# Washtenaw Community College Comprehensive Report

# MTH 169 Intermediate Algebra Effective Term: Winter 2018

#### **Course Cover**

**Division:** Math, Science and Engineering Tech

**Department:** Mathematics **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.

**Outcomes/Assessment** 

Rationale: Regular 3-year review based on assessment report.

**Proposed Start Semester:** Winter 2018

**Course Description:** Intermediate Algebra is the second course in the algebra sequence. The following functions will be studied: 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**

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#### **General Education**

#### **Degree Attributes**

Assoc in Applied Sci - Area 3 Assoc in Science - Area 3 Assoc in Arts - Area 3 MACRAO Science & Math

# **Request Course Transfer**

#### **Proposed For:**

Central Michigan University 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: Common departmental exam questions administered to students in all sections

Assessment Date: Fall 2020

Assessment Cycle: Every Three Years Course section(s)/other population: All Number students to be assessed: All

How the assessment will be scored: Members of the math department will collect and score the questions. A four 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 70% on the 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 and translations of same: quadratic, rational, radical, exponential and logarithmic.
- 2. Solve quadratic, rational, radical, exponential and logarithmic equations.
- 3. Factor quadratic expressions.
- 4. Simplify, add, subtract, multiply and divide quadratic, rational, radical, exponential and logarithmic expressions.
- 5. 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, Second ed. McGraw-Hill, 2010

Manuals

Periodicals

Software

## **Equipment/Facilities**

Level III classroom

Reviewer	<b>Action</b>	<b>Date</b>
Faculty Preparer:		
Brenda Foster	Faculty Preparer	Jul 11, 2017
Department Chair/Area Director:		
Lisa Rombes	Recommend Approval	Jul 12, 2017
Dean:		
Kristin Good	Recommend Approval	Jul 13, 2017
Curriculum Committee Chair:		
Lisa Veasey	Recommend Approval	Sep 27, 2017
<b>Assessment Committee Chair:</b>		
Michelle Garey	Recommend Approval	Oct 03, 2017
Vice President for Instruction:		
Kimberly Hurns	Approve	Oct 05, 2017

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