

# Dakota County Technical College

## MATS 1350: Math for Liberal Arts

### A. COURSE DESCRIPTION

Credits: 4

Lecture Hours/Week: 4

Lab Hours/Week: \*.\*

OJT Hours/Week: \*.\*

Prerequisites:

This course requires either of these prerequisites

MATS 0600 - Intermediate Algebra

A score of 76 on test Accuplacer Elementary Algebra

Corequisites: None

MnTC Goals: Goal 04 - Mathematical/Logical Reasoning

A college level course exploring the uses of mathematics in society. Major topics include the design of surveys and clinical trials; counting, probability, and statistics, including the bell curve; voting methods; distribution of power; fair division; apportionment; route planning; project scheduling; patterns of growth; and financial calculations (compound interest). Optional topics include networks, spiral growth, symmetry, and fractals.

MnTC Goals: Goal 04 - Mathematical/Logical Reasoning

Prerequisites: MATS 0600 Intermediate Algebra

**B. COURSE EFFECTIVE DATES:** 06/02/2003 - Present

### C. OUTLINE OF MAJOR CONTENT AREAS

1. Descriptive Statistics
2. Social Choice
3. Management Science
4. Optional Topics

### D. LEARNING OUTCOMES (General)

1. Think critically about statistical claims
2. Tread carefully in the world of consumer credit
3. Appreciate the historical contexts of mathematics
4. Appreciate the wide variety of applications of mathematics
5. Appreciate that mathematics does not always yield only one *correct* answer
6. Distinguish between fair and envy-free

### 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**

None noted