MATH 144-01
TRIGONOMETRY

Course Syllabus

Spring 2021

PLEASE NOTE THAT THE RULES AND REGULATIONS FOR THE COURSE THAT ARE OUTLINED IN THIS SYLLABUS ARE SUBJECT TO CHANGE DUE TO ANY INSTITUTIONAL CHANGES THAT MAY OCCUR DUE TO COVID-19.

1. GOALS OF THE COURSE: The primary purpose of Trigonometry is to improve your skills and competency in trigonometry to prepare you for calculus. Another goal is to help you develop your mathematical learning skills so that you will be more confident in future mathematical courses.

2. LEARNING OUTCOMES: After completing Math 144, the student should be able to do the following without the use of a calculator:

- Understand the right triangle definitions of the trigonometric functions
- Understand the unit circle definitions of the trigonometric functions
- Evaluate trigonometric functions of angles belonging to the $\dfrac{\pi}{3}, \dfrac{\pi}{4},$ and $\dfrac{\pi}{6}$ families
- Sketch the graph of functions of the form $y = A\sin(Bx + C) + D$ and $y = A\cos(Bx + C) + D$
- Understand the graph of the tangent function and its properties
- Understand the graph of the cosecant and secant functions and their properties
- Understand the graphs of the inverse sine function, inverse cosine function, and inverse tangent function
- Evaluate expressions involving inverse trigonometric functions
- Verify trigonometric identities
- Solve trigonometric equations

3. REQUIRED STUDENT MATERIALS

MATH 144 **Spring 2021** COURSE NOTEBOOK: Fill out every page of the notebook by working through the eText, watching videos, animations, etc. **Filling out the course notebook will give students the best possible chance at success in this course!!**

MyLabsPlus Access Code: All students must purchase a Math 144 access code in the UI Bookstore. Please bring this code with you to the orientation meeting. Students who do not attend an orientation meeting will be dropped from the course.

Students who fail to register for MyLabsPlus and complete the orientation homework within 48 hours of the orientation meeting will be automatically dropped from the course.

VANDAL CARD: You will need your Vandal card in order to take an exam in the Polya Math Center.

HEADPHONES: Headphones are needed to listen to the video lectures at the computers.

Note: Calculators will **NOT BE ALLOWED** during any exams in this course.

4. GRADE CALCULATION

- This course will cover three chapters (Ch 1, Ch 2, and Ch 3). There will be one test after the completion of each chapter (see the Notebook Table of Contents for a list of sections covered) for a total of three tests throughout the semester. Each test is worth 100 points.
- Weekly Zoom class attendance and participation is mandatory.
- There are a total of 15 homework assignments. **Before starting many homework assignments, you will be required to earn a certain score on a practice test. Make sure that you leave yourself enough time to take the practice test before you start each homework assignment.** Your total homework percent score will be computed at the end of the semester. Your total homework score is worth 100 points. **This overall Homework score can be used to replace one of your three test scores.**
- The tests are cumulative. Each test will cover material from the entire semester leading up to the test. Therefore, test 3 will cover the entire semester.
- Tests will be taken in the Polya Mathematics Center on the scheduled dates. Tests may be taken one time.
- Calculators are **not allowed** during tests.

Five grades will be used to calculate your final course grade – Homework Average, Test 1, Test 2, and Test 3, and Zoom attendance/participation. The homework average, Test 1, Test 2, and Test 3 are 90% of your grade, and Zoom attendance/participation is 10% of your grade. The three highest scores from the homework average, Test 1, Test 2 and Test 3 will be used to calculate the 90% of your grade that those are worth.

5. HOMEWORK AND TEST EXTENSIONS

- The due dates for the homework and the tests are stated in this notebook. These due dates will not change and there will be **NO EXTENSIONS** except for reasons recognized by the University.
- Make up work for assignments missed because of absence will not be allowed unless an arrangement with the instructor is made prior to the absence, or in cases of medical or family emergency, in which case documentation of the emergency will be required. Documentation must be **provided within two business days** of the assignment's due date, not to exceed the last day for taking Exam 3 based on the term in which you are enrolled. The term-specific schedule(s) is/are listed in notebook. Bring appropriate documentation to your instructor during posted office hours. These hours will be announced during the class orientation and/or will be emailed to your university email account.
- If ongoing illness or other circumstances fitting the catalog definition of an excused absence prevent you from bringing documentation for your absence within two business days, then each additional delay must also be documented and the documentation for the delay must be presented with the documentation for the original absence. (See University Catalog under General Requirements and Academic Procedures, section M for details about absences.)
- Please note that problems with your personal computer or internet connection are **not** grounds for an extension.
- If an extension is granted, the length of the extension will be determined by the number of days listed on the documentation.

