

Marshall University

MTH 102 Syllabus Spring 2016

Course Title/Number	Preparation for College Mathematics B MTH 102
Semester/Year	Spring 2016
Section/CRN	207 CRN: 3984
Days/Time	MTWR 2-2:50
Location	SH 624
Instructor	Laura Stapleton
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Office Hours	Tuesday and Thursday: 10 am – 12:30 pm

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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

Course Description: From Catalog

A mastery-based course that will prepare students for College Algebra. Prerequisite: Math ACT 18 or below, or SAT Math 450 or below. **4 credit hours.**

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 identify different sets of numbers, compute results using elements of these sets, and convert numbers to the most appropriate form for applications.	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 75% on each module test.
Students will apply properties and use operations to manipulate and simplify numerical and algebraic expressions.	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 75% on each module test.
Students will solve equations and use graphical 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 75% 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 75% on each module test.
Students will factor polynomials using multiple techniques.	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 75% on each module test.
Students will perform algebraic operations on rational and radical expressions, and solve application problems involving 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 75% on each module test.

Required Texts, Additional Reading, and Other Materials

- **Textbook and computer software** – Developmental Mathematics Software and e-book, ISBN 1935782517 or 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.
- **Calculator** – A calculator is allowed on all assignments and tests. No internet-enabled devices may be used as a calculator during tests.
- **Headphones** – Students who want to watch the HawkesTV instructional videos during class, as part of learning the course material, must use headphones.
- **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 and discussed with the Instructor or Teaching Assistant as needed.

Course Requirements/Due Dates

Students must complete all certifications, all module tests (I, J, K, L, M, and N), and the final examination to earn a passing grade in the course.

Students will complete the certifications with mastery 80% or higher, the 6 module tests with mastery 75% or higher, and the final exam. Students have unlimited attempts to master the certifications. Students have 3 attempts to master each of the 6 module tests. The final exam may only be attempted once.

All certifications for a particular module must be mastered before attempting the module test, and each module test must be mastered before progressing to the next module. If mastery on the test is not achieved in 3 attempts, then the student must meet with the instructor to discuss what steps are necessary for the student to successfully complete the module.

All module tests must be completed with a score of 75% or higher before taking the final exam. Students are encouraged to earn the highest grades that they can on the exams, and so students are allowed to retake an exam to improve their scores (and the highest score will be recorded).

A complete suggested pace is provided in the Course Schedule 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.

Students are expected to work outside of class 4 – 8 hours each week.

The final exam for this section is on **Monday, May 2nd 12:45-2:45**. The last day to take the final exam is the final exam date for this section. All certifications and module tests must be completed by the last day of classes; no certifications or module tests can be completed during finals week.

Grading Policy

Semester grades will be based on module test grades, certifications, the final exam, and attendance.

Your grade will be based on the following:

Category	Percentage
Module Tests (10% each)	60%
Certifications	20%
Final Exam	20%
	100%

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 all of the course materials will be assigned a grade of F.

Attendance Policy

Students are required to attend each class. Unexcused absences from **five or more** classes will result in an F. Students with a University Excused Absence 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.

Coming into class late or leaving early will be recorded as a tardy. If the student continues to come to class late or leave early, these tardies will be counted as absences.

Academic Integrity Policy

Students may work together on the Learn and Practice portion of each lesson and on practice exams. Students may not work together, receive help, or use any resources (web, text, notes, etc.) on Diagnostic Tests, Module Test, or the Final Test. **Scratch paper will be provided to you when you take a test.** Any students who are discovered cheating will be given a 0 on the assignment, which will count towards your final course grade; students caught cheating must still master the material of the assignment before moving on. A second cheating offense will result in an F for the course. Notice of any cheating offense will be sent to Academic Affairs.

Tutoring/Testing outside of class

Math Department Open Computer Lab

Location: Smith Hall 620

Hours: MTWR 5pm – 7pm

Please remember to get your instructor's permission before taking tests during open computer lab hours. Students will need to sign-in and show ID to the persons staffing the lab to be able to take tests.

Math Department Tutoring Lab

Location: Smith Music Hall 115

Hours: MTWR 10am – 4pm and F 10am – 12noon

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.

Other MTH 100 / 102 / 102B Classes

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, get instructor permission to use an open computer, and stay the entire class period.

Technical Assistance

Students requiring technical assistance with the Hawkes software should contact Hawkes directly by phone at 800-426-9538 or 843-571-2825, Monday – Friday 8:30am – 10:00pm ET, or by live chat at www.hawkeslearning.com/chat, any time 24/7.

Course Schedule

Module	Activities	Complete on or before	✓
I	Intro to technology and policies – how this course works	M 1/11	
	Diagnostic Test Module I for students who are confident with operations in whole numbers, fractions, mixed numbers, decimals, and percentages	T 1/12	
Whole Numbers	Lessons 1.5, 1.6, and 1.7 <i>Learn, Practice, and Certify</i>	W 1/13	
Fractions	Lessons 1.8 and 1.9 <i>Learn, Practice, and Certify</i>	R 1/14	
Mixed Numbers	Lessons 2.1, 2.2, and 2.3 <i>Learn, Practice, and Certify</i>	T 1/19	
Decimals	Lessons 2.4 and 2.5 <i>Learn, Practice, and Certify</i>	W 1/20	

