**Marshall University**

**Syllabus**

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| Course Title/Number  | **MTH 127.208 CRN 4122** |
| Semester/Year | Spring 2015 |
| Days/Time | MW 5:00 – 5:50 and TR 5:00 – 6:15 |
| Location | SH 509 |
| Instructor | Mr. Matthew Knupp |
| Office | Smith Music 115 |
| Phone | 304-696-3986 |
| E-Mail |  knupp2@marshall.edu |
| Office/Tutor Hours | W 4:00 – 5:00 F 2:00 -3:00 (office) MW 2:00 -3:00 and TR 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 ACT 20 or MTH 099 |

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 every two weeks on Monday. The dates of our tests are Jan 26, Feb 9, Feb 23, Mar 9, Mar 30, Apr 13, Apr 27. Each test will cover material covered during the two weeks before the test and selected older material as chosen by the instructor.
2. Final Exam: 25% The final exam is comprehensive.
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 Monday May 4th 5:00 – 7:00 pm in Smith 509.
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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**