6. TESTING IN THE POLYA LAB

Tests must be taken in the Polya lab only. Testing start times are stated in this syllabus and will be posted in the announcements in MyLabsPlus.

- **NO CALCULATORS** of any kind are allowed during tests.
- **NO NOTES** of any kind are allowed during tests, although a sheet of formulas will be provided during Test 3.
- **NO DEVICES** which are capable of transmitting or receiving data, including but not limited to watches, phones, tablets, iPods, and calculators, may be on your person during the exam. Any such items are expected to be left at home or securely stowed in your bag and placed on the shelves in the testing area. Failure to do so will result in a zero on the exam and possibly a failing grade for the course.
- **Students must earn at least a 60% on the corresponding practice test** before the first version of the test will become available.

7. COMMUNICATIONS AND EMAIL

Announcements about the course, special sessions, changes in schedules or procedures, and so forth, will be sent to your university e-mail account. You are expected to check your University e-mail regularly. **Every student must attend a mandatory orientation session at a time announced via email which will be sent to your university email account.**

All emails must be sent through the email form located at: https://sites.uidaho.edu/polyaweb/Login . **Any emails sent without using this form will not be read.**

All emails must follow standard grammar and punctuation rules. Any email which fails to adhere to these standards will be returned to you for revision. **Emails should also follow basic email etiquette**. Any emails that violate the student code of conduct regarding respect of others will be sent to the Dean of Students as appropriate.

8. THE STUDENT WITH SPECIAL NEEDS

We are committed to accommodate students with special needs. Reasonable accommodations are available for students who have documented temporary or permanent disabilities. All accommodations must be approved through the Center for Disability and Resources located in the Pitman Center, Suite 127 in order to notify your instructor(s) as soon as possible regarding accommodation(s) needed for the course.

- (208) 885-6307
- email at cdar@uidaho.edu
- website at www.uidaho.edu/current-student/cdar

9. ACADEMIC HONESTY

Students are expected to maintain Academic Honesty in all their work. Collaboration is encouraged on homework assignments. All tests are considered individual work and must be completed without unauthorized assistance of any kind, including the help of other students, tutors, notes, or calculators. All test materials and scratch paper are to be turned in with the test paper and attempting to bring test work out of the testing area and/or share that work with other students is considered cheating.

The University of Idaho has defined acceptable behavior in the Student Code of Conduct Article II.A-1 – Academic Dishonesty *[rev. 7-98, 7-05, 7-14, ed. 7-09]*. The following summarizes relevant points related to your math course:

- **Because academic honesty and integrity are core values at a university, the faculty finds that even one incident of academic dishonesty may merit expulsion**.

- **Cheating on classroom or outside assignments, examinations, or tests is a violation of this code.**

- Plagiarism, falsification of academic records, falsification of records and the acquisition or use of test materials without faculty authorization are considered forms of academic dishonesty and, as such, are violations of this code.

- Instructors and students are responsible for maintaining academic standards and integrity in their classes. Consequences for academic dishonesty may be imposed by the course instructor. Such consequences may include but cannot exceed a grade of "F" in the course.

(The full text of the Student Code of Conduct may be found at
http://www.uidaho.edu/DOS/judicialaffairs/studentcodeofconduct/Student%20Code%20of%20Conduct)

10. DUE DATES

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Section 1.1 and Section 1.3…………………………Thurs	Jan 28
Section 1.4 and Section 1.5…………………………Thurs	Feb 4
Section 1.6 and Section 2.1A………………………Thurs	Feb 11
Test 1 …………………………………………......Thurs	Feb 25
Section 2.1B and Section 2.2………………………Thurs	Mar 4
Section 2.3 and Section 2.4………………..………Thurs	Mar 11
Section 2.5…………………………………………..Mon	Mar 22
Test 2 ………………………………………….... Thurs	Apr 1
Section 3.1 and Section 3.2……………………. Thurs	Apr 8
Section 3.3…………………………………………..Thurs	Apr 15
Section 3.5…………………………………………..Thurs	Apr 22
Test 3 …………………………………………….... Thurs	Apr 29

The due dates above will NOT be changed. It is the responsibility of the student to adhere to these deadlines and to take responsibility to make sure that these deadlines are met.

Note: Students may finish this course early by completing all assignments and tests. There is no limit to how fast a student can finish this course.

Note that it is the students' responsibility to know when testing is available in the Polya Lab. Students MUST bring their Vandal Cards and wear a mask when taking tests in the Polya Lab. The Polya Lab will be open every Thursday afternoon for early testing. Testing will only occur at the following listed start times. Students will not be allowed to test once the start time has passed. The testing start times for the entire semester are on the next page.
TESTING START TIMES: (Students should plan on being in the Polya lab at least 5 minutes prior to the start time.)   Students can only test starting at any one of the designated start times. For example, if a student shows up on Thursday, February 25 at 2:00 PM, then that student will NOT be allowed to test until the next start time at 3:00 PM.

