MATH 2312 - Precalculus – Fall 2025
Course Syllabus

Course Information

Section	Time	Instructor	Room
2312.001	Mon, Wed, & Fri : 10:00am – 10:50am	Dr. Irina Martynova	SCI 2.230
2312.002	Mon, Wed, & Fri : 11:00am – 11:50am	Dr. Irina Martynova	SCI 2.210
2312.003	Mon, Wed, & Fri : 12:00pm – 12:50pm	Dr. Irina Martynova	SCI 2.210
2312.004	Mon, Wed, & Fri : 1:00pm – 1:50pm	Richik Das	SCI 2.210
2312.005	Mon, Wed, & Fri : 2:00pm – 2:50pm	Richik Das	SCI 2.230
2312.006	Mon, Wed, & Fri : 9:00am – 9:50am	Dr. Jingzhou Liu	SCI 2.230

Instructors Contact Information

Dr. Irina Martynova	**Richik Das**	**Liu Jingzhou**
Office Location: FO 2.108	Office Location: FO 1.204	Office Location: FO 1.210
Email Address: irina.martynova@utdallas.edu	Email Address: richik.das@utdallas.edu	Email Address: Jingzhou.Liu@UTDallas.edu
Office Hours: M/W/F by app	Office Hours: : M/W/F by app, Th:2-3pm	Office Hours: TBA

TAs Contact Information

Ning Zhiyuan	001	Zhiyuan.Ning@UTDallas.edu
Suchana Sanzina	003	Sanzina.Suchana@UTDallas.edu
Valabh Shushant	004	Shushant.Valabh@UTDallas.edu
Arefin Mohammad Asif	005	MohammadAsif.Arefin@UTDallas.edu
Liu Jingzhou	006	Jingzhou.Liu@UTDallas.edu

Note: TAs are strictly prohibited from accepting assignments via email. All assignments must be submitted or completed through the eLearning/WebAssign platforms. If you have inquiries regarding point deductions or if your homework remains ungraded, please reach out to the TA assigned to your section.

Course Pre-requisites, Co-requisites, and/or Other Restrictions

A test score of 480 on the SAT II Mathematics Level IC exam or a grade of at least a C- in MATH 1314 and MATH 1316 or equivalent courses.
The goal of this course is to provide the student with an understanding of algebraic, exponential, logarithmic, trigonometric and inverse trigonometric functions. Additionally, the successful student will gain proficiency in the algebraic manipulation required to succeed in Calculus.

Course Description

The goal of this course is to provide the student with an understanding of algebraic, exponential, logarithmic, trigonometric and inverse trigonometric functions. Additionally, the successful student will gain proficiency in the algebraic manipulation required to succeed in Calculus

Student Learning Objectives/Outcomes

1. Students will evaluate functions, determine their domains, and be able to find the inverse function if one exists.
2. Students will perform algebraic operations with polynomial and rational functions and determine the domains and asymptotes of rational functions.
3. Students will evaluate and recognize exponential and logarithmic functions and use their properties to solve exponential and logarithmic equations.
4. Students will evaluate trigonometric functions, use fundamental trigonometric identities, and evaluate inverse trigonometric functions.
5. Students will solve systems of linear equations.

Required Textbooks and Materials

WebAssign Access - Can be purchased at the bookstore, or directly through our eLearning course homepage.

