



**MATH 3352.90L: Modern Geometry I**  
**SYLLABUS**  
**Summer II 2021**

*Subject to any new Texas legislative mandate changes.*

**COURSE INFORMATION**

Meeting times – MTWRF 9:45 AM – 11:15 AM (Central Time)

Meeting location – Zoom Class in Blackboard

**Course Modality:** Online Synchronous Courses (OSYNC) – See below for the details

**INSTRUCTOR INFORMATION**

Instructor Name: Dr. Younggon Bae

Phone: (956) 882-7271

E-Mail: [younggon.bae@utrgv.edu](mailto:younggon.bae@utrgv.edu)

Office location: BLHSB 2.526

Office hours: MTWRF 8:00 AM – 9:00 AM or by appointment

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**COVID-19 RESOURCES**

Please visit the [UTRGV COVID-19 Website](#) via the following link for the most up-to-date information and resources.

**UTRGV VACCINE PORTAL**

UTRGV Students are now eligible to receive the COVID-19 Vaccine. Students may access and complete their vaccine profile via the [UTRGV Vaccine Portal](#). For additional information on the COVID-19 Vaccine, please visit the [UTRGV COVID-19 Website](#).

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**COURSE MODALITY**

**Online Synchronous Courses:** This course will be delivered fully online. There will be a designated class meeting time for real-time instructor/student interaction, which will be conducted remotely via online platforms from the safety of your home. This real-time interaction may be supplemented by asynchronous video lectures and the digital presentation of course content. If this is the case it may mean a proportional reduction in number of synchronous class meetings. Your instructor will provide the details in the course syllabus. Your instructors will provide you with feedback on assigned work, communicate with you electronically, and be available to meet with you as defined on this syllabus.

**COURSE DESCRIPTION, PREREQUISITES & MODE OF LEARNING**

Topics include Euclidean geometry, analytic geometry, transformation geometry, and a brief introduction to non-Euclidean geometries. Prerequisites: MATH 2318 with a grade of 'C' or better.

This course will require both synchronous and asynchronous modes of learning. **Students will attend online synchronous class meetings on every Tuesday, Thursday, and Friday.** To access the meetings, go to Zoom Classes in Blackboard course page and find the scheduled Zoom meetings. In additions, students are expected to read/view course materials provided via Blackboard to supplement their study on Monday and Wednesday. This may include read lecture notes, view video lectures, and submit homework assignments and course project(s).

## LEARNING OBJECTIVES/OUTCOMES FOR THE COURSE

At the end of this course, students will be able to:

- Explain various theorems from contemporary geometry and their applications,
- Demonstrate an understanding of the historical development of geometry from its Euclidean foundations to the formulation of hyperbolic and elliptical non-Euclidean geometries.
- Demonstrate an understanding of the axiomatic foundations of various geometries and skill in formulating conjectures, proving theorems, disproving non-theorems, and solving problems in these geometries.
- Communicate mathematical ideas effectively with appropriate types of written, verbal, visual, and digital communication tools.

## LEARNING OBJECTIVES FOR CORE CURRICULUM REQUIREMENTS

This course is designed to satisfy a core curriculum requirement which learning outcomes match the outcomes set by the Texas Higher Education Coordinating Board (THECB) including Critical Thinking Skills, Communication Skills, and Empirical & Quantitative skills defined as follows.

Core Objectives	UTRGV Student Learning Outcome Statement
<b>Critical Thinking</b>	Students will demonstrate comprehension of a variety of written texts and other information sources by analyzing and evaluating the logic, validity, and relevance of the information in them to solve challenging problems, to arrive at well-reasoned conclusions, and to develop and explore new questions.
<b>Communication Skills</b>	Students will demonstrate the ability to adapt their communications to a particular context, audience, and purpose using language, genre conventions, and sources appropriate to a specific discipline and/or communication task.
<b>Empirical &amp; Quantitative Skills</b>	Students will be able to make and communicate informed conclusions and predictions based on the interpretation, manipulation, and analysis of empirical and quantitative data.

