

MESABI RANGE COLLEGE

Course Outline

Course Title: Algebra Through Data Use
Semester Course Prefix and Number: Math 0090
Old Quarter Course Prefix and Number:

Submitted By: Math Dept.
Approval Date:
Revision Date: June 5, 2014

Number of Credits: 3
Semester(s) Offered:
Class Size: 25
Negotiated by AASC on:
(date)

Number of Lecture Credits: 3
Number of Lab Credits: Number of Lab Hours:
Number of Studio/Demonstration/Internship Credits:

Course Purpose Code:

- 0 – Developmental Courses
 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 is designed to develop algebra skills using data analysis. Students will be expected to develop an understanding of algebraic functions and formulas by analyzing data and reporting results using a spreadsheet.

Prerequisites and/or recommended entry skills/knowledge:

Course Prerequisite(s): Placement by CPT score.

Reading Prerequisite:

Composition Prerequisite:

Mathematics Prerequisite: Placement by CPT score.

Career Programs and Transfer Majors Accessing this Course:

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. <input checked="" type="checkbox"/> None | 6. <input type="checkbox"/> The Humanities and Fine Arts |
| 1. <input type="checkbox"/> Communications | 7. <input type="checkbox"/> Human Diversity |
| 2. <input type="checkbox"/> Critical Thinking | 8. <input type="checkbox"/> Global Perspectives |
| 3. <input type="checkbox"/> Natural Sciences | 9. <input type="checkbox"/> Ethical and Civic Responsibility |
| 4. <input type="checkbox"/> Mathematical/Logical Reasoning | 10. <input type="checkbox"/> People and the Environment |
| 5. <input type="checkbox"/> History and the Social and Behavioral Sciences | |

Learning Outcomes: (including any relevant competencies listed in the Minnesota Transfer Curriculum)

Upon completion of this course, the student will be able to:

- Demonstrate the ability to investigate solutions to mathematical and real-world problems using patterns, functions, algebra and technology.
- Demonstrate the ability to interpret solutions to mathematical and real-world problems using patterns, functions and algebra.
- Demonstrate the ability to communicate solutions to mathematical and real-world problems using patterns, functions, algebra and technology.
- Demonstrate the ability to apply probability methods for representing and interpreting data and communicating results, using technology when needed.
- Demonstrate the ability to apply statistical methods for representing and interpreting data and communicating results, using technology when needed.

Student Assessment Methods:

Portfolio (notebook)
Quizzes
Homework
Exams

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

This course suggests the use of technology with Excel and mastery-based homework and testing system software.

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:

| Body | Representative Signatures | Date |
|--------------------------------------|---------------------------|------|
| Faculty Association | | |
| Academic Affairs Standards Committee | | |
| Chief Academic Officer | | |

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