**Marshall University**

**MTH 100 Syllabus**

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| **Course Title/Number** | Preparation for College Mathematics A - MTH 100 |
| **Semester/Year** | Summer 2016 |
| **Section/CRN** | MTH 100-301 |
| **Days/Time** | M,T,W,R,F, 10:30am- 12:45pm |
| **Location** | SM 624 |
| **Instructor** | OTUNUGA, ELIZABETH |
| **Office** | SH 621 |
| **Phone** |  |
| **E-Mail** | otunuga1@live.marshall.edu |
| **Office Hours** | 12:45pm - 1:45pm |

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| **Teaching Assistant** | Rodeheffer, Jacob |
| **TA Office** | SH 620 |
| **TA Phone** |
| **TA E-Mail** |  |

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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](http://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/](http://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**

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| A mastery-based course that will prepare students for quantitative reasoning courses in their major. Prerequisite: Math ACT 18 or below, or SAT Math 450 or below. 3 credit hours. |

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| This course is intended to prepare students for MTH 121 or MTH 125. It will not prepare students for courses that use algebra, MTH 127, MTH 130, or MTH 160. Students who have Math ACT 17 or 18 may go directly to MTH 121B. After completing MTH 100, students who need MTH 127, MTH 130, or MTH 160 should enroll in MTH 102B. |

**The Modified Math Emporium Format**

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| 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.**

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| **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, perform operations on, round, recognize and know properties for problem solving using whole numbers. | Both outside and inside the classroom, students will practice to master these concepts. These ideas are covered in Module A. | Students must certify in each lesson at the mastery level with a minimum grade of 80%. Students must demonstrate mastery of 75% on a module exam and take a comprehensive final exam. |
| Students will identify, perform operations, recognize and convert between, and use properties for problem solving using fractions and mixed numbers. | Both outside and inside the classroom, students will practice to master these concepts. These ideas are covered in Module B. | Students must certify in each lesson at the mastery level with a minimum grade of 80%. Students must demonstrate mastery of 75% on a module exam and take a comprehensive final exam. |
| Students will identify, perform operations on decimals and convert between fractions and decimals. | Both outside and inside the classroom, students will practice to master these concepts. These ideas are covered in Module C. | Students must certify in each lesson at the mastery level with a minimum grade of 80%. Students must demonstrate mastery of 75% on a module exam and take a comprehensive final exam. |
| Students will identify ratios, solve proportions, convert between and problem solve using decimals, fractions, and percentages. | Both outside and inside the classroom, students will practice to master these concepts. These ideas are covered in Module D. | Students must certify in each lesson at the mastery level with a minimum grade of 80%. Students must demonstrate mastery of 75% on a module exam and take a comprehensive final exam. |
| Students will apply properties and order of operations to evaluate numerical and algebraic expressions and solve simply problems. | Both outside and inside the classroom, students will practice to master these concepts. These ideas are covered in Module E. | Students must certify in each lesson at the mastery level with a minimum grade of 80%. Students must demonstrate mastery of 75% on a module exam and take a comprehensive final exam. |
| Students will convert between different unit measuring systems and learn the basics of statistics and interpretation of graphs. | Both outside and inside the classroom, students will practice to master these concepts. These ideas are covered in Module F. | Students must certify in each lesson at the mastery level with a minimum grade of 80%. Students must demonstrate mastery of 75% on a module exam and take a comprehensive final exam. |

**Required Texts, Additional Reading, and Other Materials**

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| (1) 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.  (2) Calculator – A calculator is allowed on all assignments and tests. No internet enabled devices may be used as a calculator during tests.  (3) Headphones – Students who want to watch the HawkesTV instructional videos during class, as part of learning the course material, must use headphones or earbuds.  (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 paper from each lesson, as the student reads through the Learn and completes problems in the Practice. To prepare for certifications and tests, examples and explanations for different types of problems should be worked out neatly in a student’s notebook and discussed with the Instructor or Teaching Assistant as needed. |

**Course Requirements/Due Dates**

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| Students must complete all certifications, all module tests (A, B, C, D, E, and F), and the final exam 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 (at 80% or higher) before attempting the module test, and each module test must be mastered (at 75% or higher) before progressing to the next module. If mastery on the test is not achieved in 3 attempts, then all certifications for the module and the diagnostic test will be reset; the student will work through the module until mastery is achieved.  All certifications and module tests must be completed with a score of 75% or higher before taking the final exam.  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 2 – 4 hours each day.  The final exam for this section is on Friday, June 3rd. The last day to take the final exam is the final exam date for this section. All modules and module exams must be completed by the last day of classes; no modules or module exams can be completed after the final exam. |

**Grading Policy**

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| Students have unlimited attempts to achieve mastery of 80% or higher in each lesson certification, and once mastery is achieved, is recorded in the gradebook at 100%. Students have 3 attempts to achieve mastery of 75% or higher in each of the 6 module tests, and once mastery is achieved, the highest of the 3 attempts is recorded in the gradebook. Students have 1 attempt to take the final exam and the score earned is recorded in the gradebook.  Semester grades will be based on certifications (15%), module tests (10% each for a total of 60%), the final exam (20%), and attendance (5%; note 1% point will be lost each day of missed class).  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 materials will be assigned a grade of F. |

**Attendance Policy**

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| Students are required to attend each class. 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. |

