

Washtenaw Community College Comprehensive Report

MTH 169 Intermediate Algebra Effective Term: Winter 2022

Course Cover

College: Math, Science and Engineering Tech

Division: Math, Science and Engineering Tech

Department: Math & Engineering Studies

Discipline: Mathematics

Course Number: 169

Org Number: 12200

Full Course Title: Intermediate Algebra

Transcript Title: Intermediate Algebra

Is Consultation with other department(s) required: No

Publish in the Following: College Catalog , Time Schedule , Web Page

Reason for Submission: Three Year Review / Assessment Report

Change Information:

Consultation with all departments affected by this course is required.

Rationale: No changes are necessary given the results of the Fall 2020 Assessment Report. All outcomes were met by the students.

Proposed Start Semester: Winter 2022

Course Description: Intermediate Algebra is the second course in the algebra sequence. In this course, students will study the following functions: quadratic, rational, radical, logarithmic and exponential. A graphing calculator is required for this course. See the time schedule for the current brand and model. Successful completion of this course with a minimum grade of "C" will raise your Academic Math level to 4.

Course Credit Hours

Variable hours: No

Credits: 4

Lecture Hours: Instructor: 60 **Student:** 60

Lab: Instructor: 0 **Student:** 0

Clinical: Instructor: 0 **Student:** 0

Total Contact Hours: Instructor: 60 **Student:** 60

Repeatable for Credit: NO

Grading Methods: Letter Grades

Audit

Are lectures, labs, or clinicals offered as separate sections?: NO (same sections)

College-Level Reading and Writing

College-level Reading & Writing

College-Level Math

Level 3

Requisites

General Education

Degree Attributes

MACRAO Science & Math

General Education Area 3 - Mathematics

Assoc in Applied Sci - Area 3

Request Course Transfer**Proposed For:**

Eastern Michigan University
Jackson Community College
Michigan State University
Western Michigan University

Student Learning Outcomes

1. Sketch and transform accurate graphs of quadratic, rational, radical, exponential and logarithmic functions.

Assessment 1

Assessment Tool: Outcome-related common departmental exam questions

Assessment Date: Winter 2022

Assessment Cycle: Every Three Years

Course section(s)/other population: All

Number students to be assessed: All

How the assessment will be scored: A five-point rubric will be used to score each question

Standard of success to be used for this assessment: 70% of students must score at least 75% (3.75 of 5) on the outcome related questions

Who will score and analyze the data: A committee of department members, led by the course mentor, will score the questions and analyze the data

2. Simplify expressions and solve problems involving functions and equations using algebraic concepts.

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Course Objectives

1. Graph the following parent functions: quadratic, rational, radical, exponential and logarithmic.
2. Graph the translations of the following parent functions: quadratic, rational, radical, exponential and logarithmic.
3. Solve quadratic, rational, radical, exponential and logarithmic equations.
4. Factor quadratic expressions.
5. Simplify, add, subtract, multiply and divide quadratic, rational, radical, exponential and logarithmic expressions.
6. Simplify, rationalize, add, subtract, multiply and divide radical expressions including complex numbers.

New Resources for Course

Course Textbooks/Resources

Textbooks

Miller, J. O'Neill, M. Hyde, N.. *Intermediate Algebra*, Fifth ed. McGraw-Hill, 2018

Manuals

Periodicals

Software

Equipment/Facilities

Level III classroom

<u>Reviewer</u>	<u>Action</u>	<u>Date</u>
Faculty Preparer: <i>Brenda Foster</i>	<i>Faculty Preparer</i>	<i>Aug 19, 2021</i>
Department Chair/Area Director: <i>Lawrence David</i>	<i>Recommend Approval</i>	<i>Aug 20, 2021</i>
Dean: <i>Victor Vega</i>	<i>Recommend Approval</i>	<i>Aug 26, 2021</i>
Curriculum Committee Chair: <i>Randy Van Wagnen</i>	<i>Recommend Approval</i>	<i>Nov 05, 2021</i>
Assessment Committee Chair: <i>Shawn Deron</i>	<i>Recommend Approval</i>	<i>Nov 10, 2021</i>
Vice President for Instruction: <i>Kimberly Hurns</i>	<i>Approve</i>	<i>Nov 12, 2021</i>