Textbook - The book for this course is available for free in PDF, iBook, and Kindle forms on our eLearning homepage or the OpenStax website. You can also buy a physical copy at the bookstore or via the OpenStax website.
> Title: Precalculus
> Author: Abramson, et. al.
> Website: https://openstax.org/details/books/precalculus

Additional Resources - The material for the first week of class will be taken from the OpenStax "Algebra and Trigonometry" textbook, a PDF of which will be available on our eLearning homepage. Supplemental material for topics not covered in the text will also be available on our eLearning homepage.

eLearning Course Homepage - Go to http://elearning.utdallas.edu/ and login with your net ID. To access the course homepage, click the link for MATH 2312.701 - Precalculus – F25. **Note the section is 701.**

Class Participation

> Regular class participation is expected regardless of course modality. Students who fail to participate in class regularly are inviting scholastic difficulty. A portion of the grade for this course is directly tied to your participation in this class. It also includes engaging in group or other activities during class that solicit your feedback on homework assignments, readings, or materials covered in the lectures (and/or labs). Class participation is documented by faculty. Successful participation is defined as consistently adhering to University requirements, as presented in this syllabus. Failure to comply with these University requirements is a violation of the Student Code of Conduct.

COVID-19 Resources

Comets United webpage: check frequently

FAQ: check out the FAQs and reach out to your instructor or academic advisor if answers are not included

Student Resources: a variety of resources are available to help students to obtain counseling, health care, and academic support.

Proactive Community Testing remains an important part of the university's efforts to protect our community. Tests are fast and free. Please check the Comets United webpage for additional information.

Student Safety remains an important part of the UT Dallas' efforts to protect our community. All students will adhere to the Comet Commitment. Unvaccinated Comets will be expected to complete the mandatory Required Daily Health Screening. Those students who do not comply will be referred to the Office of Community Standards and Conduct for disciplinary action under the Student Code of Conduct – UTSP5003. All students are encouraged to read the Recommendations for Students Returning to Campus issued on August 2, 2021.

Technical Requirements
> In addition to a confident level of computer and Internet literacy, certain minimum technical requirements must be met to enable a successful learning experience. Please review the important technical requirements on the Getting Started with eLearning webpage.

Course Access and Navigation

This course can be accessed using your UT Dallas NetID account on the eLearning website.

Please see the course access and navigation section of the Getting Started with eLearning webpage for more information.

To become familiar with the eLearning tool, please see the Student eLearning Tutorials webpage.

UT Dallas provides eLearning technical support 24 hours a day, 7 days a week. The eLearning Support Center includes a toll-free telephone number for immediate assistance (1-866-588-3192), email request service, and an online chat service.

Communication

This course utilizes online tools for interaction and communication. Some external communication tools such as regular email and a web conferencing tool may also be used during the semester. For more details, please visit the Student eLearning Tutorials webpage for video demonstrations on eLearning tools.

Student emails and discussion board messages will be answered within 3 working days under normal circumstances.

Distance Learning Student Resources

Online students have access to resources including the McDermott Library, Academic Advising, The Office of Student Accessibility, and many others.

Email: studentaccess@utdallas.edu

Phone number: 972-883-2098

Office Hours: Mon-Fri 8 a.m. to 5:00 p.m.

Office: AD2.224

Please see the eLearning Current Students webpage for more information.

Server Unavailability or Other Technical Difficulties

The University is committed to providing a reliable learning management system to all users. However, in the event of any unexpected server outage or any unusual technical difficulty which prevents students from completing a time sensitive assessment activity, the instructor will provide appropriate accommodation based on the situation. Students should immediately report any problems to the instructor and contact the online eLearning Help Desk. The instructor and the eLearning Help Desk will work with the students to resolve any issues at the earliest possible time.

eLearning and WebAssign

This course uses the UTD eLearning system to distribute content, send out announcements, and track grades. Go to http://elearning.utdallas.edu and login using your net ID and password. You should see a link for MATH 2312.**701** - Precalculus. Follow this link and you will be taken to our course homepage, which contains a link to **Access WebAssign.** The first time you follow this link you will be asked for an **Access Code** which you can purchase directly though the website.

Technical Support

If you experience any problems with your UTD account, you may send an email to: assist@utdallas.edu or call the UTD Computer Helpdesk at 972-883-2911.

