MATH 113: Trigonometry

Number of Credits: 3 credits
Canvas Course URL: Your canvas course URL
Course Designation or Attributes:
Level: Elementary, Gen Ed: N/A, L&S Credit Type: C

Meeting Time and Location:

Lecture 004 at 1pm - 2:15pm in B107 Van Vleck

Lecture 005 at 2:30pm - 3:45pm in B107 Van Vleck

Lecture 006 at 4pm - 5:15pm in 19 Ingraham

Credit hours: This class meets for two 75-minute class periods each week over the Spring semester and carries the expectation that students will work on course learning activities (e.g. reading, problem sets, and studying) for about two hours outside of classroom for every class period. The syllabus includes additional information about meeting times and expectations for student work.

INSTRUCTOR: Eugenia Malitsky

Office hours and location:

TuTh 11:30am-12:30pm in B127 Van Vleck, MW 2pm -3pm by Zoom, or by appointment

Email: emalitsky@wisc.edu

Peer Mentors:

Lecture 004	Wyatt Broscious Kshitij Galav	broscious@wisc.edu galav@wisc.edu
Lecture 005	Hamlet Abrahamyan Shriya Goyal	habrahamyan@wisc.edu Sgoyal24@wisc.edu
Lecture 006	Ashwini Kumble Soham Warke	akumble@wisc.edu swarke@wisc.edu

OFFICIAL COURSE DESCRIPTION

Covers the graphs, properties and geometric significance of trigonometric functions of a real variable. Other topics include trigonometric equations and identities, application, trigonometric form of complex numbers, DeMoivre's theorem, and polar and parametric equations. The course also has a significant number of applications, especially related to other disciplines.

Requisites
MATH 112 or placement into MATH 113.

LEARNING OUTCOMES
By the conclusion of this course, students are expected to be able to:
- Understand angles and how we measure them in degrees and radians;
- Understand congruence and similarity theorems;
- Relate right triangle trigonometry to circular trigonometry;
- Solve triangles using congruence, similarity, trigonometric ratios, right triangle trigonometry, law of sines, and law of cosines;
- Use reference angles and special triangles to find key values on the unit circle;
- Graph trigonometric functions
- Use trigonometric identities
- Use inverse trigonometric functions
- Solve equations using trigonometry

Textbook
Margaret L. Lial, John Hornsby, David I. Schneider, Callie Daniels. Trigonometry. Pearson. 12th Ed.

This course requires MyLab from Pearson. MyLab contains the eBook, various study tools, and homework assignments. Paid access has been provided through Pearson and paid for by your tuition (hence you should not need to purchase access: you can access the homework assignments directly in Canvas).

For MyLab support, please visit https://support.pearson.com/getsupport/s/

Precalculus Lab Hours
Instructors, teaching assistants, and student assistants are available during the week in either College Library or Van Vleck Hall. The times and locations are listed in Canvas. These lab hours are meant to be drop-in help sessions for precalculus students in MATH 96 (and MATH 112, 113 & 114). We encouraged you to come anytime you want to ask questions, work on homework assignments, collaborate with other students, or review for exams. You may also make an appointment to meet with your instructor.

GRADING
- Homework Assignments 20%
- Exams 35%
- Group Quizzes 7%
- Individual Quizzes 13%
- Final Exam 25%

You weighted average will then be assigned a letter grade using the standard UW-Madison definitions (A - Excellent, etc.). As a starting point we will use the following guaranteed grade lines, which the instructor may adjust and lower at the end of semester in order to maintain the grade definitions:

Minimum A - 92
Minimum AB - 88
Minimum B - 82
Minimum BC - 78
Minimum C - 70
Minimum D - 60

If you have any questions or concerns about MATH 113 and you want to contact someone other than your instructor, please contact **Dr. Oh Hoon Kwon, Associate Director of the Precalculus Program, kwon@math.wisc.edu**.

EXAMS

There will be three exams during the semester, occurring on **Wednesday, Oct. 11 (Exam 1, evening), Wednesday, Nov. 8 (Exam 2, evening), and Thursday, Dec. 7 (Exam 3, in-class)**. You will have 90 minutes to complete exams 1 and 2 without the aid of a calculator or textbook. Exams 1 and 2 will be administered as individual exams beginning at 5:45 pm. in-person, while exam 3 will be a 75-minute group exam administered during class on Dec. 7 (also without the aid of calculators, texts, notes, etc.). The final exam will be a two-hour cumulative exam on **Friday, Dec. 15 starting at 2:45 pm. in-person**. The final exam is to be completed without the aid of a calculator or textbook. If the grade on the final exam is higher than either of the three midterms, then the grade on the final will replace the lowest exam score. Please note that **the final exam score CANNOT be dropped or replaced**.

Please contact your instructor if you have a university-related conflict with these scheduled exam times at least two weeks in advance. Also, students with McBurney Center accommodations should notify their instructor at least one week in advance. Makeup exams are allowed only under two circumstances: conflicts with other university-related events or a last-minute medical or family emergency with verification. In the highly unusual circumstance that you cannot attend the exam or the makeup exam, then the grade on the final will replace the missed exam score.

