Math 4A: Trigonometry, SPRING 2017

Instructor: Walid Tayar
Email: walid.tayar@reedleycollege.edu
Phone: 559-638-3641 ext. 3263 (email is preferred)
Office hours: Tuesday and Thursday 12:00-12:50pm in FEM 1K or by appointment
Virtual Office Hour: Wednesday 12:00-12:50pm via email

Mandatory Meetings
A PHOTO ID IS REQUIRED FOR EACH MEETING. YOU WILL NOT BE ALLOWED TO REGISTER FOR THIS CLASS OR TAKE THE MIDTERMS WITHOUT A VALID PHOTO ID.

Orientation: TUESDAY 1/10/2017 from 4-5:30pm in FEM 3
(YOU WILL BE DROPPED IF YOU ARE LATE OR DO NOT ATTEND)
Midterm #1: TUESDAY 2/21/2017 from 4-5:30pm in FEM 3
Midterm #2: TUESDAY 3/28/2017 from 4-5:30pm in FEM 3
Final: TUESDAY 5/16/2017 from 4-5:30pm in FEM 3

Prerequisites:
Mathematics 102 and 103 or equivalent. ADVISORIES: Eligibility for English 125 and 126.

Catalog Description:
This course in trigonometry of the plane concentrates on trigonometric functions and their applications. Topics covered include the trigonometric functions, solution of right triangles, radian measure, fundamental identities, angular measure, graphs, logarithms, functions of composite angles, oblique triangles, trigonometric equations, inverse trigonometric functions, and complex numbers, including powers and roots. The study of polar coordinates and polar equations is also covered.

Optional text:
You can buy the bundled textbook (which includes the textbook and access code for MyMathLab at the Reedley College Bookstore. Be careful, once you open the kit you will <u>not</u> be able to return the book for a full refund. You can also purchase the access code by itself, without the book. The book is available <u>electronically</u> through the website. **Another option would be to purchase the access code through MyMathLab. I will explain this on the first day of class.**

<u>**Text:**</u> Lial, Hornsby, Schneider, Daniels, <u>Trigonometry</u>, 10th Edition. Pearson/Addison Wesley, 2013.
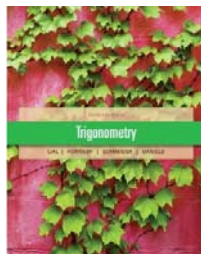
WHEN SETTING UP YOUR ACCOUNT ON MYMATHLAB, USE YOUR <u>7-DIGIT REEDLEY COLLEGE ID AS YOUR USERNAME </u>(0123456)

YOU MUST BE REGISTERED ON MYMATHLAB BY THE END OF THE DAY ON <u>MONDAY JANUARY 9th</u> OR YOU WILL BE DROPPED!

IF YOU ARE USING THE <u>TEMPORARY ACCESS</u> CODE, IT IS YOUR RESPONSIBILITY TO PAY FOR ACCESS BY THE EXPIRATON DATE OR YOU WILL BE DROPPED! NO EXCEPTIONS!

<u>**Required Course Materials:**</u>
- Non-graphing scientific calculator (i.e. TI-30xIIs)

- Pencils/rulers/paper etc.
- Class notes from Canvas
- 3-ring binder (for class notes)
- **TWO** Mead Cambridge Quad Wire-bound Notebook (graph paper) from the bookstore. You will need these for your homework. **No other notebook will be accepted!** (See image below)

<u>**Canvas:**</u>
This course will utilize Canvas for lecture notes, announcements, handouts, assignments, etc. You can access Canvas from the Reedley College homepage. Your login and password are as follows:
Login ID: your student ID (ex. 01233456)
Password: same as email

<u>**Online and Textbook Homework:**</u>
Online homework assignments are completed online and the assignments can be found at the MyMathLab website. You may work ahead if you like. Each assignment has a due date and no extensions will be provided under any circumstances. You can access and complete any past due assignments and earn 50% credit on the past due problems up until the unit exam. It is important to stay current to be successful in the course!

There may be homework assigned from the textbook as well. All <u>work must be shown</u> in order to receive full credit for these assignments. You will be required to keep all of your written work from your online homework assignments as well as the textbook assignments in a notebook (see notebook section below). Homework (Online/Textbook) will be worth 20% of your overall grade.

Notebook:
You will be required to keep all of your written work from your online homework assignments in a notebook as well as the problems assigned from the textbook. Your notebook will be graded on completeness, neatness, and effort. Please make sure to write the section number at the top of each page and circle problem numbers down the left side of the page. Do not start a new section in the middle of a page. <u>Please start a new section on a new page</u>. Separate each chapter with a labeled tab as well. Problems must be written out in pencil and all work and graphs must be shown in order to receive credit. Your final answer for each problem needs to be circled or boxed in when appropriate. <u>Word problems do not need to be written out.</u> The required notebook can be purchased at the book store. You can earn up to half credit for a past due notebook if turned in by the beginning of the next class meeting (see attached example of notebook entries).

Attendance:
Students are expected to attend all scheduled class meetings, and be on time. The doors will be locked at 6pm on midterm dates so be there early. I will not allow you to take the midterm if you are late and you will get a 0. If you decide to drop the course, it is your responsibility to make the drop official in the Admissions and Records office or else possibly receive an F in the course. Also, there are to be no visitors in class for any reason. ALL ELECTROINC DEVICES MUST BE TURNED OFF AND OUT OF SITE BEFORE ENTERING CLASS. If you need to text or use your phone before class begins, please step outside. You will be asked to leave if your phone rings in class. Also, cell phones are NOT to be used as calculators.

