Course Number: MATH 1316
Course Title: Trigonometry
Course Director: **James Tison, Ph.D.**
Office Hours: T Th 1-2PM
Lab Director/Instructors: N/A

Trimester Credit Hours: 3
Total Contact Hours Per Trimester: 44

Lab Hours Per Week: N/A

Lab Contact Hours/Trimester: N/A

COURSE DESCRIPTION:

This course is a functional approach to college trigonometry. The course is designed to meet three hours of the 6 hours of mathematics required for the undergraduate degree in anatomy. It is also a prerequisite for admission to Physics I. The course covers circular and trigonometric functions and their inverses, vectors, identities, trigonometric equations and other transcendental functions.

The student will meet for lecture 6 hours per week for 7½ weeks.

GENERAL APPROACH TO TEACHING:

Trigonometric concepts will be presented and relevant mathematical formulations developed with a strong emphasis on problem solving and applications. Participatory involvement in the problem solving is encouraged.

ESTIMATE OF STUDENT WORKLOAD:

A minimum of 6-10 hours per week out of class is recommended for a student to achieve a grade of B.

LEARNING OUTCOMES:

1) Learn the definitions and the usage of the six trigonometric functions so as to be able to apply these to a range of practical problems in everyday life and the natural sciences
2) Learn the characteristics of triangles, especially the applications of the Pythagorean theorem.
3) Learn the measures of angular quantities and their usage in determining the behavior of static objects and objects in motion.
4) Learn vectors and their usage in describing physical phenomena, such as velocity, forces, etc .
5) Learn the principles and usage of graphing of mathematical functions so as to analyze and interpret the characteristics of the functions.
6) Learn trigonometric identities so as to simplify trigonometric calculations when solving equations, including the Laws of Sines and Cosines.

ASSESSMENT:

The four exams will consist of multiple choice, multiple response, short answer and essay type questions. Each problem has a value of 5 points. Partial credit (1-4 pts) will be given based on work shown for each problem.

PREREQUISITES: Enrollment in Parker University.

REQUIRED TEXTBOOKS: Trigonometry, Sixth Edition, by McKeague, Turner

RECOMMENDED ADDITIONAL TEXTBOOKS: None

SUPPLIES: Scientific Calculator with trigonometric functions.

GRADING SYSTEM:

Evaluation is an integral part of the educational process and is used as an educational tool to help students identify problem areas, to recognize and reward achievement, and to identify students who are unable to meet the rigors of the curriculum. Final course grades and their interpretation are listed below:

Grade	Numerical Value	Grade Point Average	Interpretation of Academic Achievement
A	89.5 – 100	4.0	Excellent
B	79.5 - 89.49	3.0	Above Average
C	69.5 - 79.49	2.0	Satisfactory
F	69.49 or Below	0.0	Unacceptable

This grading scale is strictly adhered to. There are NO exceptions.

Four exams will be given equally weighted and worth 90% of final grade. Homework assignments will be graded as in-class quizzes, the number tbd , accounts for 10% of final grade.

LABS: N/A

OPEN LABS: NA

90/90 RULE:

This course offers the student the benefits of a 90/90 policy. It is designed to reward the diligent student with an end of the course bonus provided they meet the qualifications of the policy. A student who has a 90 or better average in this course (for all exams, lab practicals and lab quizzes) and who has attended class 90% or more of the class meetings, including labs, will have the option of being exempted from taking the final exam. A student wishing to be exempt from the final exam must submit this request in writing in person to the course director by the Thursday of the last day of regular classes. Permission to be exempt from the final exam will be given on a case by case basis and will be given at the time of presentation of the written request.

EXTRA CREDIT: Extra credit is not given

A complete listing of all Academic policies is found on the MyParker Website/Academic Home Page/Common Policies:

Absences for Religious Holidays
Academic Dishonesty
Academic Promotion, Probation and Dismissal Policy
Appeals
Assistance and Accommodations
Attendance Policy
Audio/Video Taping
Cell Phones and Electronic Devices in Class
Classroom Behavior
Communications
Computer Usage
Examinations (Make up Exams/Lab Practicals)
Altering Grades on Exams
Exam Review
Final Examinations
Grading System
Late Instructors to Lecture/Lab
Missed Exam Policy
Professional Decorum
Special Needs Consideration
Student Bereavement Policy
Excused Absences

DISCLAIMER

The lecture outlines contained in the lecture booklet are NOT intended to represent the entire content of the course. A lecture outline is intended to be a guide to the lecture. The responsibility of the instructor is to follow the outline, expand the concepts and give explanation and illustrations to clarify content. The role of the student is to attend lecture and take notes over material presented by the lecturer that explains and illustrates the material listed in the outline. It is also the responsibility of the student to question the instructor if explanations and illustrations are not clearly presented or understood.

The instructors take no responsibility for the accuracy or completeness of old notes, quiz questions or exam questions that students may purchase, acquire from off of the internet or be given by previous students.

IMPORTANT NOTE:

The provisions contained in this syllabus do not constitute a binding contract between the student and the Parker University. These provisions may be changed at any time and for any reason at the discretion of the Course Director. When it is necessary to make changes to this document, appropriate notice (at least one week, if at all possible) will be given to the student(s).