

The University of Iowa
The College of Liberal Arts and Sciences
Spring, 2024

Title of Course: Trigonometry, section: **MATH:1010:0101**
Course meeting time and place: MWF, 2:30P-3:30P 210 MLH
Department of Mathematics: <https://math.uiowa.edu/>

Course ICON site: To access the course site, log into [Iowa Courses Online \(ICON\)](https://icon.uiowa.edu/index.shtml) <https://icon.uiowa.edu/index.shtml> using your Hawk ID and password.

Course Home

The College of Liberal Arts and Sciences (CLAS) is the home of this course, and CLAS governs the add and drop deadlines, the “second-grade only” option (SGO), academic misconduct policies, and other undergraduate policies and procedures. Other UI colleges may have different policies.

Instructor: Jingchao Gao
Office location: B20J MLH
Student drop-in hours: will announce later
E-mail: jingchao-gao@uiowa.edu

Course Supervisor: Dr. Sergii Bezuglyi
Office location: 325D MLH (MacLean Hall)
Student drop-in hours: MWF 3:30 – 4:30 pm or by appointment
E-mail: sergii-bezuglyi@uiowa.edu

DEO: Dr. **Ryan Kinser**, 14 MacLean Hall, ryan-kinser@uiowa.edu

Description of Course:

This course is intended for students who are proficient in algebra, but whose background lacks trigonometry. Topics include trigonometric and inverse trigonometric functions, solutions of right and oblique triangles, trigonometric identities, trigonometric equations, trigonometric form of complex numbers, and vectors.

Learning Objectives:

The main goal of this course is to develop fluency in working with trigonometric functions and to prepare students for trigonometry-based Calculus. Particular objectives are trigonometric functions of angles and circular functions; solving right triangles; linear and angular speed, graphs of translated trigonometric functions, verifying trigonometric identities, sum and difference identities, double-angle and half-angle identities, inverse circular functions, solving

trigonometric equations, solving acute and obtuse triangles; laws of sines and cosines, vectors, polar form of complex numbers, De Moivre theorem, polar and parametric equations.

Textbook:

The required textbook for this course is:

- Title: **Trigonometry 5e WileyPlus**
- ISBN: 978EEGRP38295
- Author: Cynthia Y. Young
- Publisher: Wiley

Required course materials will be delivered to you in your ICON course through the University of Iowa's Inclusive Access program by the first day of classes. Your IOWA student account (UBILL) will then be charged by the HawkShop for the use of the content for the course, unless you opt out.

1. You will use WileyPlus to complete your homework assignments.
2. You may access WileyPlus through your ICON course.

Material to be covered: All chapters of the textbook will be covered in this course.

Tentative lecture schedule:

Week	Sections	Quizzes, exams
Week 1	1.1, 1.2, 1.3	
Week 2	1.4, 1.5	Quiz 1
Week 3	2.1, 2.2	Quiz 2
Week 4	2..3, 2.4, 3.1	Quiz 3
Week 5	3.2, 3.3, 3.4	Quiz 3
Week 6	Review 1, 4.1	Exam 1
Week 7	4.2, 4.3, 5.1	Quiz 5
Week 8	5.2, 5.3	Quiz 6
Week 9	5.4, 5.5	Quiz 7
Week 10	6.1, 6.2, 6.3	Quiz 8
Week 11	Review 2, 7.1	Exam 2
Week 12	7.2, 7.3, 7.4	Quiz 9
Week 13	7.5, 8.1, 8.2	Quiz 10
Week 15	8.3, 8.4, 8.5	Quiz 11
Week 16	Review	

Calculation of the Final Grade:

Attendance: 5%

Homework (on WileyPlus): 10%

Quizzes (in class): 15%

Midterms: 2 in class midterms, each worth 20%

Final Exam: 30%

Grade distribution: Final grades will be assigned on a curve, which will be determined after the final examination. Plus/minus letter grades will be used. The final grades will not be lower than the following:

A+	A	A-		B+	B	B-		C+	C	C-		D		F	
>98	>94	>90		>85	>80	>75		>68	>62	>55		50 - 55		< 50	

Examinations: There will be two 50-minute midterm exams and a cumulative final exam.

Midterm Exam I: Monday, February 26, 2024, in class.

Midterm Exam II: Monday, April 1, 2024, in class

Final Exam: TBA

All exams are closed-book, closed-notes.

Date and Time of the Final Exam

The final examination date and time will be announced by the Registrar generally by the fifth week of classes and it will be announced on the course ICON site once it is known. **Do not plan your end of the semester travel plans until the final exam schedule is made public. It is your responsibility to know the date, time, and place of the final exam.** According to Registrar's final exam policy, students **have a maximum of two weeks after the announced final exam schedule** to request a change if an exam conflict exists or if a student has more than two exams in one day (see the [policy](#) here).

