## TRIGONOMETRY

## MATH 1060, CRN 30358, Spring 2023

http:// faculty.weber.edu/aghoreishi/Math1060_S23/Math1060_S23.asp/

Prerequisite: Math 1010 with a grade of C or better, or ACT score of 23 or better, or placement test.
Text: Required: Algebra and Trigonometry by Stewart, Redlin, and Watson, 4th Edition, Loose-Leaf Binding + Enhanced WebAssign Access Card, ISBN 978-1337759465 . This package is available from the bookstore for about $\$ 135$ and will be good for the College Algebra, Trigonometry, and Pre-Calculus courses. For access to the online material use the Class Key: weber 5542 6417to login at
https://www.webassign.net/v4cgi/selfenroll/classkey.html.
Optional: Student Solutions Manual by Stewart, Redlin, and Watson, ISBN 978-1305118157.
Class Meetings: MWF 11:30-12:20, TY 449.
Instructor Information: Dr. Afshin Ghoreishi, http:// faculty.weber.edu/aghoreishi/. Office: TY 450M. Office Hours: M 9:30-10:20, 12:30-1:20, T 9:30-10:20, 10:30-11:20, W 9:30-10:20, and F 9:30-10:20. At other times, you can see me whenever I am in my office and not busy. You can also see me by making an appointment.

## General Instructions

Learning Mathematics: One learns mathematics by doing it. Struggling is a part of learning. There is no substitute for working on and solving problems on your own.

Reading a Mathematics Book: Read mathematics books with a scratch paper and a pencil close by. Use them to work through the parts left for the reader to figure out and/or redoing the parts that are not clear. Do not expect to fully master every topic in the first reading.

Writing Mathematics: Mathematics, like English, requires proper use of grammar. The process of learning a topic and accurately communicating that knowledge are intimately related. The objective is not just to find the answer to problems but also to communicate the work involved through writing.

Getting Ready for a Test: In addition to studying homework problems, class notes, and sample tests, you should develop a set of short notes and sample problems on each topic. Develop these notes after learning each topic. Use your notes as a reference and review them before a test. This technique will solve the problem of forgetting or confusing things on the tests and will enable you to attain that higher grade which you deserve.

## Specific Instructions

Procedures: I will try to answer a few questions at the beginning of each class, but this time will be limited. Be prepared for each class by working on prior homework and reading the book ahead of time. You are encouraged and expected to read the book on your own. Utilize office hours and other sources of tutoring.

We will have weekly homework, two 1 -hour exams and a comprehensive " 2 -hour" final exam. Do not enter the class late $\&$ do not come to class if you have to leave early. Turn off pagers, cell phones and other such disruptive devices. Do not text message. Failure to follow these basic courtesies may result in a failing grade.

Attendance: Typically, it is much harder to learn mathematics without attending class. Large number of absences will generally result in a grade of W, UW, or E.

| Reason for Missing Class | Solution |
| :--- | :--- |
| 1. I am too busy; too many <br> classes, too many hours of work, <br> or too many commitments. | Reduce your life load to a reasonable amount. Rather than doing <br> everything poorly, do better in a smaller number of things. This <br> might include dropping a class or reducing work/commitment hours. |
| 2. I don't like this course. | If you don't like this class specifically, I can help you to get into <br> another section. Otherwise, if you attend class, and work at it, you <br> will do well enough to like it more. |
| 3. I don't need to attend class to <br> learn. | Take an online class or attend an online university, like WGU, or take <br> the CLEP exam. However, attending class will usually result in a <br> higher course grade. |
| 4. I just need to get a C. | Since I do care about your learning, you are in the wrong section. <br> Also, it is easier to get a C if you attend the class. |

The following policy is to help you earn your best possible grade. You can earn extra credit for regular ontime attendance and positive contribution as follows: 10 points for missing at most 1 class, 5 points for missing 2 or $\mathbf{3}$ classes. While, excessive absence ( 5 or more classes) will result in a grade of UW. However, if you don't like this policy, I will be happy to place you in another section or find you other accommodations.

Note: The university administration has reduced the length of the spring semester by 4 days. This means we will have two less classes than usual. I will do my best to still devote adequate time to all topics, questions and reviews.

