

Marshall University
MTH 127: College Algebra – Expanded

Semester and Year	Fall 2016
Course Title	College Algebra – Expanded
Course Number	MTH 127
Section Number	108
CRN	3005
Days and Time	Monday, Tuesday, Wednesday, Thursday, Friday: 3:00 – 3:50pm
Location	Smith Hall 516
Credit Hours	5
Prerequisites	ACT Math 17 or SAT Math 420 (this section only); MTH 099; MTH 102

Professor	Dr. Anna Mummert
Office	Smith Hall 719
Phone	304 696 3041
E-mail	mummerta@marshall.edu
Office Hours	Monday, Tuesday, Wednesday, Thursday 9:30 - 10:30am; Monday, Tuesday, Wednesday 1:30 - 2:30pm; other hours by appointment

Graduate Student Instructor	Roger Estep
GSI Office	Smith Music 115
GSI Phone	304 696 3986
GSI E-mail	estep102@marshall.edu
GSI Office Hours	TBA

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

<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, and Sexual Harassment.

Course Description

MTH 127 - College Algebra – Expanded. A brief but careful review of the main techniques of algebra. Polynomial, rational, exponential, and logarithmic functions. Graphs, equations and inequalities, sequences. 5 hours.

Course Structure

This section of MTH 127 is structured in a lecture / recitation style. You will meet three days each week (Monday, Wednesday, Friday) with your professor, Dr. Mummert. You will meet two days each week (Tuesday, Thursday) with your graduate student instructor, Roger Estep.

Monday, Wednesday, and Friday will focus on learning new college algebra material.

Tuesday and Thursday will focus on review and practice, with active-learning activities to help you succeed in the course.

Course Learning Outcomes

Student Learning Outcomes for this course	How students will practice each outcome in this course	How student achievement of each outcome will be assessed in this course
Students will identify and implement appropriate solution methods for single-variable equations.	In class activities, Homework	Exams
Students will identify and graph standard algebraic functions.	In class activities, Homework	Exams
Students will interpret graphs of functions.	In class activities, Homework	Exams
Students will construct functions to model applications.	In class activities, Homework	Exams
Students will communicate written mathematics using appropriate notation and explanation in English.	In class activities, Homework	Exams

Required Text

Sisson. 2008. *College Algebra*. 2nd Edition. Hawkes Learning Systems.

The topics covered in this class correspond to Chapters 1 – 8.

You may choose to purchase a textbook or e-book version of the required text. In either case, you will need access to the Hawkes homework system.

A copy of the textbook is available for short-term borrowing at the front desk of Drinko Library.

Recitation

You have recitation classes on Tuesday and Thursday with your graduate student instructor, Roger Estep. Your attendance and participation during these recitations will be graded.

Homework

Homework will be due regularly throughout the semester. Homework problems will be done using the on-line program Hawkes Learning.

In a web browser, navigate to learn.hawkeslearning.com. Click on Create an Account. Choose the appropriate option "I have an Access Code", "I want to Purchase Access", or "I want to request Temporary Access" and press Continue.

Use your name and email as officially recorded with Marshall University. In particular, enter your Marshall email address **@live.marshall.edu**. Select product "College Algebra". Select your instructor "Anna Mummert" and section "MTH 127 - Fall 2016 (MTWRF 3:00 - 3:50pm)". Verify your email as instructed.

You can work with other students on homework, though each person must enter their own solutions. Every class day will begin with time to discuss problems you are having with the homework questions.

Exams

Three in-class exams will be given during the semester. Exam questions will be similar to in-class and homework questions.

1. Friday, September 16
2. Wednesday, October 19
3. Friday, December 2

Final Exam

There will be a comprehensive final exam in Smith Hall 516 on

- Tuesday, December 13, 3:00 - 5:00pm.

Final exam questions will be similar to in-class, homework, and exam questions.

Late Assignments

Late assignments will only be accepted with an Excused Absence – university-sponsored activity, student illness, immediate family emergency, short-term military obligation, jury duty or court appearance, religious holiday. Students must provide evidence to justify a University Excused Absence on the first day you return to class.

Late assignment must be turned in within 1 week after you return to class.

Grading Policy

Any student caught cheating will receive a 0 on the assignment and Academic Affairs will be notified.

Homework: 25%

In-class Exams: 45% total (15% each)

Recitation: 15%

Final Exam: 15%

Percentage ranges for final grades are as follows:

A = 90-100% B = 80-89% C = 70-79% D = 60-69% F = 0-59%

Attendance Policy

Attendance is mandatory. Attendance will be taken every day. Students who arrive late will be considered absent and will not be given extra time on exams.

If you are absent with an Excused Absence, then please provide evidence to justify a University Excused Absence on the first day you return to class.

If you are absent for any reason, then it is your responsibility to make up any missed material.

Calculators and Other Technology

You may use a calculator on all work and assignments in this class. A graphing calculator (e.g. TI-84) is not required. You may not use your phone, iPad, laptop, etc. as a calculator on any quiz or exam.

No other technology may be used in class without permission.

Course Webpage

All important course information will be posted on our class MUOnline page.

Tutoring

There are several opportunities for you to get help with any material in this class.

1. Dr. Mummert's office hours.
 - Smith Hall 719: Monday, Tuesday, Wednesday, Thursday 9:30 - 10:30am; Monday, Tuesday, Wednesday 1:30 - 2:30pm; other hours by appointment
2. Roger Estep's office hours. TBA
3. Math department tutoring lab (<http://www.marshall.edu/math/tutoringlab.asp>).
 - Smith Music 115: Monday - Thursday 10am - 4pm; Friday 10am - 12noon
 - Smith Hall 620: Monday - Thursday 5:00pm - 6:30pm
4. University College Tutoring Center (<http://www.marshall.edu/uc/tutoring-services/>).

Tentative Course Schedule

Date	Material / Topic Covered
Week 1	2.1: Linear equations, including with absolute value; 2.2: Linear inequalities
Week 2	2.3: Quadratic equations
Week 3	2.4: Polynomial equations; 2.5: Rational equations
Week 4	2.6: Radical equations; Test 1
Week 5	3.1: Cartesian coordinates; 3.2: Linear equations in two variables 3.3: Slope-intercept and point-slope forms; 3.4: Parallel and perpendicular; 3.5: Linear inequalities in two variables
Week 6	3.6: Circles; 4.1: Functions
Week 7	4.2: Linear and quadratic functions; 4.3: Other functions; 4.4: Transformations of functions
Week 8	4.5: Combining function; 4.6: Inverse functions
Week 9	Test 2; 5.1: Polynomial equations and graphs
Week 10	5.2: Polynomial division; 5.3: Real zeros of polynomials; 5.4: Fundamental theorem of algebra
Week 11	6.1: Rational functions and inequalities
Week 12	7.1 and 7.2: Exponential functions and applications; 7.3: Logarithmic functions
Week 13	7.4: Applications of logarithms; 7.5: Exponential and logarithmic equations
Week 14	Test 3
Week 15	8.1: Solving systems of equations
Finals Week	Tuesday, December 13, 3:00 - 5:00pm

University Schedule

The complete university schedule can be found at

www.marshall.edu/calendar/academic/fall2016.asp