**Academic Integrity Policy**

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| Students may work together on the Learn and Practice of each lesson and on Practice Tests. Students may not work together, receive help, or use any resources (web, notes, cell phones, textbook) on Diagnostic Tests, Certifications, Module Tests, or the Final Examination. Any students who are discovered cheating will be given a 0 on the assignment, which will count toward their final course grade; students caught cheating must still master the material of the assignment before progressing to later certifications or tests. A second cheating offense will result in an F for the course. Notice of any cheating offense will be sent to Academic Affairs. |

**Tutoring**

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| Math Department Open Computer Lab  Location: Smith Hall 620  Hours: 12:00PM- 4:00PM  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: TBD  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**

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| 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. |

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| **Summer 2016 MTH 100 Course Schedule for Sections Meeting MTWRF** | | | |
| **Module** | **Lessons and Tests** | **Complete on or before** | **✓** |
| **A**  **Whole Numbers** | Intro to technology and policies - how this course works | M 5/9 |  |
| **Module A Diagnostic Test** (optional) for students who are confident using whole numbers |  |  |
| Lesson 1.1 Learn, Practice, Certify | M 5/9 |  |
| Lesson 1.2 Learn, Practice, Certify | M 5/9 |  |
| Lesson 1.3 Learn, Practice, Certify | T 5/10 |  |
| Lesson 1.4 Learn, Practice, Certify | T 5/10 |  |
| Lesson 1.5 Learn, Practice, Certify | T 5/10 |  |
| Lesson 1.6 Learn, Practice, Certify | T 5/10 |  |
| Lesson 1.7 Learn, Practice, Certify | W 5/11 |  |
| Lesson 1.8 Learn, Practice, Certify | W 5/11 |  |
| Lesson 1.9 Learn, Practice, Certify | W 5/11 |  |
| Module A Practice Test |  |  |
| **Module A Test** | R 5/12 |  |
| **B**  **Fractions and Mixed Numbers** | **Module B Diagnostic Test** (optional) for students who are confident using fractions and mixed numbers |  |  |
| Lesson 2.1 Learn, Practice, Certify | F 5/13 |  |
| Lesson 2.2 Learn, Practice, Certify | F 5/13 |  |
| Lesson 2.3 Learn, Practice, Certify | F 5/13 |  |
| Lesson 2.4 Learn, Practice, Certify | M 5/16 |  |
| Lesson 2.5 Learn, Practice, Certify | M 5/16 |  |
| Lesson 2.6 Learn, Practice, Certify | M 5/16 |  |
| Module B Practice Test |  |  |
| **Module B Test** | T 5/17 |  |
| **C**  **Decimals** | **Module C Diagnostic Test** (optional) for students who are confident in decimals |  |  |
| Lesson 3.1 Learn, Practice, Certify | W 5/18 |  |
| Lesson 3.2 Learn, Practice, Certify | W 5/18 |  |
| Lesson 3.3 Learn, Practice, Certify | W 5/18 |  |
| Lesson 3.4 Learn, Practice, Certify | W 5/18 |  |
| Lesson 3.5 Learn, Practice, Certify | W 5/18 |  |
| Module C Practice Test |  |  |
| **Module C Test** | R 5/19 |  |
| **D**  **Ratios, Rates, and Proportions** | **Module D Diagnostic Test** (optional) for students who are confident in using ratios, proportions, and percentages |  |  |
| Lesson 4.1 Learn, Practice, Certify | F 5/20 |  |
| Lesson 4.2 Learn, Practice, Certify | F 5/20 |  |
| Lesson 4.3 Learn, Practice, Certify | F 5/20 |  |
| Lesson 4.4 Learn, Practice, Certify | M 5/23 |  |
| Lesson 4.5 Learn, Practice, Certify | M 5/23 |  |
| Lesson 4.6 Learn, Practice, Certify | M 5/23 |  |
| Module D Practice Test |  |  |
| **Module D Test** | T 5/24 |  |
| **E**  **Real Number Operations and Variable Expressions** | **Module E Diagnostic Test** (optional) for students who are confident in numerical and algebraic expressions |  |  |
| Lesson 7.1a Learn, Practice, Certify | W 5/25 |  |
| Lesson 7.2 Learn, Practice, Certify | W 5/25 |  |
| Lesson 7.3 Learn, Practice, Certify | W 5/25 |  |
| Lesson 7.4 Learn, Practice, Certify | W 5/25 |  |
| Lesson 7.5 Learn, Practice, Certify | R 5/26 |  |
| Lesson 7.7a Learn, Practice, Certify | R 5/26 |  |
| Lesson 7.7c Learn, Practice, Certify | R 5/26 |  |
| Module E Practice Test |  |  |
| **Module E Test** | F 5/27 |  |
| **F**  **Statistics and Measurement Conversion** | **Module F Diagnostic Test** (optional) for students who are confident in unit measuring systems, basic statistics and interpretation of graphs. |  |  |
| Lesson 6.1 Learn, Practice, Certify | T 5/31 |  |
| Lesson 6.2 Learn, Practice, Certify | T 5/31 |  |
| Lesson A.1 Learn, Practice, Certify | T 5/31 |  |
| Lesson A.2a Learn, Practice, Certify | W 6/1 |  |
| Lesson A.2b Learn, Practice, Certify | W 6/1 |  |
| Lesson A.3 Learn, Practice, Certify | W 6/1 |  |
| Module F Practice Test |  |  |
| **Module F Test** | R 6/2 |  |
| **Final** | Final Practice Problems |  |  |
| Final Practice Test |  |  |
| **Final Test** | F 6/3 |  |
| **All course certification, module tests, and the final exam must be completed to finish the course.** | | | |