Mathematics Department

MATH 127: PRE-CALCULUS II SYLLABUS

Catalog Course Description

Continuation of Math 126. Includes the study of circular functions, their graphs and applications; analytic trigonometry; the coordinate geometry of lines and conics; solving systems of equations; matrices; mathematical induction. The combination of Math 126 and Math 127 is equivalent to UNR's Math 128.

Pre-requisites

C or better in MATH 126 or equivalent or qualifying ACCUPLACER, ACT/SAT test results. A TI-83, TI-84 or better graphics calculator is required for this course.

Course Outcomes for Assessment

- **Outcome 1**: Students will demonstrate the ability to solve equations involving trigonometric values.
- **Outcome 2**: Students will demonstrate the ability to prove trigonometric identities.
- **Outcome 3**: Students will be able to solve Polar Equations.

Course Objectives

Successful students will be able to: relate the coordinates on the unit circle to the angle using the sine, cosine, tangent, and their reciprocal functions; compute the values of the trigonometric function of special/general angles; analyze and relate data, graphs, and formulas of the trigonometric functions; compute and apply the inverse trigonometric functions. Solve trig equations; solve right/oblique triangles; apply trigonometric identities; manipulate and apply vectors; use polar coordinates to represent curves with equations and graphs; manipulate complex numbers in trigonometric and exponential forms; analyze and relate graphs and formulas of conic sections; apply concepts of modeling in mathematics; use a graphing calculator to solve problems; describe and explain problem analyzes orally and in writing; plan and carry out a project with a team, using teamwork skills.

ADA Statement

Any student who feels s/he may need an accommodation based on the impact of a disability should contact me privately to discuss your specific need and contact the Disability Resource Center at 775-673-7277 in RDMT 315 to coordinate reasonable accommodations for students with documented disabilities.

Student Conduct Policy

Students are responsible for complying with Nevada System of Higher Education (NSHE) and college guidelines. Use of violence, force, repeated use of obscene or abusive language, coercion, threats, intimidation, disorderly, lewd, or indecent conduct, harassment, or any similar conduct that threatens the quality of this learning environment in the classroom will result in immediate removal from the class and possible criminal arrest and prosecution.