## TEXTBOOK, TECHNOLOGY, AND/OR RESOURCE MATERIAL

Exploring Geometry, 2<sup>nd</sup> edition by Michael Hvidsten, CRC Press (ISBN 9781498760805). Recommended to get an e-book (\$35.50 for rent, \$96.00 for purchase at Amazon). Hardcover or Paperback are available at higher prices as well.

A free geometry software Geometry Explorer will be used in class.

## CALENDAR OF ACTIVITIES (SUBJECT TO CHANGE)

Week	Topic	Assignments (TBD)
<b>1 (Jul 8 – 14)</b>	Axiomatic Foundations of Euclidean Geometry (1)	Weekly Assignment 1
<b>2 (Jul 15 – 21)</b>	Axiomatic Foundations of Euclidean Geometry (2)	Weekly Assignment 2
<b>3 (Jul 22 – 28)</b>	Parallel Postulates	Weekly Assignment 3
<b>4 (Jul 29 – Aug 4)</b>	Non-Euclidean Geometry	Weekly Assignment 4
<b>5 (Aug 5 – Aug 11)</b>	Transformational Geometry	Weekly Assignment 5
<b>Final (Aug 13)</b>	Cumulative Exam	Final Exam

## Importatn Dates

### Summer II

July 8	First day of classes.
July 9	Last day to add a class or register for Summer II 2021 classes.
Aug. 4	Last day to drop a class or withdraw.
Aug. 12	Study Day – NO classes
Aug. 13	Final Exams
Aug. 16	Grades Due at 3 p.m.

## GRADING POLICIES

At the end of the semester each student's weighted average is computed using the following percentages. The letter grade (A,B,C,D, or F) will be determined by the following scheme.

- Weekly assignments (50%), Attendance and Participation (10%), Course Projects (20%), Final Exam (20%)
- A (90-100), B (80-89), C (70-79), D (60-69), F (0-59)

There will be no curve on the course grade and no individual extra point assignment (especially at the end of semester). It is student's responsibility to check all the grades through the entire semester. Student should contact the instructor within 1 week (1 day for summer semester) after receiving grades from submitted assignments, if any questions regarding the grades. No appeal will be accepted after this period for any reason.

**Notice:** Your enrollment in this course requires that you use Respondus Lockdown Browser and Respondus Monitor for online assessment proctoring. LockDown Browser is a custom browser that locks down the testing environment within Blackboard and replaces regular browsers such as Chrome, Firefox, and Safari. Respondus Monitor requires you to have a webcam and microphone as it will record you while taking your assessment. YOUR ACTIVITIES ARE RECORDED WHILE YOU ARE LOGGED INTO OR TAKING YOUR ASSESSMENT(S). THE RECORDINGS SERVE AS A PROCTOR AND WILL BE REVIEWED AND USED IN AN EFFORT TO MAINTAIN ACADEMIC INTEGRITY.

You can find more detailed information on [Lockdown Browser and Monitor](#) at [UTRGV.edu/online](#).

## VIDEO RECORDING POLICY

*The use of recordings will enable you to have access to class lectures, group discussions, etc. in the event you have to miss a synchronous or face to face class meeting due to illness or other extenuating circumstance. Our use of such technology is governed by the Federal Educational Rights and Privacy Act (FERPA), UTRGV's acceptable-use policy, and UTRGV HOP Policy STU 02-100 Student Conduct and Discipline. A recording of class sessions will be kept and stored by UTRGV, in accordance with FERPA and UTRGV policies. Your instructor will not share the recordings of your class activities outside of course participants, which include your fellow students, teaching assistants, or graduate assistants, and any guest faculty or community-based learning partners with whom we may engage during a class session. **You may not share recordings outside of this course.** Doing so may result in disciplinary action under UTRGV HOP Policy STU 02-100 Student Conduct and Discipline.*

## BLACKBOARD SUPPORT

If you need assistance with course technology at any time, please contact the [Center for Online Learning and Teaching Technology](#) (COLTT).

Campus:	Brownsville	Edinburg
Location:	Casa Bella (BCASA) 613	Education Complex (EEDUC) 2.202
Phone:	956-882-6792	956-665-5327

**Toll Free: 1-866-654-4555**

Office Hours: Monday - Friday, 7:30 a.m. - 6:00 p.m.

