

Marshall University
MTH 102 Syllabus

Course Title/Number	Preparation for College Mathematics B MTH 102
Semester/Year	Fall 2015
Section/CRN	Section 111/CRN 2996
Days/Time	MW/5:00 p.m. – 6:15 p.m.
Location	MOVC Computer Lab 126
Instructor	Nicholas Bedway
Office	Gullickson Hall 212N
Phone	304-696-3257
E-Mail	bedway@marshall.edu
Office Hours	By Appointment

University Policies	By enrolling in this course, you agree to the University Policies listed below. Please read the full text of each policy by going to www.marshall.edu/academic-affairs and clicking on “Marshall University Policies.” Or, you can access the policies directly by going to www.marshall.edu/academic-affairs/policies/ . Academic Dishonesty/Excused Absence Policy for Undergraduates/Computing Services Acceptable Use/Inclement Weather/Dead Week/Students with Disabilities/Academic Forgiveness/Academic Probation and Suspension/Academic Rights and Responsibilities of Students/Affirmative Action/Sexual Harassment
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Course Description: From Catalog

A mastery-based course that will prepare STEM students for College Algebra. Prerequisite: ACT Math below 18 or below or SAT Math 450 or below and major requiring completion of MTH 127 or 160. 4 credits.

This course is intended to prepare students for MTH 127 or MTH 160. It will prepare students for courses that use algebra.

The Modified Math Emporium Format

The format of this course is known as a modified math emporium. Math emporia have been shown to be more effective than traditional lecture-based courses in a number of colleges and universities across the country in the last decade. Studies have shown that when students actively engage with course material, on average they have higher rates of achievement of intended learning outcomes as well as higher course completion rates. The emporium model is based on mastery learning, promotes active learning, and provides flexibility in the pace at which students move through content, allowing students to cover familiar material quickly so that they can spend more time on topics that are more challenging for them. The format features timely personal assistance from the instructor, coupled with interactive computer technology for instruction, and assessment with immediate feedback. The interactive computer technology provides a nearly unlimited variety of practice examples, step-by-step guidance, and customized review support.

Note: Although this course involves computer-assisted instruction, it is not a distance learning or online course, nor is it an independent study.

The table below shows the following relationships: How each student learning outcome will be practiced and assessed in the course.

Course Student Learning Outcomes	How students will practice each outcome in this Course	How student achievement of each outcome will be assessed in this Course
Students will be able to identify different sets of numbers, recognize the properties of these sets, and compute results using elements of these sets.	Both outside and inside the classroom, students will practice to master these concepts. These ideas are covered in Module H.	Students must certify in each lesson at the mastery level with a minimum grade of 80%. Students must demonstrate mastery of 80% on each module test.
Students will convert numbers to different forms after determining the most appropriate form for an application.	Both outside and inside the classroom, students will practice to master these concepts. These ideas are covered in Module I.	Students must certify in each lesson at the mastery level with a minimum grade of 80%. Students must demonstrate mastery of 80% on each module test.
Students will develop a facility in solving equations.	Both outside and inside the classroom, students will practice to master these concepts. These ideas are covered in Module J.	Students must certify in each lesson at the mastery level with a minimum grade of 80%. Students must demonstrate mastery of 80% on each module test.
Students will develop graphing techniques to arrive at solutions of algebra problems.	Both outside and inside the classroom, students will practice to master these concepts. These ideas are covered in Module K.	Students must certify in each lesson at the mastery level with a minimum grade of 80%. Students must demonstrate mastery of 80% on each module test.
Students will learn the basics of polynomials and their applications.	Both outside and inside the classroom, students will practice to master these concepts. These ideas are covered in Module L.	Students must certify in each lesson at the mastery level with a minimum grade of 80%. Students must demonstrate mastery of 80% on each module test.
Students will practice techniques of factoring.	Both outside and inside the classroom, students will practice to master these concepts. These ideas are covered in Module M.	Students must certify in each lesson at the mastery level with a minimum grade of 80%. Students must demonstrate mastery of 80% on each module test.
Students will be able to apply their algebra skills to add and subtract rational expressions, solve equations involving radicals, and solve quadratic equations.	Both outside and inside the classroom, students will practice to master these concepts. These ideas are covered in Module N.	Students must certify in each lesson at the mastery level with a minimum grade of 80%. Students must demonstrate mastery of 80% on each module test.

