Reedley College Math 4A Syllabus

Course: Math 4A Trigonometry Schedule number: 78065 Instructor: Ron Reimer E-mail: ron.reimer@scccd.com Phone: (559)638-3641 ext. 3355 Text: Trigonometry Sixth Edition, Charles P. McKeague, ISBN 978-0-495-47521-7 Text and Access Code ISBN 978-0-495-10835-1 Text Only ISBN 978-0-495-38258-4 Solutions Manuel

Meeting times: MTWTHF, 8:00 AM – 10:10 AM, FEM 4E, 6/29/09 – 8/7/09 Important dates: Fri 7/3/09 Independence day, No Class 7/17/09 Last day to drop this course without receiving a grade Fri. 8/7/09 Final Examination

Course Description: This course is designed to meet the pre-requisite requirements and prepare the student for higher mathematics courses such as Calculus. Trigonometry is the study of triangles.

Course Objectives

- A. Apply the trigonometric functions to solve for the part of a triangle.
- B. Evaluate trigonometric functions of both acute and obtuse angles.
- C. Solve problems involving vectors.
- D. Apply the concept of radian measure to circular functions.
- E. Graph the circular functions.
- F. Apply trigonometric identities to algebraic expressions.
- G. Solve trigonometric equations.
- H. Apply the concept of polar coordinates to algebraic operations and graphs.
- I. Apply computing and graphing technology.

Course Outcomes

A. Identify the appropriate function to use and then apply it to solve for the sides or angles of a triangle.

B. Find both approximate and exact trigonometric function values of both acute and obtuse angles through the use of reference angles and special angle values.

C. Set up, sketch and analyze vector application problems

D. Convert angles from degree measure to radian measure and vice-versa; evaluate trigonometric functions of angles in radian measure and apply the concept of radian measure to application problems involving linear and angular velocity.

E. Graph the fundamental graphs of sine, cosine and tangent, identifying their characteristics such as amplitude, period and phase shifts from their equations.

F. Apply the trigonometric identities such as the Pythagorean, sum and difference, cofunction, double angle and half angle identities to algebraic expressions to either verify or simplify the expression.

G. Solve trigonometric equations through the use of inverse trigonometric functions.

H. Apply the concept of polar coordinates to graphing, complex numbers and binomial expansion.

I. Use graphing calculator and/or computer technology to evaluate trigonometric functions and analyze graphs of the trigonometric functions.

Attendance: In order to maintain continuity of subject matter regular attendance is imperative in any academic course. Students, who do not attend class consistently, learn less and typically earn lower grades than students who do attend class consistently. You are expected to attend all class sessions, arrive on time and stay for the entire session. If you accumulate 3 or more absences before July 17, 2009, you will be dropped from this course. Do not be late to class. If you are not present when role is taken you will be marked absent.

Grading: Grades will be based on four sets of criteria: Homework, Midterm exams, Class participation and a Final exam.

Homework: Homework will be scored based on completeness and neatness. To be complete you must write down all problems (except word problems), show all necessary steps to solve the problem and show your solution. Please use standard 8.5" x 11" paper (no spiral notebook paper please), write your work in pencil and staple multiple papers together in the upper left hand corner. Record the **class name**, **your name**, **chapter**, **section and problem numbers** on each page of your homework assignment. <u>No late homework assignments will be accepted</u>. Homework will make up twenty-two percent of your grade.

Midterm Exams and quizzes: The midterm exams and quizzes will make up the majority of your grade in this course. In most cases a midterm exam will follow the completion of a chapter in the textbook and cover the material discussed in that chapter only. If appropriate a midterm exam may cover more or less than one chapter in the text. The material you will be held accountable for on an exam will be clearly announced before each exam. Your lowest midterm exam score will not be calculated in your overall grade. Midterm exams and quizzes will make up sixty-five percent of your grade.

Class Participation: In this course class participation is defined as taking notes, being involved in class discussions, asking questions, etc. Each student is awarded 50 class participation points at the beginning of the semester. Anytime you are not participating in class due to lack of attention, causing a disruption or tardiness you will

lose 3 class participation points and 5 for an unexcused absence. Class participation will make up three percent of your grade.

Final Exam: There will be a comprehensive final exam at the end of this course. The final exam <u>may not be dropped</u> from your grade. The final exam will make up 10% of your grade. The final exam date for this course is Friday August 1, 8:00 – 10:10 AM.

Grading scale:

Total Percentage Points	Grade
90<100	A
80<90	В
65<80	С
50<65	D
0<50	F

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.

A blackboard website will be maintained for this course. The web address is: <u>http://blackboard.reedleycollege.edu</u>

User Name = Your student I.D. number Password = Your student I.D. number

To enroll in Webassign go to <u>www.webassign.net</u> Click on "LOG IN" Click on "I have a Class Key" Enter the Class Key: Reedley 1856 2468 Click on "Yes, this is my class" (if the information is correct) Follow the onscreen instructions