

MESABI RANGE COMMUNITY & TECHNICAL COLLEGE

Course Outline

Course Title: Trigonometry

Submitted By: Math
Department

Semester Course Prefix and Number: MATH 1547

Approval Date:

Old Quarter Course Prefix and Number: MATH 119

Revision Date: December 2012

Number of Credits: 2

Number of Lecture Credits: 2

Semester(s) Offered: F, Sp

Number of Lab Credits: Number of Lab Hours:

Class Size: 35

Number of Studio/Demonstration/Internship Credits:

Negotiated by AASC on:
(date)

Course Purpose Code:

_____ 0 – Developmental Courses

_____ 1 – Non-transferable

_____ 2 – Technical course related to career programs

_____ 3 – College course which has the primary goal of applying certain concepts (e.g. vocal ensemble)

X _____ 4 – Other college course not considered a part of MNTC (e.g. computer science, health, physical education)

_____ 5 – Course which is intended to fulfill the Minnesota Transfer Curriculum (MNTC) requirements or intended for transfer.

_____ 9 – Continuing Education/Customized Training specialized credit course (not occurring in 0-5)

Catalog Description:

This course is the study of angles in degrees and radian measure; trigonometric functions of angles in a coordinate system and in triangles; solutions of triangles and applications. Students will examine solutions of trigonometric identities and equations and graphs of trigonometric functions and inverses. Students will be introduced to vector notation and analysis and polar coordinates.

Prerequisites and/or recommended entry skills/knowledge:

Course Prerequisite(s): None

Reading Prerequisite: None

Composition Prerequisite: None

Mathematics Prerequisite: Math 0096

Career Programs and Transfer Majors Accessing this Course:

Mathematics and Engineering

Minnesota Transfer Curriculum Goal(s) partially met by this course if applicable:

(Notes: No more than two goals may be met by any one course. Curriculum Committee review and the Chief Academic Officer's approval are required.)

0. X _____ None

1. _____ Communications

2. _____ Critical Thinking

3. _____ Natural Sciences

4. _____ Mathematical/Logical Reasoning

5. _____ History and the Social and Behavioral Sciences

6. _____ The Humanities and Fine Arts

7. _____ Human Diversity

8. _____ Global Perspectives

9. _____ Ethical and Civic Responsibility

10. _____ People and the Environment

Learning Outcomes: (including any relevant competencies listed in the Minnesota Transfer Curriculum)

Upon completion of this course, the student will demonstrate the ability to:

- Use trigonometric functions to solve triangles.
- Graph trigonometric functions.
- Prove trigonometric identities.
- Solve trigonometric equations.

Student Assessment Methods:

Student learning will be assessed via homework, quizzes, and exams.

Use of Instructional Technology: (includes software, interactive video and other instructional technologies):

The use of a TI-89 is recommended but not required.

Additional Special Information: (special fees, directives on hazardous materials, etc.)

Transfer Information: (Please list colleges/majors that accept this course in transfer.)

Course Outline Revision History:

Approvals:

Body	Representative Signatures	Date
Curriculum Committee		
Faculty Association		
Academic Affairs Standards Committee		
Chief Academic Officer		

Distribution: Original – Instructional Services
Copies: Transfer Specialist, Originating Faculty Member, Records
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