

MESABI RANGE COMMUNITY & TECHNICAL COLLEGE

Course Outline

Course Title: Advanced Algebra
Semester Course Prefix and Number: MATH 0096
Old Quarter Course Prefix and Number:

Submitted By: Monica Pavek
Approval Date:
Revision Date: Dec. 5, 2013

Number of Credits: 4
Semester(s) Offered:
Class Size: 25
Negotiated by AASC on:
(date)

Number of Lecture Credits: 4
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 a review of exponents and radicals. It is the study of rational expressions and equations, quadratic equations and inequalities, graphing techniques and functions, exponential and logarithmic functions.

Prerequisites and/or recommended entry skills/knowledge:

Course Prerequisite(s): MATH 0095
Reading Prerequisite: None
Composition Prerequisite: None
Mathematics Prerequisite: Placement by CPT score or a grade of "C" or higher in Math 0095.

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.)

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| 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 problem-solving skills by solving word problems.
- Demonstrate proficiency in linear functions and properties of their graphs.
- Demonstrate proficiency in quadratic functions and properties of their graphs.
- Demonstrate proficiency in solving equations involving polynomial and rational expressions.
- Demonstrate proficiency in polynomial and rational functions and properties of their graphs.
- Demonstrate proficiency in simplifying and solving exponential and logarithmic expressions and equations.

Student Assessment Methods:

Portfolio (notebook)
Quizzes
Homework
Exams

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

This course may use technology such as a 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:

This course is a developmental math course.

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