Support Tickets Submit a Support Case via our [Ask COLTT Portal](#)

## 24/7 Blackboard Support

Need Blackboard assistance after hours? You can call our main office numbers, 956-882-6792 or 956-665-5327, to speak with a support representative.

## ATTENDANCE

Students are expected to attend all scheduled classes and may be dropped from the course for excessive absences. UTRGV's attendance policy excuses students from attending class if they are participating in officially sponsored university activities, such as athletics; have been provided such an accommodation by Student Accessibility Services (SAS); for observance of religious holy days; or for military service. Students should contact the instructor in advance of the excused absence and arrange to make up missed work or examinations.

## ACADEMIC INTEGRITY

Members of the UTRGV community uphold the [Vaquero Honor Code](#)'s shared values of honesty, integrity and mutual respect in our interactions and relationships. In this regard, academic integrity is fundamental in our actions, as any act of dishonesty conflicts as much with academic achievement as with the values of honesty and integrity. Violations of academic integrity include, but are not limited to: cheating, plagiarism (including self-plagiarism), and collusion; submission for credit of any work or materials that are attributable in whole or in part to another person; taking an examination for another person; any act designed to give unfair advantage to a student; or the attempt to commit such acts (Board of Regents Rules and Regulations, STU 02-100, and UTRGV Academic Integrity Guidelines). **All violations of Academic Integrity will be reported to Student Rights and Responsibilities through [Vaqueros Report It](#).**

## UTRGV POLICY STATEMENTS

### STUDENTS WITH DISABILITIES

Students with a documented disability (physical, psychological, learning, or other disability which affects academic performance) who would like to receive reasonable academic accommodations should contact **Student Accessibility Services (SAS)** for additional information. In order for accommodation requests to be considered for approval, the student must apply using the *mySAS* portal located at [www.utrgv.edu/mySAS](http://www.utrgv.edu/mySAS) and is responsible for providing sufficient documentation of the disability to SAS. Students are required to participate in an interactive discussion, or an intake appointment, with SAS staff. Accommodations may be requested at any time but are not retroactive, meaning they are valid once approved by SAS. Please contact SAS early in the semester/module for guidance. Students who experience a broken bone, severe injury, or undergo surgery may also be eligible for temporary accommodations.

### Pregnancy, Pregnancy-related, and Parenting Accommodations

Title IX of the Education Amendments of 1972 prohibits sex discrimination, which includes discrimination based on pregnancy, marital status, or parental status. Students seeking accommodations related to pregnancy, pregnancy-related condition, or parenting (reasonably immediate postpartum period) should submit the request using the form found at <https://www.utrgv.edu/pregnancy> for review by **Student Accessibility Services**.

### Student Accessibility Services:

**Brownsville Campus:** Student Accessibility Services is located in 1.107 in the Music and Learning Center building (BMSLC) and can be contacted by phone at (956) 882-7374 or via email at [ability@utrgv.edu](mailto:ability@utrgv.edu).

**Edinburg Campus:** Student Accessibility Services is located in 108 University Center (EUCTR) and can be contacted by phone at (956) 665-7005 or via email at [ability@utrgv.edu](mailto:ability@utrgv.edu).

## MANDATORY COURSE EVALUATION PERIOD

Students are encouraged to complete an ONLINE evaluation of this course, accessed through your UTRGV account (<http://my.utrgv.edu>); you will be contacted through email with further instructions. Students who complete their evaluations will have priority access to their grades. Online evaluations will be available on or about:

Summer Module 1	June 23-29, 2021
Summer I	June 28- July 5, 2021
Summer II	August 7-12, 2021
Summer Module 2	August 12-18, 2021

## SEXUAL MISCONDUCT and MANDATORY REPORTING:

In accordance with UT System regulations, your instructor is a “Responsible Employee” for reporting purposes under Title IX regulations and so must report to the Office of Institutional Equity & Diversity (OIED@utrgv.edu) any instance, occurring during a student’s time in college, of sexual misconduct, which includes sexual assault, stalking, dating violence, domestic violence, and sexual harassment, about which she/he becomes aware during this course through writing, discussion, or personal disclosure. More information can be found at [www.utrgv.edu/equity](http://www.utrgv.edu/equity), including confidential resources available on campus. The faculty and staff of UTRGV actively strive to provide a learning, working, and living environment that promotes personal integrity, civility, and mutual respect that is free from sexual misconduct, discrimination, and all forms of violence. If students, faculty, or staff would like confidential assistance, or have questions, they can contact OVAVP (Office for Victim Advocacy & Violence Prevention) at (956) 665-8287, (956) 882-8282, or [OVAVP@utrgv.edu](mailto:OVAVP@utrgv.edu).