Percentages	Lesson 2.6 <i>Learn, Practice, and Certify</i>	R 1/21	
	Lessons 3.1 and 3.5 <i>Learn, Practice, and Certify</i>	M 1/25	
	Lessons 4.3 and 4.4 <i>Learn, Practice, and Certify</i>	T 1/26	
	Module I Practice Problems	W 1/27	
	Module I Test	R 1/28	
J Real Numbers Algebraic Expressions	Diagnostic Test Module J for students who are confident with operations on real numbers and evaluating algebraic expressions	M 2/1	
	Lessons 7.1a and 7.1b <i>Learn, Practice, and Certify</i>	T 2/2	
	Lessons 7.2 and 7.3 <i>Learn, Practice, and Certify</i>	W 2/3	
	Lessons 7.4 and 7.5 <i>Learn, Practice, and Certify</i>	R 2/4	
	Lessons 7.6 and 7.7a <i>Learn, Practice, and Certify</i>	M 2/8	
	Lessons 7.7b and 7.7c <i>Learn, Practice, and Certify</i>	T 2/9	
	Lesson 7.8 <i>Learn, Practice, and Certify</i>	W 2/10	
	Module J Practice Problems	R 2/11	
	Module J Test	M 2/15	
K Solving Linear Equations Graphing	Diagnostic Test Module K for students who are confident in solving linear equations and graphing	T 2/16	
	Lessons 8.1a and 8.1b <i>Learn, Practice, and Certify</i>	W 2/17	
	Lessons 8.2 and 8.3 <i>Learn, Practice, and Certify</i>	R 2/18	
	Lessons 8.4 and 8.5 <i>Learn, Practice, and Certify</i>	M 2/22	
	Lesson 8.7 <i>Learn, Practice, and Certify</i>	T 2/23	
	Lessons 9.1 and 9.2 <i>Learn, Practice, and Certify</i>	W 2/24	
	Lesson 9.3 <i>Learn, Practice, and Certify</i>	R 2/25	
	Lesson 9.4a <i>Learn, Practice, and Certify</i>	M 2/29	
	Lesson 9.4b <i>Learn, Practice, and Certify</i>	T 3/1	
	Module K Practice Problems	W 3/2	
Module K Test	R 3/3		
L Exponents Scientific Notation Polynomials	Diagnostic Test Module L for students who are confident with exponents, scientific notation, and polynomials	M 3/7	
	Lessons 11.1 and 11.2a <i>Learn, Practice, and Certify</i>	M 3/7	
	Lessons 11.2b <i>Learn, Practice, and Certify</i>	T 3/8	
	Lessons 11.3 and 11.4 <i>Learn, Practice, and Certify</i>	W 3/9	
	Lessons 11.5 and 11.6a <i>Learn, Practice, and Certify</i>	R 3/10	
	Lessons 11.6b and 11.7a <i>Learn, Practice, and Certify</i>	M 3/14	
	Module L Practice Problems	T 3/15	
Module L Test	W 3/16		
M Factoring	Diagnostic Test Module M for students who are confident in factoring	R 3/17	
	Lessons 12.1a and 12.1b <i>Learn, Practice, and Certify</i>	M 3/28	
	Lessons 12.1c and 12.2 <i>Learn, Practice, and Certify</i>	T 3/29	
	Lessons 12.3a and 12.3b <i>Learn, Practice, and Certify</i>	W 3/30	
	Lesson 12.4a <i>Learn, Practice, and Certify</i>	R 3/31	

	Lessons 12.4b and 12.5 <i>Learn, Practice, and Certify</i>	M 4/4	
	Lesson 12.6 <i>Learn, Practice, and Certify</i>	T 4/5	
	Module M Practice Problems	W 4/6	
	Module M Test	R 4/7	
N Rational Expressions Radicals Quadratic Equations	Diagnostic Test Module N for students who are confident in adding and subtracting rational expressions, simplifying radicals, and solving quadratic equations	M 4/11	
	Lessons 13.1a and 13.1b <i>Learn, Practice, and Certify</i>	T 4/12	
	Lesson 13.2 <i>Learn, Practice, and Certify</i>	W 4/13	
	Lessons 14.1 and 14.2 <i>Learn, Practice, and Certify</i>	R 4/14	
	Lessons 14.3a and 14.3b <i>Learn, Practice, and Certify</i>	M 4/18	
	Lessons 14.4 and 14.6 <i>Learn, Practice, and Certify</i>	T 4/19	
	Lessons 15.1 and 15.3 <i>Learn, Practice, and Certify</i>	W 4/20	
	Lesson 15.4 <i>Learn, Practice, and Certify</i>	R 4/21	
	Module N Practice Problems	M 4/25	
	Module N Test	T 4/26	
Final Exam All Topics	Final Exam Practice Problems	W 4/27	
	Final Exam Practice Problems	R 4/28	
	Final Examination	See Final Exam Schedule	

MARSHALL UNIVERSITY SPRING 2016 EXAM SCHEDULE

EXAM HOUR	MONDAY MAY 2	TUESDAY MAY 3	THURSDAY MAY 5	FRIDAY MAY 6
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, May 6, at 6:00 p.m.

All Wednesday (only) afternoon classes, those meeting at 3:00 p.m. and after, will be examined Wednesday, May 4.

Saturday classes will be examined April 30 at their regularly scheduled class period.

The common final exam time and date for all sections of CHM111, CHM 203, 211, 212, 355, and 356 will be 10:00 a.m. Saturday, April 30.

DEADLINE FOR ONLINE SUBMISSION OF GRADES TUESDAY, MAY 10, 12:00 NOON.