Midterms:
There will be a midterm at the end of each unit, approximately every 4-5 weeks. Each midterm will be worth 100 points. There are no make-ups for missed midterms. No exceptions. Calling the day of the midterm and telling me that you cannot make it to class is inexcusable. YOU MUST HAVE A VALID PHOTO ID AT EACH MIDTERM OR YOU WILL NOT BE ABLE TO TAKE IT AND WILL GET A 0%.

YOU MAY NOT LEAVE CLASS DURING AN EXAM. YOU MUST SUBMIT YOUR EXAM BEFORE YOU LEAVE. ALL CELLPHONES/ELECTRONICS ARE TO BE COMPLETELY OUT OF SIGHT AND TURNED OFF DURING THE EXAMS OR YOU WILL RECEIVE A 0% ON THAT EXAM AND IT WILL NOT BE DROPPED OR REPLACED BY THE FINAL EXAM SCORE. THIS WILL BE COUNTED AS CHEATING (SEE CHEATING POLICY BELOW). NO EXCEPTIONS!!

Final Exam:

A final exam worth 100 points will be given at the end of the semester during finals week.

Grading:
- Homework (online/textbook) will be worth 20% of your overall grade.
- Exams and Final will be worth 80%

Percent	Grade
90 - 100	A
80 – 89	B
70 – 79	C
60 – 69	D
0 – 59	F

Course Outline:
Chapter 1: Trigonometric functions
Chapter 2: Acute Angles and Right Triangles
Chapter 3: Radian Measure and Circular Functions
Chapter 4: Graphs of the Circular Functions
Chapter 5: Trigonometric Identities
Chapter 6: Inverse Circular Functions and Trigonometric Equations
Chapter 7: Applications of Trigonometry and Vectors

Special Needs Requests:
If you have a verified need for an academic accommodation or materials in alternate media (i.e., Braille, large print, electronic text, etc.) per the Americans with Disabilities Act (ADA) or Section 504 of the Rehabilitation Act, please contact me as soon as possible.

Academic Dishonesty
Students at Reedley College are entitled to the best education that the college can make available to them, and they, their instructors, and their fellow students share the responsibility to ensure that this education is honestly attained. Because cheating, plagiarism, and collusion in dishonest activities erode the integrity of the college, each student is expected to exert an entirely honest effort in all academic endeavors. Academic dishonesty in any form is a very serious offense and will incur serious consequences.

Cheating is the act or attempted act of taking an examination or performing an assigned, evaluated task in a fraudulent or deceptive manner, such as having improper access to answers, in an attempt to gain an unearned academic advantage. Cheating may include, but is not limited to, copying from another's work, supplying one's work to another, giving or receiving copies of examinations without an instructor's permission, using or displaying notes or devices inappropriate to the conditions of the examination, allowing someone other than the officially enrolled student to represent the student, or failing to disclose research results completely.

Plagiarism is a specific form of cheating: the use of another's words or ideas without identifying them as such or giving credit to the source. Plagiarism may include, but is not limited to, failing to provide complete citations and references for all work that draws on the ideas, words, or work of others, failing to identify the contributors to work done in collaboration, submitting duplicate work

to be evaluated in different courses without the knowledge and consent of the instructors involved, or failing to observe computer security systems and software copyrights.

Incidents of cheating and plagiarism may result in any of a variety of sanctions and penalties, which may range from a failing grade on a particular examination, paper, project, or assignment in question to a failing grade in the course, at the discretion of the instructor and depending on the severity and frequency of the incidents.

Note: This syllabus is subject to change at the discretion of the instructor.

Section 6·1

① Find the greatest commont factor

$77 = 7 \cdot 11$ $GCF = \boxed{7}$
$343 = 7 \cdot 7 \cdot 7$

②

$66 = 2 \cdot 3 \cdot 11$
$78 = 2 \cdot 3 \cdot 13$
$GCF = 2 \cdot 3 = \boxed{6}$

③ $12 = 2 \cdot 2 \cdot 3$
$28 = 2 \cdot 2 \cdot 7$
$24 = 2 \cdot 2 \cdot 2 \cdot 3$
$GCF = 2 \cdot 2 = \boxed{4}$

④ a^6
a^8
$GCF = \boxed{a^6}$

⑤ $a^7 b^2$ $GCF = \boxed{a^7 b^2}$
$a^7 b^6$

⑥ $55 = 5 \cdot 11$ x^3 $GCF = \boxed{5 x^3}$
$35 = 5 \cdot 7$ x^7

⑦ $3y - 6 = \boxed{3(y-3)}$

⑧ $14a^2 + 3a = \boxed{a(14a+3)}$

⑨ $315x^2 + 105x + 21$
$315 = 3 \cdot 3 \cdot 5 \cdot 7$
$105 = 3 \cdot 5 \cdot 7$ $GCF = 21$
$21 = 3 \cdot 7$

$\dfrac{315x^2}{21} + \dfrac{105x}{21} + \dfrac{21}{21}$
$\boxed{21(15x^2 + 5x + 1)}$