## COURSE DROPS

According to UTRGV policy, students may drop any class without penalty earning a grade of DR (drop) until the official drop date. Following that date, students must be assigned a letter grade and can no longer drop the class. Students considering dropping the class should be aware of the “3-peat rule” and the “6-drop” rule so they can recognize how dropped classes may affect their academic success. The 6-drop rule refers to Texas law that dictates that undergraduate students may not drop more than six courses during their undergraduate career. Courses dropped at other Texas public higher education institutions will count toward the six-course drop limit. The 3-peat rule refers to additional fees charged to students who take the same class for the third time.

## STUDENT SERVICES

Students who demonstrate financial need have a variety of options when it comes to paying for college costs, such as scholarships, grants, loans and work-study. Students should visit the Student Services Center (U Central) for additional information. U Central is located in BMAIN 1.100 (Brownsville) or ESSBL 1.145 (Edinburg) or can be reached by email ([ucentral@utrgv.edu](mailto:ucentral@utrgv.edu)) or telephone: (888) 882-4026. In addition to financial aid, U Central can assist students with registration and admissions.

Students seeking academic help in their studies can use university resources in addition to an instructor’s office hours. University Resources include the Advising Center, Career Center, Counseling Center, Learning Center, and Writing Center. The centers provide services such as tutoring, writing help, counseling services, critical thinking, study skills, degree planning, and student employment. In addition, services such as the Food Pantry are also provided. Locations are listed below.

Center Name	Brownsville Campus	Edinburg Campus
<b>Advising Center</b> <a href="mailto:AcademicAdvising@utrgv.edu">AcademicAdvising@utrgv.edu</a>	BMAIN 1.400 (956) 665-7120	ESWKH 101A (956) 665-7120
<b>Career Center</b> <a href="mailto:CareerCenter@utrgv.edu">CareerCenter@utrgv.edu</a>	BINAB 1.105 (956) 882-5627	ESSBL 2.101 (956) 665-2243
<b>Counseling Center</b> <a href="mailto:Counseling@utrgv.edu">Counseling@utrgv.edu</a> <a href="#">Mental Health Counseling and Related Services List</a>	BSTUN 2.10 (956) 882-3897	EUCTR 109 (956) 665-2574
<b>Food Pantry</b> <a href="mailto:FoodPantry@utrgv.edu">FoodPantry@utrgv.edu</a>	BCAVL 101 & 102 (956) 882-7126	EUCTR 114 (956) 665-3663
<b>Learning Center</b> <a href="mailto:LearningCenter@utrgv.edu">LearningCenter@utrgv.edu</a>	BMSLC 2.118 (956) 882-8208	ELCTR 100 (956) 665-2585
<b>Writing Center</b> <a href="mailto:WC@utrgv.edu">WC@utrgv.edu</a>	BUBLB 3.206 (956) 882-7065	ESTAC 3.119 (956) 665-2538

## **DEAN OF STUDENTS RESOURCES**

The Dean of Students office assists students when they experience a challenge with an administrative process, unexpected situation such as an illness, accident, or family situation, and aids in resolving complaints. Additionally, the office helps to advocate on behalf of students and inform students about their rights and responsibilities as well as serving as a resource and support for faculty and campus departments.

[Vaqueros Report It](#) allows students, staff and faculty a way to report concern about the well-being of a student, seek assistance in resolving a complaint, or report allegations of behaviors contrary to community standards or campus policies.

The Dean of Students can also be reached by emailing [dos@utrgv.edu](mailto:dos@utrgv.edu) or visiting [Virtual Office hours](#) in which a representative is available Monday-Friday 9:00-11:00 a.m. and 1:00-4:00 p.m.