

Syllabus: MTH 130

College Algebra

Department of Mathematics|College of Science

Fall 2014

Dr. Evelyn Pupplo-Cody (pupploco@marshall.edu)

This course begins on August 25, 2014 and ends on December 10, 2014.

Please note that all times are Eastern.

Please see the [University Academic Calendar](#) for course withdrawal dates.

Office

Office Hours:

You can e-mail me using the MUOnline Mail function available through the course or at pupploco@marshall.edu. You may also leave me voice mail messages at 304 696-3047.

About me:

I have been teaching at Marshall University since 1989. My credentials include a Ph.D. from the University of Kentucky where I studied univalent function theory and other topics in mathematics.

My interests include all types of technology in teaching mathematics. I am an avid reader and enjoy many kinds of puzzles.

Course Materials and Cost

College Algebra, 6th Edition by Levitan, Kolman, and Shapiro. You will also need a BVTLab access card that can be purchased with the book.

You will need a graphing calculator.

The books can be purchased at [The Marshall University Bookstore](#) or ordered online at www.BVTLab.com for approximately \$50.00.

Technical Requirements

- To use Black Board you must have the latest versions of your internet browser and Java.
- To take exams off-campus you will need a webcam and microphone on your computer.
- Help Desk – for assistance needs

<http://www.marshall.edu/ucs/cs/helpdesk/>

HELP DESK PHONE NUMBERS:

(304) 696-3200 (Huntington, WV)

(304) 746-1969 (Charleston, WV)

(877) 689-8638 (Toll free)

Course Details

Prerequisites: MTH 123 or at least 21 on Math ACT or Math SAT 500 or MTH 120

Objectives of the course:

1. To prepare students for a course in calculus with analytic geometry. Students should also take trigonometry before attempting calculus.
2. To prepare students for science and engineering courses.
3. To give students a solid understanding of algebra and how it is used.
4. To develop facility in using graphing calculators to solve math problems.
5. To satisfy the mathematics general education requirement.

This course consists of six chapters: a review chapter and five chapters. Each chapter is divided into sections. For each section I suggest that you:

- **Begin by reading the text for each new section.** The content in my lectures is not meant to replace the text, but to supplement it.
- **Look at my lectures for a guided tour through the section.** Each lecture contains video clips of selected problems, web sites for more help, definitions and rules, worked out examples and explanations.
- **Try the assigned homework problems.** You won't know if you can do this unless you really try.
- **If you are having trouble, please contact me through the MUOnline e-mail or through Marshall's e-mail.** I would be happy to explain to you how to do any of the problems. If you understand the concept being presented, you may be able to skip some of the problems. Only you can be the judge of the work you will have to put in to master the material, but remember that "practice makes perfect."
- **For the homework grade, please complete the homework quizzes after each section.** These you may do with your books, notes, and other resources. I do not collect homework but I am happy to discuss how to solve the problems if you need help.

Upon finishing each unit you will need to take a unit examination and a comprehensive final examination will conclude the course.

Below is a schedule for the work in this course. Students who work at a constant pace tend to make better grades than those who try to hurry through or leave it all to the last minute.

Schedule

| Week | Unit | Section | Topic | Quiz Due Date |
|------|------|---------------|---|---------------|
| 1 | 1 | 1.1 | The Real Number System | 9/26 |
| 1 | 1 | 1.2 | The Real Number Line | 9/26 |
| 1 | 1 | 1.3 | Algebraic Expressions; Polynomials | 9/26 |
| 1 | 1 | 1.4 | Factoring | 9/26 |
| 2 | 1 | 1.5 | Rational Expressions | 9/26 |
| 2 | 1 | 1.6 | Integer Exponents | 9/26 |
| 2 | 1 | 1.7 | Rational Exponents and Radicals | 9/26 |
| 3 | 1 | 1.8 | Complex Numbers | 9/26 |
| 3 | 1 | 2.1 | Linear Equations in One Variable | 9/26 |
| 3 | 1 | 2.2 | Applications | 9/26 |
| 4 | 1 | 2.3 | Quadratic Equations | 9/26 |
| 4 | 1 | 2.4 | Applications – Quadratic Equations | 9/26 |
| 4 | 1 | 2.5 | Linear and Quadratic Inequalities | 9/26 |
| 5 | 1 | 2.6 | Absolute Value – Equations and Inequalities | 9/26 |
| 5 | 1 | Exam 1 | Quizzes and test due by 2:45 p.m. on Friday | 9/26 |