Homework: A problem list composed of two parts is attached. To be successful in this class you should be able to solve all of them. I will collect all problems listed under the heading "Turn-In Problems". Homework will be due on Wednesday with the grace period until Friday before start of the class. The latest time I will accept homework is on Friday at 11:30. No late homework will be accepted.

Your solutions must be complete, correct and neatly written. Do not solve two problems side-by-side, write only on one side of each page and staple your homework. Write your name on the top center position of the front page and number your pages as, for example; $1 / 7,2 / 7, \ldots, 7 / 7$ (if there are a total of 7 pages), on the top right hand corner of each page. Failure to follow these will result in losing points.

Exams: Exams will not require graphics or programmable calculators and these calculators are not allowed. However, you will need a scientific calculator. The tentative exam dates are as follows.

| Exam I | Fri, Feb 17 |
| :--- | :--- |
| Exam II | Fri, Apr 7 |
| Final Exam | Tue, Apr $25(\mathbf{1 1 : 0 0 - 1 2 : 5 0 ) ~}$ |

Sample tests will be available from my website: http:// faculty.weber.edu/aghoreishi/. No make-up exam will be given.

Grading: Exams will be curved as needed, but a minimum standard will be retained regardless of the class performance. You will be given the opportunity to replace your lowest homework score with your score on a special assignment at the end of the semester.

| Exam I | 100 points |
| :--- | :--- |
| Exam II | 100 points |
| Homework | 100 points |
| Final Exam | 150 points |
| Attendance | up to 10 extra credit points |
|  | --------------------- |
|  | Total |
|  | 450 points |

## Miscellaneous Information

## Other Important Dates:

| Martin Luther King Holiday | Jan | 16 |
| :--- | :--- | :--- |
| Last day to cancel a class | Jan | 30 |
| Presidents' Day Holiday | Feb | 20 |
| Last day to drop with a grade of W | Mar | 28 |

If you decide to drop this class, please inform me of your decision.
Extra Help: You will find tutors in the Solution Space, TY 233. All other tutoring information can be found at the website http://weber.edu/Tutoring.

| Course Coverage and Problem List for Math 1060 |  |  |
| :---: | :---: | :---: |
| Section | Problems | Turn-In Problems |
| 5.1 | $\begin{aligned} & \text { 1-4, 6-93 (multiples of } 3 \text { ), } 10,31,38,59,67,71,80 \text {, } \\ & 84 \end{aligned}$ | $\begin{aligned} & 10,18,24,30,31,38,42,51,54,59,63,67,71,77 \text {, } \\ & 80,84,93 \end{aligned}$ |
| 5.2 | 1, 2, 3-69 (multiples of 3), 34, 52, 53, 64, 65, 67 | $\begin{aligned} & \begin{array}{l} 6,9,12,18,21,30,34,39,48,52,53,54,60,64, \\ 65,67,69 \end{array} \end{aligned}$ |
| 5.3 | $\begin{aligned} & 1-4,6-63 \text { (multiples of } 3 \text { ), } 41,52,55,58,62,65,69 \text {, } \\ & 70 \end{aligned}$ | 6, 9, 15, 30, 39,41, 45, 48, 52, 55, 58, 62, 63, 65, 69 |
| 5.4 | 1-4, 5-37 (odd), 8, 14, 18, 24, 30, 36, 39-44 | $7,8,9,14,18,21,24,27,29,30,35,36,39,40,42$ |
| 5.5 | 1, 2, 3-30 (odd), 4, 10, 14, 20, 26, 30, 32, 35, 37 | $4,7,10,14,15,19,20,21,29,30,31,32,35,37$ |
| 5.6 | $\begin{aligned} & 1,2,3-37 \text { (odd), } 4,14,22,26,36,39,40,41,44,48 \text {, } \\ & 49,51 \end{aligned}$ | $4,7,14,15,21,22,25,26,29,36,39,44,48,51$ |
| 6.1* | 1, 2, 3-60 (odd), 4, 10, 22, 30, 38, 44 | $4,7,10,13,15,19,22,27,30,38,44,57$ |
| 6.2 | $\begin{aligned} & \text { 1, 2, 3-81 (multiples of } 3 \text { ), } 17,25,46,50,53,57,67 \text {, } \\ & 73,79,82 \end{aligned}$ | $\begin{aligned} & 6,12,17,25,27,30,36,46,50,53,57,67,73,78 \text {, } \\ & 79,82 \end{aligned}$ |
| 6.3 | 1-4, 6-54 (multiples of 3), 22, 29, 37, 47, 83, 84 | 6, 12, 15, 21, 22, 29, 36, 37, 45, 47, 48, 54, 84 |
| 6.4 | 1-8, 9-60 (multiples of 3), 13, 16, 34, 40, 43, 61 | $3,4,13,16,21,34,36,40,43,51,61$ |
| 6.5 | $\begin{aligned} & \text { 1, 2, 3-47 (multiples of } 3 \text { ), } 8,11,20,25,26,37,41 \text {, } \\ & 43,49,50 \end{aligned}$ | $3,6,8,9,11,18,20,25,26,36,37,41,43$ |
| 6.6 | $\begin{aligned} & \text { 1-4, 5-19 (odd), 29-37 (odd), 39-53 (odd), 6, 12, } 18 \\ & 30,36,48 \end{aligned}$ | $6,12,15,18,29,30,36,41,43,48,53$ |