Additional Resources

The Student Success Center offers Drop-In Tutoring for this course.
Check their website for more info: https://www.utdallas.edu/studentsuccess/help-with-courses/peertutoring/

IMPORTANT DATES AND HOLIDAYS

Labor Day	Mon. Sept. 1
Census (last day to drop without record)	Wed. Sept. 10
Last day of dropping with instructor approval	Wed. Sept. 10
Fall Break	Mon. Nov. 24 – Wed. Nov. 26
Thanksgiving Break	Thurs. Nov. 27 – Sun. Nov. 30
Last Day of Classes	Tue. Dec. 9
Exam I	Thurs. Oct. 9, 7:30 pm – 8:45 pm
Exam II	Thurs. Nov. 13, 7:30 pm – 8:45 pm
Final Exam	**TBD**

Course & Instructor Policies

Digital Homework:	Weekly digital homework assignments (DHW) will be posted on WebAssign on a weekly basis and usually be due by 11:59 pm Monday of the following week. When calculating your final average, we will not include your lowest two DHW grades. Your DHW average will count as 20% of your course grade.
Graded Homework:	Graded homework (GHW) will be given regularly throughout the semester. These will be posted as PDF files on our eLearning homepage and usually be due by 11:59 pm Monday of the following week. You will need to upload your GHWs solutions on eLearning. When calculating your final average, we will not include the lowest GHW grade. Your GHW average will count as 20% of your course grade.
Exams:	There will be two midterm Exams and one comprehensive Final Exam. You will receive a zero for a missed Exam. The Final Exam cannot be skipped. The lower midterm Exams will count as 15% of your course grade, the higher of the midterm Exams will count as 20% of your course grade. The Final Exam will count as 25% of your course grade. The exams will be held on Thursday evenings (except possibly the final). These are free-response, and paper for them will be provided. All you will need to bring is something to write with.

Grading Scale:

[96.5, 100]	[92.5, 96.5)	[89.5, 92.5)	[86.5, 89.5)	[82.5, 86.5)	[79.5, 82.5)	[76.5, 79.5)
A+	A	A -	B+	B	B -	C+
[72.5, 76.5)	[69.5, 72.5)	[66.5, 69.5)	[62.5, 66.5)	[59.5, 62.5)	[0, 59.5)	
C	C -	D+	D	D -	F	

Example

	GHW grade	DHW grade	Exam I	Exam II	Final
Grade	81	91	72	86	83
Weight	0.20	0.20	0.15	0.20	0.25
Course Percent	0.20*81 + 0.20*91 + 0.15*72 + 0.20*86 + 0.25*83 = 82.85%				
Course grade	B				

Calculator: Calculators will not be allowed on exams. You are free to use them for the homework, but they should never be necessary.

Grading Policy

Your final class average will be determined based on the following weighting:

- **Digital HomeWork 20%**
- **Graded HomeWork 20%**
- **Lower of Exam 1 and 2 15%**
- **Higher of Exam 1 and 2 20%**
- **Final Exam 25%**

Notes:

Scanning and Uploading:

• You must scan and upload your GHWs on eLearning. The video available at
https://www.youtube.com/watch?v=arcHpX6zH5Y&amp=&t=18s
provides information about uploading your scanned pdf files on eLearning. Please watch this video to make sure you understand it before the first GHW is due.

• To turn in a GHW (that in no scheduled on WebAssign), you must print the pdf, write your solution on the space provided; scan and save your solutions as **single pdf file**; and upload it on eLearning.

• If you want to use a touch screen device, you can download the GHW pdf, write the solutions without printing it, and upload it as **single pdf**.

• If you do not have a printer or touch screen device, you can write the solutions on blank sheets of paper, scan all pages, and upload as **single pdf**. Write solution to only question on one sheet of paper.

• When scanning, maintain the order of the questions.

• Do not upload "zip files" or cell phone pictures. If you do not have a scanner, you can download the scanning apps such as: Cam Scanner or Office Lens or use your phone to scan.