HOMEWORK ASSIGNMENTS

Homework assignments must be accessed through the Canvas website. They are assigned on MyLab. The due dates for the assignments are located on Canvas, but generally, they are due on **Thursday and Monday nights at 11:59pm.** The lowest assignment score will be dropped from your overall homework score. Students should not have to pay for access as they are charged for MyLab by the university through the Engage program as a portion of their semester fees. Students may request a 48-hour extension in MyLab on any individual assignment within 48 hours of the due date for the assignment.

QUIZZES

There will be two weekly quizzes, a group quiz consisting of a single problem eight minutes in length on Tuesdays, and an individual quiz 15 minutes in length consisting of two problems from the previous week's homework on Thursdays. The lowest two individual quiz scores and two lowest group quiz scores will be dropped. In the event that a student must miss a quiz due to a health or other emergency, the student MUST email the instructor by the day of the quiz and notify them of their sickness or emergency: students should NOT come to class sick under any circumstances. In such situations, those quizzes will be temporarily excused and replaced with the grade on the final exam for the individual quizzes and replaced with the grade on Exam 3 for group quizzes at the end of the semester. If a student does not contact the instructor by the day

of the quiz and misses the quiz, a grade of zero will be recorded for that quiz. It is NOT allowed to take quizzes in other sections.

Participation and Attendance

This course depends on your active participation in class discussions and group activities, and your attendance is critical to your success the course. Therefore, you need to attend each class.

Canvas

The instructor and course coordinator will regularly make important course announcements in Canvas, including announcements for students with testing accommodations. Thus, it is necessary for students to check their Canvas daily. You can also have notifications sent to your email when new announcements are posted: I strongly suggest you use this feature. To activate it, click on your account name and then click Notifications. Make sure your email address is et correctly and then look to see if there a GREEN bell beside the Announcements Tab. If the bell is green, you're all set. If the bell is white or grey, then click on the bell and it will turn green. There is also a link in Canvas in the Course Overview Module to an external page with a video demonstrating how to change your Notifications settings.

Piazza

Piazza is an online chat platform that we will use in 113 so students can communicate between each other and with the instructors across sections of 113. Please keep in mind however that Piazza is NOT a social media platform, and so posts should pertain to mathematical questions arising from lecture or homework. Inappropriate comments pertaining to instructors, the class itself, or other students WILL BE REMOVED. Students may post anonymously to other students: however, no posts are anonymous to the instructors.

QUARANTINE OR ISOLATION DUE TO COVID-19

Student should continually monitor themselves for COVID-19 symptoms and get tested for the virus if they have symptoms or have been in close contact with someone with COVID-19. Student should reach out to instructors as soon as possible if they become ill or need to isolate or quarantine, in order to make alternate plans for how to proceed with the course. Students are strongly encouraged to communicate with their instructor concerning their illness and the anticipated extent of their absence from the course (either in-person or remote). The instructor will work with the student to provide alternative ways to complete the course work.

COURSE EVALUATIONS

Students will be provided with an opportunity to evaluate this course and your learning experience. Student participation is an integral component of this course, and your feedback is important to the instructor. We strongly encourage you to participate in the course evaluation.

Digital Course Evaluation (AEFIS)

UW-Madison now uses an online course evaluation survey tool, AEFIS. In most instances, you will receive an official email prior to the end of the semester when your course evaluation is available. You will receive a link to log into the course evaluation with your NetID where you can complete the evaluation and submit it, anonymously. Your participation is an integral component of this course, and your feedback is important to me. I strongly encourage you to participate in the course evaluation.

ACADEMIC CALENDAR & RELIGIOUS OBSERVANCES

See: https://secfac.wisc.edu/academic-calendar/#religious-observances

ACADEMIC INTEGRITY STATEMENT
By virtue of enrollment, each student agrees to uphold the high academic standards of the University of Wisconsin-Madison; academic misconduct is behavior that negatively impacts the integrity of the institution. Cheating, fabrication, plagiarism, unauthorized collaboration, and helping others commit these previously listed acts are examples of misconduct which may result in disciplinary action. Examples of disciplinary action include, but is not limited to, failure on the assignment/course, written reprimand, disciplinary probation, suspension, or expulsion.

ACCOMMODATIONS FOR STUDENTS WITH DISABILITIES STATEMENT
The University of Wisconsin-Madison supports the right of all enrolled students to a full and equal educational opportunity. The Americans with Disabilities Act (ADA), Wisconsin State Statute (36.12), and UW-Madison policy (Faculty Document 1071) require that students with disabilities be reasonably accommodated in instruction and campus life. Reasonable accommodations for students with disabilities is a shared faculty and student responsibility. Students are expected to inform faculty of their need for instructional accommodations by the end of the third week of the semester, or as soon as possible after a disability has been incurred or recognized. Faculty will work either directly with the student or in coordination with the McBurney Center to identify and provide reasonable instructional accommodations. Disability information, including instructional accommodations as part of a student's educational record, is confidential and protected under FERPA. (See: McBurney Disability Resource Center)

DIVERSITY & INCLUSION STATEMENT
Diversity is a source of strength, creativity, and innovation for UW-Madison. We value the contributions of each person and respect the profound ways their identity, culture, background, experience, status, abilities, and opinion enrich the university community. We commit ourselves to the pursuit of excellence in teaching, research, outreach, and diversity as inextricably linked goals.

The University of Wisconsin-Madison fulfills its public mission by creating a welcoming and inclusive community for people from every background – people who as students, faculty, and staff serve Wisconsin and the world.