located in Binnion 328, is open **Monday**, **Wednesday 10am – 8 pm, Tuesday, Thurday 10 am – 6 pm and Friday from 10 am – 2 pm.** The **Mach III/TRIO Program** is available for students who qualify for additional resources, such as private tutoring. In order to qualify, students must meet certain conditions, such as being a first-generation college student. For more information, contact Ronnie Brooks at 903-886-5833 or in the Halladay Student Services building, Room 301.

#### **GRADING**

Final grades in this course will be based on the following scale:

A = 90%-100%

B = 80% - 89%

C = 70% - 79%

D = 60%-69%

F = 59% or Below

## **Assessments**

Projects/Reflections 20%

Homework 15%

Exams 40% Comprehensive Final Exam 25%

### **TECHNOLOGY REQUIREMENTS**

#### **LMS**

All course sections offered by Texas A&M University-Commerce have a corresponding course shell in the myLeo Online Learning Management System (LMS). Below are technical requirements

#### LMS Requirements:

https://community.brightspace.com/s/article/Brightspace-Platform-Requirements

## LMS Browser Support:

https://documentation.brightspace.com/EN/brightspace/requirements/all/browser\_support.htm

## **ACCESS AND NAVIGATION**

You will need your campus-wide ID (CWID) and password to log into the course. If you do not know your CWID or have forgotten your password, contact the Center for IT Excellence (CITE) at 903.468.6000 or <a href="https://heibidesk.org/needle-needle

**Note:** Personal computer and internet connection problems do not excuse the requirement to complete all course work in a timely and satisfactory manner. Each student needs to have a backup method to deal with these inevitable problems. These methods might include the availability of a backup PC at home or work, the temporary use of a computer at a friend's home, the local library, office service companies, Starbucks, a TAMUC campus open computer lab, etc.

### **COMMUNICATION AND SUPPORT**

If you have any questions or are having difficulties with the course material, please contact your Instructor.

## **Technical Support**

If you are having technical difficulty with any part of Brightspace, please contact Brightspace Technical Support at 1-877-325-7778. Other support options can be found here:

https://community.brightspace.com/support/s/contactsupport

#### Interaction with Instructor Statement

Students will be expected to interact with the instructor(s) in class, during office hours or via electronic means in an appropriate manner. All instructor contact information is listed on this syllabus and should be used. Please use email to facilitate a quick response.

#### COURSE AND UNIVERSITY PROCEDURES/POLICIES

# **Course Specific Procedures/Policies**

#### Attendance:

Attendance will be taken promptly at the start time of each class. Furthermore, students must be actively participating in class to receive credit for attendance that day. If you are part of an athletic or scholastic team or other group and must miss class, you may be excused only if the absence is listed as an excused absence by the university. You will be expected to communicate this absence to me at least one

week beforehand. If a student misses class, please get the notes from another students and see me during office hours with any questions.

Excessive Absences: \*\*\* Students who are absent more than 6 times, for whatever reason, are subject to the instructor dropping them from the course or receiving a failing grade from this class.\*\*\* Six absences in this course constitutes missing 20% of the course, which is a very large fraction of material for a student to miss. Any student who is close to this number of absences should come to the instructor before they accumulate six absences in the course. I will NOT automatically drop students from the course. Therefore, if students intend to drop the course, students will need to follow the drop procedures of the school. If I intend to drop students from the course, students will receive an email from me at the address students have given me on my student information sheet.

#### Homework:

Homework will be assigned most class periods. It is extremely important for students to work all assignments in order to be prepared for the exams. Students can work together with classmates when trying to figure out how to do the problems. Please include classmate(s)' name(s) on the top of students' paper if students have worked with another students for an assignment. Homework assignments will be turned in through D2L. Late work is not typically accepted and will be graded with reduced credits. Assignments that are turned in a week passed the due date will receive a zero for the grade.

#### Quizzes:

Both individual and group quizzes will be given in class and the grade will be counted toward students' daily grade. Since regular attendance is expected, **NO make-up quizzes will be given**. This class covers a variety of important topics that there is not a "good" time to miss a class. Each quiz will be over material to be emphasized on exams. Quizzes will average into students' daily grade.

#### **Activities and Projects:**

Activities or projects will be assigned for students to work on outside of class periodically. These activities or projects will vary in their scope and should be completed neatly and punctually. An Activity or project is typically counted as twice a homework grade. Please follow the instructions for each activity or project closely and turn in quality work that reflects students' future profession as a teacher.

#### Exams:

There will be two scheduled exams before a comprehensive final exam and will consist of a variety of problems and short answer questions. Partial credit may be given on exams IF all work is neatly shown with clear steps. When pictures are drawn to answer a question, figures need to be clearly labeled and easily understood. CELL PHONES AND OTHER SUCH DEVICES MUST BE TURNED OFF AND STORED OUT OF THE STUDENT'S REACH DURING AN EXAM. All exams must be completed in pencil.

\*I do not give any make-up exams unless pre-arranged and accompanied by a documented University-excused absence. Students can replace the lowest exam grade with their grade on the corresponding portion of the final exam, provided the grade on that section of the final exam is higher.