Late/Missed Coursework: There is no make-up for late or missed assignments or exams, unless extreme circumstances with proper documentation accepted by the instructor.

Course Schedule (subject to change)

Date	Topics	Assignments' Due	Notes
Aug 25 Aug 27 Aug 29	Syllabus, AT 2.1 Rectangular Coordinate System and Graphs AT 2.1 (cont.) AT 2.2 Linear Equations in One Variable	DHW1 due Tue, 9/2 11:59PM Week 1	First day of classes: 8/25
Sept 1 Sept 3 Sept 5	**Labor Day** 1.1 Functions and Function Notation, 1.2 Domain and Range 1.2 cont. 1.3 Behavior of Graphs (p.42 onward)	DHW2 and GHW1 due Mon, 9/8 11:59PM Week 2	Last day to add/swap: 9/10
Sept 8 Sept 10 Sept 12	1.4 Composition of Functions 1.5 Transformations of Functions 1.5 cont. 1.7 Inverse Functions	DHW3 and GHW 2 due Mon, 9/15 11:59PM Week 3	Last day to drop without a "W": 9/10
Sept 15 Sept 17 Sept 19	3.2 Quadratic Functions 3.3 Power Functions and Polynomial Functions, 3.4 Graphs of PF 3.5 Dividing Polynomials	DHW4 and GHW3 due Mon, 9/22 11:59PM Week 4	
Sept 22 Sept 24 Sept 26	3.6 Zeros of Polynomial Functions 3.7 Rational Functions 3.7 cont.	DHW5 and GHW 4 due Mon, 9/29 11:59PM Week 5	
Sept 29 Oct 1 Oct 3	4.1 - 4.4 Exponential and Logarithmic Functions and Their Graphs 4.1 - 4.4 cont. 4.5 Logarithmic Properties 4.6 Exponential and Logarithmic Equations	DHW6 and GHW 5 due Mon, 10/6 11:59PM Week 6	
Oct 6 Oct 8 Oct 10	4.6 cont. Exam 1 Review, **Exam 1 THURS, Oct 9** 5.1 Angles	DHW7 due Mon, 10/13 11:59PM No GHW Week 6	Exam 1: Thursday, 10/9, 7:30-8:45PM
Oct 13 Oct 15 Oct 17	5.4 Right Triangle Trigonometry 5.2 - 5.3 The Unit Circle 5.2 - 5.3 cont.	DHW8 and GHW 6 due Mon, 10/20 11:59PM Week 7	
Oct 20 Oct 22 Oct 24	6.1 Graphs of the Sine and Cosine Functions 6.1 cont., 6.2 Graphs of the Other Trigonometric Functions 6.2 cont.	DHW9 and GHW 7 due Mon, 10/27 11:59PM Week 8	
Oct 27 Oct 29 Oct 31	6.3 Inverse Trigonometric Functions 6.3 cont. 7.1 Trigonometric Identities 7.2 Sum and Difference Formulas	DHW10 and GHW 8 due Mon, 11/3 11:59PM Week 9	
Nov 3 Nov 5 Nov 7	7.3 Double-Angle, Half-Angle, and Power Reduction Formulas 7.5 Solving Trigonometric Equations 7.5 cont.	DHW11 and GHW 9 due Mon, 11/10 11:59PM Week 10	
Nov 10 Nov 12 Nov 14	8.3 Polar Coordinates Exam 2 Review, **Exam 2 THURS, Nov 13** 8.4 Polar Coordinates: Graphs	DHW12 due Mon, 11/17 11:59PM No GHW Week 11	Exam 2: Thursday, 11/13, 7:30-8:45PM
Nov 17 Nov 19 Nov 21	8.4 cont. 8.8 Vectors 8.8 cont.	DHW13 and GHW 10 due Mon, 12/1 11:59PM Week 12	
Nov 24 – Nov 30	break		
Dec 1 Dec 3 Dec 5	10.3 The Parabola 10.1 The Ellipse 10.2 The Hyperbola	DHW14 due Mon, 12/8 11:59PM No GHW Week 13	
Dec 8 **Dec 9**	9.1-9.2 Systems of Linear Equations. **Last day of classes**	Week 14	Last day of classes: 12/9
Dec 11 – Dec 16	**Final Exam Week**		**TBA**

