**Marshall University**

**Syllabus**

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| Course Title/Number  | **MTH 127.107** |
| Semester/Year | Fall 2014 |
| Days/Time | MTWRF 1:00 – 1:50 |
| Location | SH 518 |
| Instructor | Mr. Matthew Knupp |
| Office | Smith Music 115 |
| Phone | 304-696-3986 |
| E-Mail |  Knupp2@marshall.edu |
| Office/Tutor Hours | MWF 12:00 – 1:00 (office) TR 12:00-1:00 and 3:30 -5:00 (tutoring in Smith Music 115) |
| University Policies | By enrolling in this course, you agree to the University Policies listed below. Please read the full text of each policy be 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 <http://www.marshall.edu/academic-affairs/?page_id=802> 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 brief but careful review of the main techniques of algebra. Polynomial, rational, exponential, and logarithmic functions. Graphs, equations and inequalities, sequences. PREREQUISITE: ACT 19 or MTH 097 |

The table below shows the following relationships: How each student learning outcomes 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 employ quantitative and analytical methods to solve problems drawn from basic algebra and geometry. | Students will attend class, complete homework, participate in class discussions, and ask questions. | Opening class problems, examinations, and final examination. |
| Students will solve real-world problems using techniques that employ method of variation. | Students will attend class, complete homework, participate in class discussions, and ask questions. | Opening class problems, examinations, and final examination. |
| Students will use symmetry and transformations to create and analyze new functions and their graphs. | Students will attend class, complete homework, participate in class discussions, and ask questions. | Opening class problems, examinations, and final examination. |
| Students will analyze and compare basic algebraic functions as well as exponential and logarithmic functions. | Students will attend class, complete homework, participate in class discussions, and ask questions. | Opening class problems, examinations, and final examination. |
| Students will construct, evaluate, and graph functions to apply in real-word problems. | Students will attend class, complete homework, participate in class discussions, and ask questions. | Opening class problems, examinations, and final examination. |
| Students will demonstrate the ability to work with equations and inequalities symbolically, visually, and numerically. | Students will attend class, complete homework, participate in class discussions, and ask questions. | Opening class problems, examinations, and final examination. |
| Students will apply techniques of systems of linear equations to solve real world applications. | Students will attend class, complete homework, participate in class discussions, and ask questions. | Opening class problems, examinations, and final examination. |

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

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| 1.**College Algebra** by Sullivan, 9th Edition.2. A Graphing calculator is STRONGLY suggested. Part of each test will be calculator allowed. NO computers or IPads, phones, etc allowed on tests. |

**Grading Policy**

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| 1. Tests: 50%. There will be a test after every chapter.
2. Final Exam: 25%
3. Homework: 10% Grade received for completion of all assigned problems
4. Opening class problems. 15%. Graded for accuracy/correctness.
5. Letter grades are on a 10-point scale
6. Final exam will be on December 12th from 12:46 pm to 2:45 pm
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**Attendance Policy**

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| For this course students are allowed up to 6 UNEXCUSED absences. Any UNEXCUSED absences past the sixth will result in a grade of F for the course. An unexcused absence will result in any tests/homework collected on that day being given a grade of zero. If you are tardy to class on test day, no extra time will be given to finish the exam. If you are tardy on a non-test day, opening class problems will be graded as a zero.  |

**Course Topics**

 **1. Equations and inequalities**

 **2. Graphs**

 **3. Functions and their graphs**

 **4. Linear and quadratic functions**

 **5. Polynomial and rational functions**

 **6. Exponential and logarithmic functions**

 **7. Systems of equations**