Required Texts, Additional Reading, and Other Materials

(1) Textbook and computer software – Developmental Mathematics Software and e-book, ISBN 1935782517 9781935782513, Hawkes Learning Systems. A software license can be purchased at the student bookstore or on-line at <http://www.hawkeslearning.com/>.

Students who have not purchased a software license code within three weeks of the start of the semester will be automatically unenrolled. If a license is purchased within one additional week, the student will be re-enrolled.

(2) Calculator – A calculator is allowed on all assignments and exams. No internet enabled devices may be used as a calculator during exams.

(3) Headphones – Students who want to watch the HawkesTV instructional videos during class, as part of learning the course material, must use headphones.

(4) Notebook – Although this course involves computer-assisted instruction, students should have and use note taking materials in every class. Notes should be taken on each lesson. Problems should be worked out neatly in your notebook.

Course Requirements/Due Dates

Students will complete the certifications with mastery 80% or higher, the module tests with mastery 80% or higher, and the final exam. Students have unlimited attempts to master the certifications. Students have 5 attempts to master the module tests.

A complete suggested pace is provided in this syllabus. Students may complete certifications or exams before the suggested dates, if they have completed the appropriate prerequisites. Students who work at or faster than the provided pace will complete the course in one semester.

The final exam for this section is on December 7th, 2015 at 5:00 p.m. This is the last day to take the final exam (the final exam may be taken before finals if all modules and module exams are completed successfully. All modules and module exams must be completed by the last day of classes; no modules or module exams can be completed during finals week.

Grading Policy

Students must achieve a mastery of 80% or higher in each lesson certification in a particular module before taking the module exam. Each lesson certification is recorded in the gradebook as a 100%. The best of your (up to) 5 module test grades are recorded in the gradebook. The final exam can be taken only once.

Semester grades will be based on module test grades, certifications, the final exam, and attendance. Module tests (10% each for a total of 70%), certification (10%), final exam (20%).

Grading scale: 90 – 100 A
 80 – 89.99 B
 70 – 79.99 C
 60 – 69.99 D
 Below 60 F

At the end of the semester, students who have not completed the course, but have completed 75% of the course material according to the schedule in this syllabus, will be assigned a grade of I (incomplete). Students are required to finish the course during the next semester. Students who have not completed 75% of the course material will be assigned a grade of F.

Attendance Policy

Students are required to attend each class. Unexcused absences from three or more classes will result in an F. Students must provide evidence to justify a University Excused Absence on the first day you return to class. Students do not need to attend class after successful completion of all modules, module tests, and the final exam.

Academic Integrity Policy

Students may work together on the Learn and Practice of each lesson and on practice exams. Students may not work together, receive help, or use any resources (web, text, etc.) on Diagnostic Tests, Certifications, Module Test, or the Final Test. Any students who are discovered cheating will be given a 0 on the assignment.

Tutoring

Math computer lab hours (Huntington Campus): MTWR 4pm – 6pm in Smith Hall 620. Please remember to get your instructor's permission before taking tests during open computer lab hours. You will need to show your ID to the instructors and students staffing the lab when taking tests.

The Huntington Campus Lab is also open:

Monday 10am – 11am, 1pm – 2pm, 3pm – 4pm

Tuesday 3pm – 4pm

Wednesday 8am – 10am

Thursday 10am – 11am, 1:30pm – 2:30pm

Friday 10am – 11am.

MOVC—Tutoring is available Thursdays from 10:30 a.m. – 12:00 p.m.

Math Department Tutoring lab hours: MTWR 10am – 4pm and F 10am – 12noon in Smith Music 115. There are no computers in the math tutoring lab. Please bring your questions on paper or bring your own laptop. No tests can be taken in the math tutoring lab.

Students may attend class periods of other MTH 100 or MTH 102 sections on a first come first served basis, if the classroom has an open computer. Students must arrive on time, stay the entire class period, and get instructor permission to use an open computer.