How to Succeed in MATH:1010

- Expect to spend at least 5 hours weekly outside of the classroom during the assignments. More time may be needed to prepare for exams.
- Ask questions in class.
- Check your UI email regularly.
- Log into the course ICON page daily.
- Communicate with your instructor and visit during office hours.
- Attend the Math Tutorial Lab.
- Create a study schedule so that you don't fall behind.

Getting help:

The mathematics tutorial lab, 125 (MacLean Hall):

The Math Lab is a **free drop-in** tutorial service staffed by Teaching Assistants from the Department of Mathematics. Check out the web page <https://math.uiowa.edu/math-tutorial-lab> for hours. Regular Math Lab hours will start in the second week of classes. Your TA and other course TAs will be available at various times in the Math Lab. The Lab provides one of the best ways of getting personalized help. Practice exams and quizzes are also available in the Lab.

From time-to-time tutorials on special topics may be offered as well. It is strongly recommended that you make use of this service.

Course Policies:

Class attendance: Regular and prompt attendance is mandatory for this course. Since a substantial percentage of your grade will be based on class attendance and participation (5%), it is in your interest to attend every class and to arrive with significant contributions to make to discussions. You are allowed to have two unexcused absences without a penalty; each subsequent unexcused absence will lower your overall grade by 0.5 percentage point (E.g., if you miss 3 classes, your attendance grade is 4.5%. If you miss 12 or more classes, your participation grade is 0.) Please see the Attendance policy for more information about excused and unexcused absences.

Rules on Student Collaboration: The homework for this course is designed to help you master your knowledge related to the topics covered during lecture. As such, you may work on the homework problems with others or use online resources. However, please be aware that to master the skills needed for this class, practice is required and that to do well on the final exam you will need to work many of these problems multiple times without help. Be sure to test your knowledge by doing much of the homework on your own.

Participation in class discussions: Students are strongly encouraged to ask questions and participate in class discussions.

Homework assignments Graded homework assignments will be completed with WileyPlus. Refer to WileyPlus for due dates and instructions. There will be a penalty for late assignments.

Quizzes: There will be weekly quizzes given on Fridays approximately every week (excluding the weeks of the exams), consisting of problems similar to those assigned as homework. Taking all quizzes and the two exams (two midterms and final) is mandatory. The two lowest quiz scores will be dropped at the end of the semester.

Make-ups may be given for the exams missed due to unavoidable circumstances and compelling reasons which are documented in writing. If you have a conflict or a medical reason, discuss your situation with the instructor as soon as possible. Students with mandatory religious obligations or UI authorized activities must discuss their absences with me as soon as possible. Religious obligations must be communicated within the first three weeks of classes.

Academic Honesty and Misconduct

All students in CLAS courses are expected to abide by the [CLAS Code of Academic Honesty](#). Undergraduate academic misconduct must be reported by instructors to CLAS according to [these procedures](#). Graduate academic misconduct must be reported to the Graduate College according to Section F of the [Graduate College Manual](#).

Student Complaints

Students with a complaint about a grade or a related matter should first discuss the situation with the instructor and/or the course supervisor (if applicable), and finally with the Director or Chair of the school, department, or program offering the course.

Undergraduate students should contact [CLAS Undergraduate Programs](#) for support when the matter is not resolved at the previous level. Graduate students should contact the CLAS [Associate Dean for Graduate Education and Outreach and Engagement](#) when additional support is needed.

Drop Deadline for this Course

You may drop an individual course before the deadline; after this deadline you will need collegiate approval. You can look up the [drop deadline for this course](#) here. When you drop a course, a “W” will appear on your transcript. The mark of “W” is a neutral mark that does not affect your GPA. Directions for adding or dropping a course and other registration changes can be found on the [Registrar’s website](#). Undergraduate students can find policies on dropping and withdrawing [here](#).

Communication: UI Email

Students are responsible for all official correspondences sent to their UI email address (uiowa.edu) and must use this address for any communication with instructors or staff in the UI community.

University Policies

[Accommodations for Students with Disabilities](#)

[Basic Needs and Support for Students](#)

[Classroom Expectations](#)

[Exam Make-up Owing to Absence](#)

[Free Speech and Expression](#)

[Mental Health](#)

[Military Service Obligations](#)

[Non-discrimination](#)

[Religious Holy Days](#)

[Sexual Harassment/Misconduct and Supportive Measures](#)

[Sharing of Class Recordings](#)