

TRIGONOMETRY

COURSE DESCRIPTION

Math 4A is a trigonometry class that involves angles, trigonometric and inverse trigonometric functions, right and oblique triangles, graphs, identities, trigonometric equations, vectors, polar coordinates, DeMoivre's Theorem, and applications.

MATERIALS NEEDED:

- ❑ **Graph paper! All work for all assignments must be done on graph paper. No exceptions!**
- ❑ Pencil(s)
- ❑ Scientific Calculator (TI83 **highly recommended**. No TI-89 or cellphones)
- ❑ **Access Code to My Math Lab (Pearson)**

MANDATORY MEETING DATES

Feb. 9, 2015	Midterm #1	6 – 8 p.m.	FEM 4 Reedley College
Mar. 9, 2015	Midterm #2	6 – 8 p.m.	FEM 4 Reedley College
April 20, 2015	Midterm #3	6 – 8 p.m.	FEM 4 Reedley College
May 19, 2015	Final Exam	6 – 8 p.m.	FEM 4 Reedley College

HOMEWORK: Homework assignments are completed online and the assignments can be found at the *My Math Lab* website, www.pearsonmylabandmastering.com. You may work ahead if you like. ***It is important to stay current to be successful in the course!*** Each assignment has a due date. Late homework will lose **25%** of the points possible ***for every day it is late.*** Online homework will account for 15% of your grade.

All online homework problems are to be written out and worked out completely **on graph paper** (see materials list above). Each assignment and the problems of the assignment are to be clearly labeled and answers are to be boxed. The **written homework** will be collected on the **day of the three midterms** and on the **day of the final exam**. All **written homework** will be graded by chapter and each chapter grade will be worth **two online homework** assignments. **No late written homework will be accepted.**

ONLINE TESTS: There will be six to seven online tests given, usually (but not always!) covering one chapter of material in each exam. Tests will be available three days prior to the deadline. After the deadline the test will no longer be available. Failure to take an exam will result in a grade of zero for that exam. Each online test is worth 100 points and Online Tests will account for 15% of your grade.

*Note: Once you begin the exam you will have 90 minutes to complete it. After the 90 minutes have expired the exam will no longer be available to you. It is not possible to stop the exam and return to it later! If you attempt to do this you will be locked out of the program and will have to contact me for access to the course. Be sure to plan your exam time accordingly; if you start the exam with less than 90 minutes before the exam deadline, the program will shut you out at the deadline, **not 90 minutes after the time you started!***

Very important note! If, while taking an exam, you attempt to navigate to another website or another part of the Pearson website the system will shut down the test, submit whatever score you had at that point and you will be locked out of both the exam and the course. DO NOT navigate away from the webpage the test is on or try to open another browser!

MIDTERM EXAMS: There will be three Midterm Exams which will be given at the Reedley College Campus. Each Midterm Exam will be worth 100 points, will cover approximately two chapters of material, and will require all work to be shown for each problem in order to receive full credit. Two hours will be allowed to take each Midterm Exam. **Students will need to present a valid picture I.D. in order to take the midterms and the final exam.**

FINAL EXAM: A two hour comprehensive final exam worth 100 points will be given at the end of the semester during finals week on the Reedley College campus.

Attendance

- Students who do not sign up at www.pearsonmylabandmastering.com and complete the Chapter 1 assignments and exam by **Sunday, January 25, 2015** will be dropped. My Math Lab will allow you to enroll on their site with a *temporary access* without buying the access code.
- Any student who enrolls with a *temporary access code* will be **required** to have purchased the access code and be permanently enrolled in the My Math Lab course by **Friday, January 30, 2015**. Failure to do so will result in a **drop from the course!**
- Since this is an online class, your attendance is based on your working on assignments at www.pearsonmylabandmastering.com on a regular basis and staying up to date on assignments. Failure to complete assignments and online exams in a timely manner may result in your being dropped from the course for nonattendance.
- Checking your email daily is also a part of your attendance. Students are responsible for any and all information sent to them in emails or posted on the Blackboard or My Math lab sites. **Not checking your email is not an excuse for anything!**