Test 1 Start Times
Thurs   Feb 25   9 AM, 10:30 AM, 12:00 PM, 1:30 PM, 3:00 PM, 4:30 PM, 6:00 PM, 7:30 PM

Test 2 Start Times
Thurs   Apr 1   9 AM, 10:30 AM, 12:00 PM, 1:30 PM, 3:00 PM, 4:30 PM, 6:00 PM, 7:30 PM

Test 3 Start Times
Thurs   Apr 29   9 AM, 10:30 AM, 12:00 PM, 1:30 PM, 3:00 PM, 4:30 PM, 6:00 PM, 7:30 PM

11. COURSE NOTEBOOK

The best way to be successful in this course is to fill out **every page** of this notebook. Fill out each page of this notebook by carefully reading the eText and by watching videos and animations **before** attempting the corresponding homework problems.

Math 144 Grade Summary

Enter your scores in the charts below, as percentages. Remember that you may only take one test in a day. See the Syllabus for the requirements.

Homework (HW)

Homework	Possible	Earned
Section 1.1	100	
Section 1.3	100	
Section 1.4	100	
Section 1.5	100	
Section 1.6	100	
Section 2.1A	100	
Section 2.1B	100	
Section 2.2	100	
Section 2.3	100	
Section 2.4	100	
Section 2.5	100	
Section 3.1	100	
Section 3.2	100	
Section 3.3	100	
Section 3.5	100	
Total	**1500**	

Test Scores

Test	Score
1	
2	
3	

Attendance

Date	Score
Jan 19	
Jan 26	
Feb 2	
Feb 9	
Feb 16	
Feb 23	
Mar 2	
Mar 9	
Mar 23	
Mar 30	
Apr 6	
Apr 13	
Apr 20	
Apr 27	

Divide the HW total by 15 and write the result here: _____   Put this result in the table below: ⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯

Divide the Attendance total by 14 and write the result here:_____. Put this result in the table below: ⎯⎯⎯⎯⎯

Grading Scale
(Select the highest three of the HW average, T1, T2, and T3.)

A: 90 - 100 pts
B: 80 – 89.9 pts
C: 70 – 79.9 pts
D: 60 – 60.9 pts
F: Below 60 pts

TOTALS	Possible	Earned
HW (average of all 15)	100	
Test 1	100	
Test 2	100	
Test 3	100	
Average of the top 3 scores above	***100***	
Attendance (average of all 14)	100	
Multiply the average of the top 3 by 0.9	90	
Multiply the average attendance by 0.10	10	
Grade = ***sum*** of previous 2 products	100	

Math 144 Grade Summary Example

This person earned an "A" for the course without taking Test 3, and they missed one homework assignment. The scores were rounded to the nearest percent for this example.

Homework (HW)

Homework	Possible	Earned
Section 1.1	100	100
Section 1.3	100	100
Section 1.4	100	95
Section 1.5	100	100
Section 1.6	100	100
Section 2.1A	100	0
Section 2.1B	100	100
Section 2.2	100	99
Section 2.3	100	100
Section 2.4	100	100
Section 2.5	100	95
Section 3.1	100	93
Section 3.2	100	100
Section 3.3	100	95
Section 3.5	100	93
Total	**1500**	**1370**

Test Scores

Test	Score
1	95
2	85
3	--

Attendance

Date	Score
Jan 19	100
Jan 26	100
Feb 2	100
Feb 9	100
Feb 16	0
Feb 23	100
Mar 2	100
Mar 9	0
Mar 23	0
Mar 30	100
Apr 6	100
Apr 13	100
Apr 20	0
Apr 27	0

Divide the HW total by 15 (this example has 1370/15) and write the result here: __91_ Put this result in the table below:

Divide the Attendance total by 14 and write the result here:_____64.26___. Put this result in the table below:

Grading Scale

(Select the highest three of the HW average, T1, T2, and T3.)

A: 90 - 100 pts

B: 80 – 89.9 pts

C: 70 – 79.9 pts

D: 60 – 60.9 pts

F: Below 60 pts

TOTALS	Possible	Earned
HW (average of all 15)	100	91
Test 1	100	95
Test 2	100	85
Test 3	100	-
Average of the top 3 scores above	*100*	90.33
Attendance (average of all 14)	100	64.26
Multiply the average of the top 3 by 0.9	90	81.3
Multiply the average attendance by 0.10	10	6.43
Grade = *sum* of previous 2 products	100	**87.73**