

Minnesota State College Southeast

MATH 1015: Geometry

A. COURSE DESCRIPTION

Credits: 2

Lecture Hours/Week: 2

Lab Hours/Week: *.*

OJT Hours/Week: *.*

Prerequisites:

This course requires any of these five prerequisite categories

1. Both of these groups

1. Any one of these four

MATH 0544 - Pre-College Math (4 cr)

MATH 0533 - Pre-College Math (3 cr)

MATH 0522 - Pre-College Math (2 cr)

MATH 0555 - Pre-Geometry

And

2. Any one of these five

FYEX 1000 - College Success Strategies

A score of 18 on test ACT English

A score of 21 on test ACT Reading

A score of 78 on test Accuplacer Reading Comprehension

A score of 250 on test Accuplacer NG Reading

Or

2. A score of 1 on test Accuplacer College Level Math

Or

3. A score of 86 on test Accuplacer Elementary Algebra

Or

4. A score of 230 on test Accuplacer NG Advanced Algebra Functions

Or

5. A score of 20 on test ACT Math

Corequisites: None

MnTC Goals: None

This course presents algebra, geometry and trigonometry concepts. In addition, related practical application problems will be introduced. This course is not intended for transfer but satisfies the diploma level option. (Prerequisite: Pre-College Math and FYEX1000 or Elementary Algebra Accuplacer Score of 86 or Higher) (2 credits: 2lecture/0 lab)

B. COURSE EFFECTIVE DATES: 07/27/2016 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. General and Literal Equations
2. Direct and Indirect Variation
3. Graphing Linear Equations
4. Area and Volume of 2D and 3D Shapes
5. Right Triangle Trigonometry
6. Law of Sines and Cosines
7. Measurement Systems

D. LEARNING OUTCOMES (General)

1. Compute powers of 10 involving scientific notation
2. Solve equations involving fractions, nested parentheses, and rearrangement of variables
3. Apply principles of direct and indirect variation
4. Graph linear equations with two variables
5. Solve slope and equations of a line from graphical applications
6. Compute areas and volumes of triangles, quadrilaterals, circles, spheres, and other polygons
7. Compute area and volume formulas of various polygons in application problems
8. Use trigonometric ratios to find angles and sides of a triangle
9. Use Law of Sines and Cosines to find angles and sides of a triangle
10. Compute trigonometric formulas in application problems
11. Convert between the metric and U.S. customary measurement systems

E. Minnesota Transfer Curriculum Goal Area(s) and Competencies

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

This course was previously MATH 1566.