Course Outline

Course Title: Technical Math
Submitted By: Math Dept.
Semester Course Prefix and Number: GEDM 1165
Approval Date: 
Old Quarter Course Prefix and Number: GSDM 1507
Revision Date: May 2014

Number of Credits: 2
Number of Lecture Credits: 2
Semester(s) Offered: All
Number of Lab Credits: 0
Number of Lab Hours: 0
Class Size: 30
Number of Studio/Demonstration/Internship Credits: 0

Negotiated by AASC on: (date) Spring 2014

Course Purpose Code:
0 – Developmental Courses
X 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)
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 includes a problem solving approach to technical applications using geometric and algebraic methods.

Prerequisites and/or recommended entry skills/knowledge:
Course Prerequisite(s):
Reading Prerequisite:
Composition Prerequisite:
Mathematics Prerequisite:

Career Programs and Transfer Majors Accessing this Course:
PAS, Graphics, IMT, Carpentry

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. AASC review and the Chief Academic Officer’s approval are required.)
0. 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 be able to:

- Generate equivalent algebraic expressions; use algebraic properties to evaluate and manipulate expressions
- Represent real-world mathematical situations using algebraic and geometric methods
- Compose and decompose two- and three-dimensional figures; use decomposition to determine the perimeter, area, surface area and volume of various figures
- Calculate measurements of plane and solid geometric figures; understand that quantities associated with physical measurements must be assigned units; apply such units correctly in expressions, equations and problem solutions that involve measurements; and convert between measurement systems.
- Apply properties of geometric figures, using trigonometric functions to solve real-world and mathematical problems

Student Assessment Methods:

Attendance/participation in class
In-class assignments
Homework assignments
Quizzes/tests

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

A scientific calculator is strongly recommended.

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

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

Affiliated Mesabi Range College Courses and Programs:

Approvals:

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Distribution: Original – Instructional Services
Copies: Transfer Specialist, Originating Faculty Member, Records
Revised: December 2012