Course Schedule

Module	Activities	Complete on or before	✓
H Whole Numbers Fractions and Mixed Numbers	Intro to technology and policies – how this course works	M 8/24	
	Module H Pretest for students who are confident in whole number operations, fractions, and mixed numbers		
	Lessons 1.1 and 1.2 <i>Learn, Practice, and Certify</i>	W 8/26	
	Lessons 1.3 and 1.4 <i>Learn, Practice, and Certify</i>	W 8/26	
	Lessons 1.5 and 1.6 <i>Learn, Practice, and Certify</i>	M 8/31	
	Lessons 1.7 and 1.8 <i>Learn, Practice, and Certify</i>	M 8/31	
	Lessons 1.9 and 2.1 <i>Learn, Practice, and Certify</i>	M 8/31	
	Lessons 2.2 and 2.3 <i>Learn, Practice, and Certify</i>	W 9/2	
	Lessons 2.4 and 2.5 <i>Learn, Practice, and Certify</i>	W 9/2	
	Lesson 2.6 <i>Learn, Practice, and Certify</i> and Review	W 9/2	
	Module H Practice Problems		
	Module H Test	W 9/9	
I Decimals Ratios, Rates and Proportions	Module I Pretest for students who are confident in decimals, ratios, rates, and proportions		
	Lessons 3.1 and 3.2 <i>Learn, Practice, and Certify</i>	M 9/14	
	Lessons 3.3 and 3.4 <i>Learn, Practice, and Certify</i>	M 9/14	
	Lessons 3.5 and 4.1 <i>Learn, Practice, and Certify</i>	W 9/16	
	Lessons 4.2 and 4.3 <i>Learn, Practice, and Certify</i>	W 9/16	
	Lessons 4.4 and 4.5 <i>Learn, Practice, and Certify</i>	M 9/21	
	Lessons 4.6 <i>Learn, Practice, and Certify</i> and Review	M 9/21	
	Module I Practice Problems		
	Module I Test	W 9/23	
J Solving Equations	Module J Pretest for students who are confident in solving equations		
	Lessons 7.1a and 7.1b <i>Learn, Practice, and Certify</i>	M 9/28	
	Lessons 7.2 and 7.3 <i>Learn, Practice, and Certify</i>	M 9/28	
	Lessons 7.4 and 7.5 <i>Learn, Practice, and Certify</i>	M 9/28	
	Lessons 7.6 and 7.7a <i>Learn, Practice, and Certify</i>	W 9/30	
	Lessons 7.7b and 7.7c <i>Learn, Practice, and Certify</i>	W 9/30	
	Lesson 7.8 <i>Learn, Practice, and Certify</i>	W 9/30	
	Module J Practice Problems		
	Module J Test	M 10/5	
K	Module K Pretest for students who are confident in graphing and solving systems of linear equations		
	Lessons 8.1a and 8.1b <i>Learn, Practice, and Certify</i>	W 10/7	
	Lessons 8.2 and 8.3 <i>Learn, Practice, and Certify</i>	W 10/7	