Student Conduct & Discipline

The University of Texas System and The University of Texas at Dallas have rules and regulations for the orderly and efficient conduct of their business. It is the responsibility of each student and each student organization to be knowledgeable about the rules and regulations which govern student conduct and activities. General information on student conduct and discipline is contained in the UTD printed publication, *A to Z Guide*, which is provided to all registered students each academic year.

The University of Texas at Dallas administers student discipline within the procedures of recognized and established due process. Procedures are defined and described in the *Rules and Regulations, Series 50000, Board of Regents, The University of Texas System,* and in Title V, Rules on Student Services and Activities of the university's *Handbook of Operating Procedures*. Copies of these rules and regulations are available to students in the Office of the Dean of Students, where staff members are available to assist students in interpreting the rules and regulations (SU 1.602, 972/883-6391) and online at http://www.utdallas.edu/judicialaffairs/UTDJudicialAffairs-HOPV.html

A student at the university neither loses the rights nor escapes the responsibilities of citizenship. He or she is expected to obey federal, state, and local laws as well as the Regents' Rules, university regulations, and administrative rules. Students are subject to discipline for violating the standards of conduct whether such conduct takes place on or off campus, or whether civil or criminal penalties are also imposed for such conduct.

Academic Integrity

The faculty expects from its students a high level of responsibility and academic honesty. Because the value of an academic degree depends upon the absolute integrity of the work done by the student for that degree, it is imperative that a student demonstrates a high standard of individual honor in his or her scholastic work.

Scholastic Dishonesty, any student who commits an act of scholastic dishonesty is subject to discipline. Scholastic dishonesty includes but is not limited to cheating, plagiarism, collusion, the 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.

Plagiarism, especially from the web, from portions of papers for other classes, and from any other source is unacceptable and will be dealt with under the university's policy on plagiarism (see general catalog for details). This course will use the resources of turnitin.com, which searches the web for possible plagiarism and is over 90% effective.

Copyright Notice

The copyright law of the United States (Title 17, United States Code) governs the making of photocopies or other reproductions of copyrighted materials, including music and software. Copying, displaying, reproducing, or distributing copyrighted works may infringe the copyright owner's rights and such infringement is subject to appropriate disciplinary action as well as criminal penalties provided by federal law. Usage of such material is only appropriate when that usage constitutes "fair use" under the Copyright Act. As a UT Dallas student, you are required to follow the institution's copyright policy (Policy Memorandum 84-I.3-46). For more information about the fair use exemption, see http://www.utsystem.edu/ogc/intellectualproperty/copypol2.htm

Withdrawal from Class

The administration of this institution has set deadlines for withdrawal of any college-level courses. These dates and times are published in that semester's course catalog. Administration procedures must be followed. It is the student's responsibility to handle withdrawal requirements from any class. In other words, I cannot drop or withdraw any student. You must do the proper paperwork to ensure that you will not receive a final grade of "F" in a course if you choose not to attend the class once you are enrolled.

Student Grievance Procedures

Procedures for student grievances are found in Title V, Rules on Student Services and Activities, of the university's *Handbook of Operating Procedures*.

