**Marshall University**

**Syllabus**

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| Course Title/Number  | **MTH 127: College Algebra – Expanded (4023:201)** |
| Semester/Year | Spring 2016 |
| Days/Time | MTWTrF 8:00 – 8:50 |
| Location | Smith Hall 518 |
| Instructor | Rob-Roy Mace |
| Office | Smith Hall 743E |
| Phone | 304.696.7040  |
| E-Mail | mace22@marshall.edu |
| Office/Hours | MTWTrF 9:00 – 10:00 a.m.  |
| 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, including but not limited to polynomial, rational, exponential, and logarithmic functions; graphs; systems of equations; etc. |

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 succeed in higher math classes, such as Trigonometry and Calculus. | Discussions, group work, board work, homework | Comprehensive final exam covering concepts encountered in higher math courses. |
| Students will see themselves as possessing the ability to understand and explain basic algebra concepts. | Discussions, group work, board work, homework | Participation in group quizzes, and presentation/explanation of homework solutions to classmates |
| Students will think critically. | Discussions, group work, board work, homework. | Tests and quizzes, including problems requiring synthesis of many ideas to solve unseen problems |

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

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| 1. **College Algebra** by Larson, 9th Edition with Graphing Calculator Supplement
2. Graphing calculator, such as a TI-83 or similar (Note: Cell phone is not permitted for use during exams.)
3. Access to the internet to complete online homework found at webwork.marshall.edu
4. Writing materials (paper and pencil) for daily work in class
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**Grading Policy**

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| Grades will be determined on a percentage basis with five 50-minute exams (each worth 10% of final grade), a comprehensive two-hour final exam (worth 20%), a variety of in class activities such as quizzes, projects, board-work (worth 15%), and online work (worth 15%).  Final Grade Scale: A: 100-90% B: 89-80%  C: 79-70%  D: 69-60%  F: 59-0% Students should keep all returned exams throughout the semester to study for the final exam. Also, students should be aware of their current grade, but may visit office hours to confirm whenever they wish. |

**Attendance Policy**

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| Attendance **is required**. Consult your handbook regarding university excused absences.Unexcused absences from **nine** classes will result in a reduction of one letter grade for the semester; unexcused absences from **twelve or more** classes will result in an F. Excessive use of cell phone or sleeping during class will be counted as an unexcused absence. It is the responsibility of the student to keep track of the number of unexcused absences they have accumulated. Y**ou must be in class to take quizzes or exams, turn in homework, etc.** If an excused absence results in missing quiz/exam/hw, then a make-up date (*within one week of absence*) must be scheduled with course instructor.  |

**Course Topics**

To provide an understanding of functions: familiarity with major classes of functions, function operations, and graphing functions; solving equations and inequalities; solving systems of equations. To prepare students for success in calculus and statistics courses.

**Course Schedule**

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| The following schedule was recommended by the department, and is presented on the syllabus to give an immediate idea to the student about the general pace and coverage for the course. However, the actual pacing/coverage of the course will most likely change, and any changes announced in class will supersede the information given below.Week 1: P.1, P.2**,** P.3, P.4, P.5Week 2: P.6, 1.1, Use of Graphing CalculatorWeek 3: 1.2, 1.3, 1.4Week 4: 1.5, Exam 1, 1.6Week 5: 1.7, 1.8 (Polynomials only), 2.1, 2.2Week 6: 2.3, 2.4, 2.5, 2.6Week 7: Exam 2, 2.7, 3.1Week 8: 3.2, 3.3, 3.4(pg. 275-8), 3.5 (Linear Regression with Calculator)Week 9: 4.1, Exam 3, 4.2Week 10: 5.1, 5.2Week 11: 5.3, Exam 4, 5.4Week 12: 5.5, 6.1 (just Linear Systems)Week 13: Exam 5, 6.2, 6.3Week 14: REVIEW |

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| **MTH 127 Course Schedule (subject to change)** |
| **MTWRF Class Spring 2016** |
|   | Monday | Tuesday | Wednesday | Thursday | Friday |  |  |
| Jan  | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| Week 1 | **In-Class (IC):** Syllabus, Course Overview**Outside-Class (OC):** P.1 | **IC:** Number (Base System, Exponent, Fraction, Radical), Area, Volume**OC**: P.2 | **IC:** Number cont., Real Number Line, Variable**OC:** P.3 | **IC:** Variable cont., Intro to Factoring Polynomials**OC:** P.4 | **IC:** Using Tech to Find Values of Variable, Begin Research Packet 1 (RP1)**OC:** Complete RP1, P.6 (Only thru Example 2) |   |   |
| Jan | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| Week 2 | MLK JR Day – No Classes |  |  |  |   |   |   |
| Jan | 25 | 26 | 27 | 28 | 29 | 30 | 31 |
| Week 3 |  |  |  |  |   |   |  |
| Feb | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Week 4 |  |  |  |  |  |   |  |
| Feb | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| Week 5 |  |  |  |  |   |   |  |
| Feb | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| Week 6 |  |  |  |  |   |   |   |
| Feb | 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| Week 7 |  |  |  |  |   |   |  |
| Feb – Mar | 29 | 1 | 2 | 3 | 4 | 5 | 6 |
| Week 8 |  |  |  |  |  |   |   |
| Mar | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| Week 9 |  |  |  |  |   |   |  |
| Mar | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| Week 10 |  |  |  |  |   |   |  |
| Mar | 21 | 22 | 23 | 24 | 25 | 26 | 27 |
| Spring Break - No Classes |
| Mar – Apr | 28 | 29 | 30 | 31 | 1 | 2 | 3 |
| Week 11 |  |  |  |  |   |   |  |
| Apr | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Week 12 |  |  |  |  |   |   |  |
| Apr | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| Week 13 |  |  |  |  |   |   |   |
| Apr | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| Week 14 |  |  |  |  |  |   |   |
| Apr - May | 25 | 26 | 27 | 28 | 29 | 30 | 1 |
| Week 15 |  |  |  |  |  |   |   |
| May | 2 | 3 | **4** | 5 | 6 | 7 | 8 |
| Week 16 | Final ExamSH 5188:00-10:00am |   |   |  |  |  |   |