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|-----------|---|------------------------------|---|--------------|
| 6 | 2 | 3.1 | Cartesian Coordinate System | 10/31 |
| 6 | 2 | 3.2 | Functions and Function Notation | 10/31 |
| 6 | 2 | 3.3 | Graph of Functions | 10/31 |
| 7 | 2 | 3.4 | Linear Functions | 10/31 |
| 7 | 2 | 3.5 | Algebra of Functions; Inverse Functions | 10/31 |
| 7 | 2 | 3.6 | Variation | 10/31 |
| 8 | 2 | 4.1 | Quadratic Functions and Their Graphs | 10/31 |
| 8 | 2 | 4.2 | Graphs of Polynomial Functions | 10/31 |
| 8 | 2 | 4.3 | Polynomial Division; Synthetic Division | 10/31 |
| 9 | 2 | 4.4 | Remainder Theorem; Factor Theorem | 10/31 |
| 9 | 2 | 4.5 | Factors and Zeros | 10/31 |
| 10 | 2 | 4.6 | Real, Complex, and Rational Zeros | 10/31 |
| 10 | 2 | Exam 2 | Quizzes and test due by 2:45 p.m. on Friday | 10/31 |
| 11 | 3 | 5.1 | Rational Functions | 12/05 |
| 11 | 3 | 6.1 | Review of Inverse Functions (See 3.5) | 12/05 |
| 12 | 3 | 6.2 | Exponential Functions | 12/05 |
| 12 | 3 | 6.3 | Logarithmic Functions | 12/05 |
| 13 | 3 | 6.4 | Properties of Logarithms | 12/05 |
| 13 | 3 | 6.5 | Exponential and Logarithmic Equations | 12/05 |
| 14 | 3 | Exam 3 | Quizzes and test due by 2:45 p.m. on Friday | 12/05 |
| 15 | | Cumulative Final Exam | Test due by 2:45 p.m. on Wednesday | 12/10 |

Course Grading

Each Unit Examination (three exams) will be worth 20% of the semester grade. Homework quizzes will be worth 20% of the semester grade. The comprehensive final exam will be worth 20% of the semester grade.

90.00 – 100 = A
80.00 – 89.99 = B
70.00 – 79.99 = C
60.00 – 69.99 = D
Below 60.00 = F

Please note that I do not round up grades.

Exams

All quizzes will be taken at www.BVTLab.com. Homework quizzes are open book/open notes quizzes. These can be found at www.BVTLab.com.

To help preserve the integrity of the course, exams will be taken in one of two ways.

1. Online using Respondus Monitor – instructions for downloading the software are posted in the course. You will need to use a computer with a webcam if you choose to take your exams online using Respondus Monitor. The current price for this service is \$10 per course. Please see the instructions in the Course Content folder in MUOnline.
2. On campus – a list of available times and computer classrooms are posted in the course. There is no charge for this option.

On-Campus Requirements

There is absolutely no requirement that you come to campus. You can communicate with me via the course *Mail* tool or the *Who's Online* tool. You have the option of taking exams online through the *Assessments Tool* using Respondus Monitor.

Course Policies

There are deadlines for the completion of each exam. Quizzes and exams will not be available after the deadlines. The course is divided into 3 units with exams at the end of each unit. The course concludes with a comprehensive final examination.

Resources

Don't hesitate to contact me directly with questions or concerns. You can reach me through the course *Mail* Tool. Please don't let your questions hang out there and simmer. If you are not sure about something the best thing to do is to ask about it right away!

University Policies: <http://www.marshall.edu/wpmu/academic-affairs/policies/>

Support Services

Marshall University offers a variety of support services to students enrolled in online courses:

- [Tutoring Center Online](#)
- [Writing Center Online](#)
- [Libraries](#)
- [Textbook Service](#)
- [Disabled Student Services](#)
- [Campus Resources](#)
- [Technical Help](#)
- [MU Help Desk](#)

Marshall University
College of Science
Department of Mathematics

First Day of Class

Dear Student:

Welcome to your first day of class! Here are the instructions for getting your **TEXTBOOK+** materials from BVT Publishing.

| | |
|--------|---|
| Step 1 | Go to https://www.bvtlab.com/store and purchase the TEXTBOOK+ bundle ISBN# 978-1-61882-656-5, which includes a loose-leaf textbook plus a Product Key for our website and use the following coupon code TBCA-FL13 |
| Step 2 | Go to www.BVTLab.com , enter your Product Key, and create an account and request the loose-leaf in the student study center. Your MTH 130 course code is 3D7F4C. |
| Step 3 | Explore the complementary eBook and the various student resources available in the Student Study Center.* |

Happy Learning!

BVT Publishing

* Student resources vary by title, and may include practice questions, flash cards, chapter summaries, lecture slides, a study guide and more.