

MAT0055 Developmental Math Modules I

MAT0056 Developmental Math Modules II

Division of Mathematics
Valencia College, West
Campus
1800 S. Kirkman Rd.
Orlando, FL

Outline

- Grant: Developmental Education Redesign & Modularization Mini-Grant, Florida College System
- Guiding Principles & Course Design
- Course Outlines
- Course Scheduling
- Assessment, Diagnostic & Student's Report
- Criteria Performance Standard

Grant

- Develop two modularized self-paced courses:
 - MAT0055-Developmental Math Modules I (1 cr., 1-2 modules)
 - MAT0056-Developmental Math Modules II (2 cr., 3-4 modules)
- Courses offered to:
 - Students with P.E.R.T.-M scores of 110, 111 or 112
 - Students completing Math diagnostic
- According to math diagnostic results, students are placed in MAT0055 or MAT0056
- Grant requirements include the use of the P.E.R.T.-M and Math diagnostic for placement into MAT0055 or MAT0056

Guiding Design Principles

- What is the course format?
 - Module based self-paced course
 - Instructor is a facilitator in students' learning

- What content needs to be in the course?
 - Targeted learning objectives assure an effective learning experience
 - Eliminating instructional activities that do not directly contribute to learning outcomes.
- How can the student use the information?
 - Specific activities provide students the necessary skills to succeed in their Math path.
 - Where possible, relate to real-life experiences through example and application.

Content Design

- MAT0055 & MAT0056 modules were designed using *the Foundations of Math* software. This Pearson product embeds math activities for each topic, from lower level to college level math competencies
- Students practice and test their math skills for specific topics included in each module with various activities for each topic

- Post-test included for each topic
- Module → topics → activities → post-test

Content Design Course Outlines

MAT0055 Developmental Math Modules I

MAT0056 Developmental Math Modules II

- MAT0055 and MAT0056 are listed in the Florida State Course Numbering System but were not listed in Valencia's catalog
- Course outlines were developed and submitted to voting faculty through the college's course outline builder for approval
- The College Curriculum Committee

approved the outlines per committee guidelines

Course Scheduling

- MAT0055 is a five week course followed by MAT1033C in a 10 week course
- MAT 0056 is an eight week course followed by MAT1033C in an eight week course
- Scheduling these parts of term classes enable students to enroll in MAT1033C course schedule, completing a college-level course in the same term

Student Placement: Assessment, Diagnostic & Student's Report

- P.E.R.T.-M taken in Testing and Assessment

- Students who score 110, 111, or 112 on the P.E.R.T-M are contacted by the West Campus Math division and scheduled to take the math diagnostic
- Math diagnostic is taken in the West Campus Testing Center
- Results of math diagnostic used to assign appropriate modules for MAT0055 or MAT0056

**McCann Upper Level Math
Diagnostic
Upper Level Math Diagnostic
Upper Level Math Diagnostic**

**Correlation of Upper Level Math
Competencies with McCann Math
Diagnostic**

Competencies were grouped into five categories:
1) Exponents and Polynomials 2) Factoring 3) Linear Equations 4) Radicals and 5) Graphing

Math Diagnostic Assessment

Passing scores per category

Math Diagnostic Assessment

Passing scores per category

Sample of student results on Math Diagnostic

Example:

- **Exponents and Polynomials** (MDEUCC3,12,15)=11/16
- Factoring (MDEUC18,19)=11/11
- **Linear Equations** (MDEUC8,9, 11)=9/12
- Radicals (MDEUC16,17)=5/6
- **Graphing** (MDEUC10)=2/5

Example of a Correlation table between the “My Foundations of Math” modules and the upper level Math Competencies

Criteria Performance Standard:

- Upon successful completion of the course the student will, with a minimum of 70% accuracy, demonstrate mastery of each module and pass the Valencia College final exam for Developmental Math II.
- MAT0056-Math Diagnostic & MAT0028C Final Exam

THANK YOU

- Russell Takashima -
• rtakashima@valenciacollege.edu
- Claudia Genovese-Martinez –
• cgenovesemartinez@valenciacollege.edu
- Ryan Kasha –
• rkasha@valenciacollege.edu