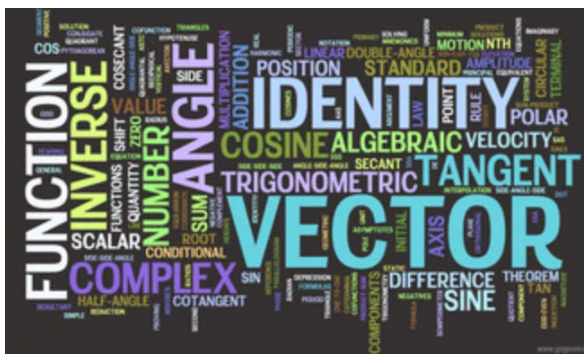


Precalculus
Fall 2016
Mathematics 4B
Section # 58916



Instructor: Dr. John Heathcote

Class Times: MTWTh 11:00 am-12:50 pm
(Second 9-Week Course: 10/13/16-12/15/16)

Office: FEM – 1B (in the math center)

Classroom: FEM – 3

Phone: 638-3641 ext. 3215

e-mail: john.heathcote@reedleycollege.edu

Office Hours: Monday, 10:00-10:50AM, 1:00-1:50PM
Wednesday, 10:00-10:50AM
Friday, 10:00-10:50AM

On-Duty in the RC Math Center (FEM-1): Friday, 11:00-11:50 AM

Canvas Course Site: All course materials (and links to recorded class lectures) will be available on the course management site on Canvas. You can access Canvas by using the “Quick Links” drop-down menu on the Reedley College webpage.

Optional Text: **Precalculus**, with MML access code, 6th Edition, Lial, Hornsby, Schneider, and Daniels, Pearson, 2017, ISBN 978-0-13-430699-5

Required Online Access: **MyMathLab Online site for Precalculus**, 6th Edition, Lial, Hornsby, Schneider, and Daniels

You can access our MyMathLab site directly from the Canvas course management site for this course. The full e-text is available from the MyMath Lab site.

Calculators will be necessary for some calculations. I would recommend a graphing calculator such as a TI-83 or TI-84. When we use calculators for graphing trigonometric functions, I will be demonstrating with a TI-84 Plus. Graphing calculators can be checked out from the library. If you do not have a graphing calculator, you will at least need a scientific calculator (with buttons for sin, cos, tan) for calculations during the course. **PHONES ARE NOT ALLOWED TO BE USED AS CALCULATORS.**

Advisory: English 125 and 126

Prerequisite: Math 4A

Catalog Description: Preparation for calculus: polynomial, absolute value, radical, rational, exponential, logarithmic, and trigonometric functions and their graphs; analytic geometry, polar coordinates

Grading: 50% Tests
20% Final Exam
15% Homework
15% In-Class Activities and Worksheets

Grading Scale:	90-100%	A
	80-89.9%	B
	70-79.9%	C
	60-69.9%	D
	<60%	F

Tests: Approximately three tests will be given throughout the term. These tests will usually cover one or two chapters from the textbook. The tests will be announced ahead of time. If you will not be able to attend class for a test, you need to make prior arrangements to take the test at another time. If you are sick on the day of a test, you must contact the instructor by phone or email **before the start class**. If you do not show up for a test without notifying the instructor, you will receive a zero for that test.

Final Exam: It is important to learn the material in this class and to retain that material. So, a comprehensive final exam will be given during finals week (Wednesday, Dec. 14, 11:00am-12:50pm).

Homework: “Practice makes perfect” is particularly true in mathematics. Therefore, it is critical that you do your homework and put in a good effort in using that homework as a way to learn and practice the material. You will submit your assignments on the MyMathLab site for this course.

Late Work: It is important that you stay up to date on the work in this class. So, you need to submit your homework on time. Late homework will not receive full credit.

Worksheets and In-Class Activities: Often in class, there will be a worksheet assigned to follow up on the concepts that we are practicing in the course. These worksheets will be collected and graded. It is important that you work through these worksheets and ask for help as necessary. Also, at times, there will be other in-class activities that are also collected and graded. If you miss one of these activities, you will need to obtain the work from the instructor and submit the worksheet by the following class period to receive full credit.

Attendance and participation: It is important that you come to class every day and *participate actively*. Arrive on time. Late students not only miss important material but also distract the rest of the class.

Learning mathematics is not a passive activity. As we progress through topics, students will be given problems in class to practice new skills. During this time, all students are expected to have paper out and to be actively working on these math problems with the rest of the class.

If you miss more than four class sessions, you may be dropped. (However, if you decide to drop the course, it is **your** responsibility to make the drop official in the Administrations and Records Office or else possibly receive a grade of F.)

Accommodations for Students with Disabilities:

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.

Please turn off all electronic devices before the start of every class period.

The use of these devices for calls, texts, or other activities is prohibited without previous approval from the instructor.

Add Date:	Tuesday, October 25 th	Last day to add this course
Drop Date:	Wednesday, November 9 th	Last day to drop this course
Holidays:	Thursday, November 24 th	Thanksgiving Holiday

Course Outline:

Unit A:	Chapters 1 and 9 – Equations and Inequalities	Weeks 9-12
Unit B:	Chapter 2 –Graphs and Functions	Weeks 12-13
Unit C:	Chapters 3 and 4 – Polynomial, rational, inverse, exponential, logarithmic functions	Weeks 13-15
Unit D and Final Exam	Chapters 5-8 –Trigonometry and Review	Weeks 16-18

Course Content:

Student Learning Outcomes:

Upon completion of this course, students will be able to:

1. Produce and interpret graphs of various functions and relations.
2. Apply techniques to solve various types of equations, systems of equations, and inequalities.
3. Use the topics of the course to model real-world situations.
4. Apply techniques to simplify, and manipulate various expressions using the skills obtained in the course.
5. Prove and derive mathematical statements using various methods.

Objectives:

In the process of completing this course, students will:

1. Graph functions and relations in rectangular coordinates and polar coordinates;
2. Synthesize results from the graphs and/or equations of functions and relations;
3. Apply transformations to the graphs of functions and relations;
4. Recognize the relationship between functions and their inverses graphically and algebraically;
5. Solve and apply equations including rational, linear, polynomial, exponential, absolute value, radical, and logarithmic, and solve linear, nonlinear, and absolute value inequalities;
6. Solve systems of equations and inequalities;
7. Apply functions to model real world applications;
8. Identify special triangles and their related angle and side measures;
9. Evaluate the trigonometric function of an angle given in degree and radian measure;
10. Manipulate and simplify a trigonometric expression;
11. Solve trigonometric equations, triangles, and applications;
12. Graph the basic trigonometric functions and apply changes in period, phase and amplitude to generate new graphs;
13. Prove trigonometric identities

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.