- It is your responsibility to make sure you have a good internet connection and that the computer you are using is able to handle the necessary software for the course. Technology problems will not be accepted as excuses to get extensions, second chances or exceptions for any assignment, **especially on tests**. If your computer 'freezes' during an online exam, you will not be given access to it again and you will receive a grade of zero for that exam.
- Students are expected to attend the on campus meetings on the scheduled date, arrive on time, and bring a valid picture ID. Students who are absent will receive a zero on the missed midterm or final exam. *Arriving late for a midterm or final exam means you will have **less** time to complete that day's exam. Please do not expect extended time to account for your tardiness.*

Time Requirements

This online class will require **at least** two hours of work **a day**, depending on your level of math preparedness. Online courses are not for everyone! Although online classes can give you a lot of flexibility with your time, the class requires excellent study skills and a great deal more discipline than a face-to-face class. I definitely **do not** recommend an online course for students

- who do not have strong study skills and discipline
- who do not have solid math skills in the prerequisite courses
- who have not taken math for a long time
- who have received a grade lower than a B in a previous math class.

Communication Guidelines

All communication will be via email. Please follow the following guidelines in all email communication:

- Email language should be written with full sentences and be professional.
- Sign your **first and last name** at the end of every email
- Type **Math 4A Online** in the subject bar of the email
- If you use more than one email address, then it is your responsibility to check **all** of your email accounts on a daily basis. When I send an email through Blackboard it will go to your Reedley College email inbox, while any messages sent through My Math Lab will go to whichever email you entered when you registered for your account on the Pearson site.

Personal and Technology Emergencies

I am well aware that sometimes emergencies arise both in your personal life and with the technology that you may be using. To account for these unexpected events, I have made the following allowances:

- The lowest two **homework grades** will be dropped.
- The lowest **online exam grade** will be dropped.

- Whatever score you earn on the final exam will count for both your final exam score and will replace your lowest midterm score (if the final is higher than that low midterm score).
- Missing the final exam will result in a score of 0.
- There are no makeups for **any** missed online exams, midterms or the final exam.

GRADING:

- **Homework** will represent 15% of the final course grade.
- **Online Exams** will represent 15% of the final course grade.
- The **midterm exam and the final exam** will represent 70% of the final course grade.

Example: If your homework average is 85, the average of your online exams is 75 and the average of your three midterm exams and the final is 78, then you would compute your grade as follows:

$$(.15)(85) + (.15)(75) + (.70)(78) = 12.75 + 11.25 + 54.6 = 78.6$$

Your grade will then be determined by the following **grading scale:**

89.5% - 100% = A	79.5% - 89.4% = B	66.5% - 79.4% = C	54.5% - 66.4% = D	0% - 54.4% = F
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Academic Dishonesty: Reedley College rules on plagiarism will be strictly enforced. Academic dishonesty in any form is a very serious offense and will incur serious consequences, including but not limited to receiving a grade of F in the course. **The student receiving the grade on their transcript needs to be the person doing the work at ALL times in this class.** If not, the student will receive an automatic F in the course, and suffer the utmost consequences of plagiarism as set forth by the college's academic regulations.

Important Dates:

- January 19 (M) Martin Luther King Holiday (No classes)
- January 23 (F) Last day to drop a full-term class for a full refund
- January 30 (F) Last day to register for a full-term Spring 2015 class in person
- February 6 (F) Last day to change a Spring 2015 class to or from a Pass/No-Pass grading basis
- Feb. 13 – Feb. 16 President's Holiday (No classes)
- March 30 (F) Last day to drop a Spring 2015 full-term class to avoid a "W"
- March 30 – April 2 Spring Recess

COURSE OBJECTIVES

Students will be able to:

- apply the trigonometric functions to solve for the parts of a triangle.
- evaluate trigonometric functions of both acute and obtuse angles.
- solve problems involving vectors
- apply the concept of radian measure to circular functions
- apply trigonometric identities to simplify algebraic expressions and solve equations.
- apply the concept of polar coordinates to algebraic operations and graphs.
- apply computing and graphing technology.

COURSE CONTENT 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

Chapter 8: Complex Numbers, Polar Equations and Parametric Equations (as time permits)

NOTE: If you have a verified need for an academic accommodation or materials in alternate media per the Americans with Disabilities Act or Section 504 of the Rehabilitation Act, please contact me as soon as possible.