| Course Coverage and Problem List for Math 1060 |  |  |
| :---: | :---: | :---: |
| Section | Problems | Turn-In Problems |
| 7.1 | 1, 2, 3-27 (multiples of 3), 22, 30-86 (multiples of 3, part a only), $38,57,68,83,89-93$ (odd), 90 , 99-111 (odd), 102 | $6,17,22,27,38,48,57,68,75,83,89,90,102$ |
| 7.2 | $\begin{aligned} & \text { 1, 2, 3-57 (multiples of } 3 \text { ), } 17,26,34,35,47,56,59- \\ & 62,69,70,71-73 \end{aligned}$ | $\begin{aligned} & 6,17,18,21,26,34,35,36,42,47,51,56,59,66 \\ & 72,73 \end{aligned}$ |
| 7.3 | $\begin{aligned} & \text { 1, 2, 3-99 (multiples of } 3 \text { ), } 11,20,32,38,43,52,59 \text {, } \\ & 97,98,101,103,110-113 \end{aligned}$ | $\begin{aligned} & 6,11,20,21,30,32,33,38,43,48,52,59,63,78 \text {, } \\ & 90,93,97,98,103,112 \end{aligned}$ |
| 7.4 | $\begin{aligned} & \text { 1-4, 5-23 (odd), } 6,18,25-38,39-54 \text { (multiples of } 3 \text { ), } \\ & 50,57 \end{aligned}$ | $6,7,13,18,21,27,34,37,42,45,50,54$ |
| 7.5 | $\begin{aligned} & 1-2,3-34 \text { (odd), 14, 20, 32, 39-54 (multiples of 3), } \\ & 40,43,52,55,63,64,65,67 \end{aligned}$ | $4,9,14,20,27,29,32,40,43,48,52,55,67$ |
| 8.1 | 1-4, 5-10, 11-27 (odd), 30-69 (multiples of 3) | $\begin{aligned} & 7,9,13,19,20,25,28,30,36,37,42,46,47,58 \text {, } \\ & 63,64 \end{aligned}$ |
| 8.2 | $\begin{aligned} & 1,2,3-8,9-15 \text { (odd), 10, 17-22, 23-45 (odd), 24, 36, } \\ & 38,53,54,57,58,63 \end{aligned}$ | $3-8,9,10,20,22,24,25,29,35,36,38$ |
| 8.3 | 1-4, 6-90 (multiples of 3), 19, 42, 50, 57, 62, 84, 87 | $\begin{aligned} & 15,18,19,21,24,36,42,50,54,57,62,66,78,84 \text {, } \\ & 87 \end{aligned}$ |
| 9.1 | 1-2, 3-8, 9-72 (multiples of 3), 32, 67, 73 | 12, 18, 21, 24, 27, 32, 36, 39, 42, 48, 57, 63, 67, 73 |
| 9.2* | 1-4, 6-51 (multiples of 3), 8, 20, 22, 26, 47 | $6,8,12,15,20,21,22,26,27,30,33,36,45,47$ |
| 9.3* |  |  |
| 9.4* |  |  |

* This section will be covered, if time permits.