\* University Authorized Excuses: 1) Participation in a required/authorized university activity; 2) Verified illness; 3) Death in a student's immediate family; 4) Obligation of a student at legal proceedings in fulfilling responsibility as a citizen; and others determined by individual faculty to be excusable (e.g., elective University activities, etc.)

Tentative Testing Schedule: Exam #1: 10/10, Exam #2: 11/20

## Final Exam:

The final exam will be a comprehensive exam. The final exam will be given as per the university schedule **Tuesday December 12**<sup>th</sup>, **1:15 pm – 3:15 pm** 

\* There are no make-up exams for the final exam! \*

## **Syllabus Change Policy**

The syllabus is a guide. Circumstances and events, such as student progress, may make it necessary for the instructor to modify the syllabus during the semester. Any changes made to the syllabus will be announced in advance.

# **University Specific Procedures**

#### Student Conduct

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. The Code of Student Conduct is described in detail in the Student Guidebook.

http://www.tamuc.edu/Admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.aspx

Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum: <a href="https://www.britannica.com/topic/netiquette">https://www.britannica.com/topic/netiquette</a>

### **TAMUC Attendance**

For more information about the attendance policy please visit the <u>Attendance</u> webpage and <u>Procedure</u> 13.99.99.R0.01.

http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/academic/13.99.99.R0.01.pdf

## **Academic Integrity**

Students at Texas A&M University-Commerce are expected to maintain high standards of integrity and honesty in all of their scholastic work. For more details and the definition of academic dishonesty see the following procedures:

Undergraduate Academic Dishonesty 13.99.99.R0.03

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduateS/13.99.99.R0.03UndergraduateAcademicDishonestv.pdf

Graduate Student Academic Dishonesty 13.99.99.R0.10

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/graduate/13.99.99.R0.10GraduateStudentAcademicDishonesty.pdf

### Students with Disabilities-- ADA Statement

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation

requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

### Office of Student Disability Resources and Services

Texas A&M University-Commerce Gee Library- Room 162 Phone (903) 886-5150 or (903) 886-5835 Fax (903) 468-8148

Email: studentdisabilityservices@tamuc.edu

Website: Office of Student Disability Resources and Services

http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServices/

## **Nondiscrimination Notice**

Texas A&M University-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

## **Campus Concealed Carry Statement**

Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in Texas A&M University-Commerce buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and A&M-Commerce Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations.

For a list of locations, please refer to the <u>Carrying Concealed Handguns On Campus</u> document and/or consult your event organizer.

#### Web url:

 $\underline{http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf}$ 

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all A&M-Commerce campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.

## A&M-Commerce Supports Students' Mental Health

The Counseling Center at A&M-Commerce, located in the Halladay Building, Room 203, offers counseling services, educational programming, and connection to community resources for students. Students have 24/7 access to the Counseling Center's crisis assessment services by calling 903-886-5145. For more information regarding Counseling Center events and confidential services, please visit www.tamuc.edu/counsel

## Mental Health and Well-Being

The university aims to provide students with essential knowledge and tools to understand and support mental health. As part of our commitment to your well-being, we offer access to Telus Health, a service available 24/7/365 via chat, phone, or webinar. Scan the QR code to download the app and explore the resources available to you for guidance and support whenever you need it.



## Al use policy [Draft 2, May 25, 2023]

Texas A&M University-Commerce acknowledges that there are legitimate uses of Artificial Intelligence, ChatBots, or other software that has the capacity to generate text, or suggest replacements for text beyond individual words, as determined by the instructor of the course.

Any use of such software must be documented. Any undocumented use of such software constitutes an instance of academic dishonesty (plagiarism).

Individual instructors may disallow entirely the use of such software for individual assignments or for the entire course. Students should be aware of such requirements and follow their instructors 'guidelines. If no instructions are provided the student should assume that the use of such software is disallowed.

In any case, students are fully responsible for the content of any assignment they submit, regardless of whether they used an AI, in any way. This specifically includes cases in which the AI plagiarized another text or misrepresented sources.

13.99.99.R0.03 Undergraduate Academic Dishonesty 13.99.99.R0.10 Graduate Student Academic Dishonesty

# **COURSE OUTLINE / CALENDAR**

Week	Date	Topic
1	8/26	Intro, What is Geometry? Building Blocks of Geometry, Special Angles
2	9/2	Triangles and Special Polygons
3	9/9	GeoGebra, Constructions
4	9/16	Triangles and Quadrilaterals
5	9/23	Triangles and Similarity
6	9/30	Beginnings of Proofs
7	10/7	Review and Exam #1
8	10/14	Quadrilaterals and Circles
9	10/21	Circles
10	10/28	Transformational Geometry
11	11/4	More Proofs, Area, Surface Area, Volume,
12	11/11	Pythagorean Theorem, Nets, Orthographic Drawings
13	11/18	Review, Exam #2
14	11/25	Project Presentations, THANKSGIVING BREAK
15	12/2	Final Exam Review
16	12/10	Final Exam 1:15 pm – 3:15 pm