In attempting to resolve any student grievance regarding grades, evaluations, or other fulfillments of academic responsibility, it is the obligation of the student first to make a serious effort to resolve the matter with the instructor, supervisor, administrator, or committee with whom the grievance originates (hereafter called "the respondent"). Individual faculty members retain primary responsibility for assigning grades and evaluations. If the matter cannot be resolved at that level, the grievance must be submitted in writing to the respondent with a copy of the respondent's School Dean. If the matter is not resolved by the written response provided by the respondent, the student may submit a written appeal to the School Dean. If the grievance is not resolved by the School Dean's decision, the student may make a written appeal to the Dean of Graduate or Undergraduate Education, and the deal will appoint and convene an Academic Appeals Panel. The decision of the Academic Appeals Panel is final. The results of the academic appeals process will be distributed to all involved parties.

Copies of these rules and regulations are available to students in the Office of the Dean of Students, where staff members are available to assist students in interpreting the rules and regulations.

Incomplete Grade Policy

As per university policy, incomplete grades will be granted only for work unavoidably missed at the semester's end and only if 70% of the course work has been completed. An incomplete grade must be resolved within eight (8) weeks from the first day of the subsequent long semester. If the required work to complete the course and to remove the incomplete grade is not submitted by the specified deadline, the incomplete grade is changed automatically to a grade of **F**.

Disability Services

The goal of Disability Services is to provide students with disabilities educational opportunities equal to those of their non-disabled peers. Disability Services is located in room 1.610 in the Student Union. Office hours are Monday and Thursday, 8:30 a.m. to 6:30 p.m.; Tuesday and Wednesday, 8:30 a.m. to 7:30 p.m.; and Friday, 8:30 a.m. to 5:30 p.m.

The contact information for the Office of Disability Services is:
The University of Texas at Dallas, SU 22
PO Box 830688
Richardson, Texas 75083-0688
(972) 883-2098 (voice or TTY)
disabilityservice@utdallas.edu

If you anticipate issues related to the format or requirements of this course, please meet with the Coordinator of Disability Services. The Coordinator is available to discuss ways to ensure your full participation in the course. If you determine that formal, disability-related accommodations are necessary, it is very important that you be registered with Disability Services to notify them of your eligibility for reasonable accommodations. Disability Services can then plan how best to coordinate your accommodations.

It is the student's responsibility to notify his or her professors of the need for such an accommodation. Disability Services provides students with letters to present to faculty members to verify that the student has a disability and needs accommodations. Individuals requiring special accommodation should contact the professor after class or during office hours.

Religious Holy Days

The University of Texas at Dallas will excuse a student from class or other required activities for the travel to and observance of a religious holy day for a religion whose places of worship are exempt from property tax under Section 11.20, Tax Code, Texas Code Annotated.

The student is encouraged to notify the instructor or activity sponsor as soon as possible regarding the absence, preferably in advance of the assignment. The student, so excused, will be allowed to take the exam or complete the assignment within a reasonable time after the absence: a period equal to the length of the absence, up to a maximum of one week. A student who notifies the instructor and completes any missed exam or assignment may not be penalized for the absence. A student who fails to complete the exam or assignment within the prescribed period may receive a failing grade for that exam or assignment.

If a student or an instructor disagrees about the nature of the absence [i.e., for the purpose of observing a religious holy day] or if there is similar disagreement about whether the student has been given a reasonable time to complete any missed assignments or examinations, either the student or the instructor may request a ruling from the chief executive officer of the institution, or his or her designee. The chief executive officer or designee must take into account the legislative intent of TEC 51.911(b), and the student and instructor will abide by the decision of the chief executive officer or designee.

Comet Creed

This creed was voted on by the UT Dallas student body in 2014. It is a standard that Comets choose to live by and encourage others to do the same:

"As a Comet, I pledge honesty, integrity, and service in all that I do."

Academic Support Resources

The information contained in the following link lists the University's academic support resources for all students.

Please go to Academic Support Resources webpage for these policies.

UT Dallas Syllabus Policies and Procedures

The information contained in the following link constitutes the University's policies and procedures segment of the course syllabus.

Please go to UT Dallas Syllabus Policies webpage for these policies.

The descriptions and timelines contained in this syllabus are subject to change at the discretion of the Professor.