Graphing Solving Systems	Lessons 8.4 and 8.5 <i>Learn, Practice, and Certify</i>	W 10/7	
	Lessons 8.6 and 8.7 <i>Learn, Practice, and Certify</i>	M 10/12	
	Lessons 9.1 and 9.2 <i>Learn, Practice, and Certify</i>	M 10/12	
	Lessons 9.3 and 9.4a <i>Learn, Practice, and Certify</i>	M 10/12	
	Lesson 9.4b <i>Learn, Practice, and Certify</i>	W 10/14	
	Module K Practice Problems	W 10/14	
	Module K Test	M 10/19	
L Polynomials	Module L Pretest for students who are confident in polynomials		
	Lessons 10.1 and 10.2 <i>Learn, Practice, and Certify</i>	W 10/21	
	Lessons 10.3 and 11.1 <i>Learn, Practice, and Certify</i>	W 10/21	
	Lessons 11.2a and 11.2b <i>Learn, Practice, and Certify</i>	W 10/21	
	Lessons 11.3 and 11.4 <i>Learn, Practice, and Certify</i>	M 10/26	
	Lessons 11.5 and 11.6a <i>Learn, Practice, and Certify</i>	M 10/26	
	Lesson 11.6b <i>Learn, Practice, and Certify</i>	W 10/28	
	Module L Practice Problems	W 10/28	
	Module L Test	M 11/2	
	75% of the course is complete		
M Factoring	Module M Pretest for students who are confident in factoring		
	Lessons 12.1a and 12.1b <i>Learn, Practice, and Certify</i>	W 11/4	
	Lessons 12.1c and 12.2 <i>Learn, Practice, and Certify</i>	W 11/4	
	Lessons 12.3a and 12.3b <i>Learn, Practice, and Certify</i>	M 11/9	
	Lessons 12.4a and 12.4b <i>Learn, Practice, and Certify</i>	M 11/9	
	Lessons 12.5 and 12.6 <i>Learn, Practice, and Certify</i>	W 11/11	
	Module M Practice Problems	W 11/11	
	Module M Test	M 11/16	
N Adding and Subtracting Rational Expressions Radicals Quadratic Equations	Module N Pretest for students who are confident in adding and subtracting rational expressions, simplifying radicals, and solving quadratic equations		
	Lessons 13.2 and 14.1 <i>Learn, Practice, and Certify</i>	W 11/18	
	Lessons 14.2 and 14.3a <i>Learn, Practice, and Certify</i>	W 11/18	
	Lessons 14.3b and 14.4 <i>Learn, Practice, and Certify</i>	W 11/18	
	Lessons 15.1 and 15.3 <i>Learn, Practice, and Certify</i>	M 11/30	
	Lesson 15.4 <i>Learn, Practice, and Certify</i>	M 11/30	
	Module N Practice Problems	M 11/30	
	Module N Test	W 12/2	
	Final Exam Practice Problems		
	Final Exam	See schedule	

Important Dates

August 24-First Day of Classes

August 24 - August 28-Late Registration

August 31 -“W” Withdrawal Period Begins

September 7-University Closed, Labor Day

October 15-Freshmen Mid-Term Grades Due

October 30-Last Day to Drop a Full Semester Individual Course

November 23 - November 27-Thanksgiving/Fall Break

November 30-Classes Resume

November 30 - December 4-“Dead Week”

December 4-Last Day to Completely Withdraw

December 7-Final Exam

MARSHALL UNIVERSITY FALL 2015 EXAM SCHEDULE

EXAM HOUR	MONDAY DEC 7	TUESDAY DEC 8	THURSDAY DEC 10	FRIDAY DEC 11
8:00 A.M. TILL 10:00 A.M.	CLASSES MEETING AT 8:00 MWF	CLASSES MEETING AT 9:30 TR	CLASSES MEETING AT 8:00 TR	CLASSES MEETING AT 9:00 MWF
10:15 A.M. TILL 12:15 P.M.	CLASSES MEETING AT 10:00 MWF	CLASSES MEETING AT 11:00 MWF	CLASSES MEETING AT 11:00 TR	CLASSES MEETING AT 12:00 MWF
12:45 P.M. TILL 2:45 P.M.	CLASSES MEETING AT 2:00 MWF	CLASSES MEETING AT 12:30 TR	CLASSES MEETING AT 2:00 TR	CLASSES MEETING AT 1:00 MWF

NOTE: All classes meeting at 3:00 p.m. and after will be examined in two-hour time blocks at the first regularly scheduled class meeting during the above examination period. If the two-hour time allowance results in a conflict in exam times, it is the student's responsibility to notify the professor of the later course and to reschedule the later exam. Rescheduled exams must be concluded by Friday, December 11, at 6:00 p.m.

All Wednesday (only) afternoon classes, those meeting at 3:00 p.m. and after, will be examined Wednesday, December 9.

Saturday classes will be examined December 5 at their regularly scheduled class period.

The common final exam time and date for all sections of CHM 111, 203, 211, 212, 355, and 356 will be 10:00 a.m. Saturday, December 5.

DEADLINE FOR ONLINE SUBMISSION OF GRADES MONDAY, DECEMBER 14, 12:00 NOON.

