

# Minnesota State College Southeast

## MATH 1218: Liberal Arts Mathematics

### A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: 3

Lab Hours/Week: \*.\*

OJT Hours/Week: \*.\*

Prerequisites:

This course requires any of these eight prerequisites

MATH 1555 - Algebra

MATH 1025 - Algebra

MATH 1020 - Special Topics in Mathematics

MATH 1577 - Special Topics in Mathematics

MATH 1015 - Geometry

MATH 1566 - Geometry and Trigonometry

A score of 50 on test Accuplacer College Level Math

A score of 22 on test ACT Math

Corequisites: None

MnTC Goals: Goal 04 - Mathematical/Logical Reasoning

This course is designed for students who do not intend to continue on to higher-level mathematics courses. Topics will be selected to develop quantitative reasoning and an appreciation for diverse applications of contemporary mathematics. Refer to the course outline for a list of topics the instructor may choose from. (Meets MnTC Goal 4) (Prerequisite: A minimum score of 50 in the college level math section of the ACCUPLACER basic skills test or a minimum score of 22 on the math subject area of the ACT test or successful completion of MATH1025 or MATH1020 or MATH1015) (3 credits: 3 lecture/0 lab)

**B. COURSE EFFECTIVE DATES:** 07/20/2016 - Present

### C. OUTLINE OF MAJOR CONTENT AREAS

1. Numeration Systems
2. Problem Solving Strategies
3. Logical Connections
4. Hidden Assumptions

### D. LEARNING OUTCOMES (General)

1. Problem solving strategies
2. Set theory
3. Logic
4. Numeration systems and number theory
5. Geometry
6. Mathematics of graphs
7. Mathematics of finance
8. Combinatorics
9. Probability
10. Statistics
11. Apportionment and voting

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

Goal 04 - Mathematical/Logical Reasoning

1. Illustrate historical and contemporary applications of mathematical/logical systems.
2. Clearly express mathematical/logical ideas in writing.
3. Apply higher-order problem-solving and/or modeling strategies.

**F. LEARNER OUTCOMES ASSESSMENT**

As noted on course syllabus

**G. SPECIAL INFORMATION**

This course was previously MATH 2518)