

## COURSE OUTLINE

Revision: Marjie Vittum-Jones, April 2008

DEPARTMENT:	Academic Programs
CURRICULUM:	Developmental Mathematics
COURSE TITLE:	Geometry I
COURSE NUMBER:	MATH 086
TYPE OF COURSE:	College Preparatory
Special Requirement Met:	None
AREA(S) OF KNOWLEDGE:	None
COURSE LENGTH:	1 quarter
CREDIT HOURS:	5
LECTURE HOURS:	55
LAB HOURS:	0
CLASS SIZE:	25
PREREQUISITES:	Math 085 with a 2.0 or better or appropriate placement score.

## COURSE DESCRIPTION:

This is the first quarter of a two-quarter course that covers the foundations of geometry, construction, proofs and applications involving quadrilaterals, lines, polygons, circles, solid and analytical geometry and an introduction to right triangle trigonometry.

## STUDENT LEARNING OUTCOMES ADDRESSED:

1. Communication – Read and listen actively to learn and communicate.

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#### STUDENT LEARNING OUTCOMES CONTINUED:

2. Computation – Use arithmetic and other basic mathematical operations as required by program of study. Apply quantitative skills for personal, academic, and career purposes. Identify, interpret and utilize higher level mathematical and cognitive skills (for those students who choose to move beyond the minimum requirements).
3. Critical thinking and problem-solving – Think critically in evaluating information, solving problems, and making decisions.
4. Personal responsibility – Be motivated and able to continue learning and adapt to change. Value one's own skills, abilities, ideas and art. Take pride in one's work. Time management, organization and regular attendance.
5. Technology – Select and use appropriate technological tools for personal, academic and career tasks.

#### GENERAL COURSE OBJECTIVES:

The student will do most or all of the following:

1. Demonstrate success on evaluations over the topics studied.
2. Be able to work with the basic geometric concepts.
3. Work to build a foundation of geometric skills and understanding for subsequent mathematical classes.
4. Use basic algebra skills to solve geometry problems.
5. Develop skills in basic geometric construction and proofs
6. Develop skills in solving applications
7. Develop regular attendance and time management/organization skills.

#### TOPICAL OUTLINE:

- I. Foundations of Geometry
- II. Triangles
- III. Parallel lines
- IV. Polygons
- V. Quadrilaterals
- VI. Circles
- VII. Solid geometry
- VIII. Analytic geometry
- IX. Basic trigonometry

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TOPICAL OUTLINE CONTINUED :

The sequence of the topics for math 086/087 may vary as determined by the math department but all the topics listed in the District Catalog will be covered in the full two quarter sequence.

APPROX HOURS: 55

REVISED BY: M. Vittum-Jones and O. Shatunova  
DATE: April 2008

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SLO #	Included in Course Objective Number	SSCC Student Learning Outcomes
SLO 1.1	1 - 7	Communication - Read and listen actively
SLO 1.2		Communication - Speak and write effectively
SLO 2.1	1 - 7	Computation - Use mathematical operations
SLO 2.2	1 - 7	Computation - Apply quantitative skills
SLO 2.3	1 - 7	Computation - Identify, interpret, and utilize higher level mathematical and cognitive skills
SLO 3.1		Human Relations - Use social interactive skills to work in groups effectively
SLO 3.2		Human Relations - Recognize the diversity of cultural influences and values
SLO 4.1	1 - 7	Critical Thinking and Problem Solving -
SLO 5.1	1 - 7	Technology - Select and use appropriate technological tools
SLO 6.1	1 - 7	Personal Responsibility - Be motivated and able to continue learning and adapt to change
SLO 6.2	1 - 7	Personal Responsibility - Value one's own skills, abilities, ideas and art
SLO 6.3	1 - 7	Personal Responsibility - Take pride in one's work
SLO 6.4		Personal Responsibility - Manage personal health and safety
SLO 6.5	1 - 7	Personal Responsibility - Be aware of civic and environmental issues
SLO 7.1	1 - 7	Information Literacy - Access and evaluate information
SLO 7.2	1 - 7	Information Literacy - Use information to achieve personal, academic, and career goals, as well as to participate in a democratic society

PREPARED BY: M. Vittum-Jones and O. Shatunova  
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