# MA 109: College Algebra, Section 011 - Syllabus

Class Time and Location: MTWTF 10:20-11:20 Whitehall Classroom Building 345 Course Website: http://www.ms.uky.edu/~viza222/MA109\_Summer18 Instructor: Vasily Zadorozhnyy Email: vasily.zadorozhnyy@uky.edu (Preferred method) Phone: (859) 257-7216 Office Location: Patterson Office Tower Rm. 706 Office Hours: MWF 11:30-12:30 or by appointment

## **Required Course Materials:**

- 1. Textbook: College Algebra, by Thomas W. Hungerford and Douglas J. Shaw. We use a customized version of the original book, which is specifically published for the University of Kentucky and can be purchased at any UK bookstore. There is also an ebook version if you prefer available on www.webassign.net. Note: This is the name of the custom edition at the UK bookstores. If you buy the book elsewhere, you need to look for *Contemporary Precalculus* by Hungerford and Shaw.
- 2. Access Code for WebAssign: If you purchase your textbook new at any UK bookstore, this will come bundled with the book. Otherwise you will need to purchase the access code from the homework website www.webassign.net.
- 3. Calculator: For part of the course you will be using a graphing calculator. In class, I will be using a TI-83. I do not personally know how to use any calculator other than the TI-83, so I may not be able to help you with the specifics of other calculators. Nevertheless, most graphing calculators have the same basic functions, and you should be able to learn about your calculator by reading the manual.

Using the calculator during a test for any reason other than performing the required calculations (for example, to recall a previously stored formula) will be considered cheating. You may use any calculator that is allowed by the ACT including graphing calculators that the ACT allows. Note that **you will not be allowed to use the calculator on a cell phone**, or any other communication device. Furthermore, you may not use any calculator that has a computer algebra system (CAS) or a QWERTY keyboard. In particular, you may **not** use the TI-Nspire CAS, any TI-89, any TI-92, the HP 48GII, any HP 40G, any HP 49G, any HP 50G, the Casio Algebra fx 2.0, the Casio ClassPad 300, the Casio ClassPad 330, or any Casio CFX-9970G.

#### Overview of the Course:

Selected topics in algebra. Develops manipulative algebraic skills and mathematical reasoning required for further study in mathematics. Includes brief review of basic algebra, quadratic formula, systems of linear equations, introduction to functions and graphing. This course is not available for credit to persons who have received credit in any mathematics course of a higher number with the exceptions of MA 111, 112, 123, 162, 201 and 202. Credit not available on the basis of special examination. Prereq: Two years of high school algebra and a math ACT score of 21 or above or a math SAT score of 510 or above; or MA 108R; or a grade of C or better in MA 111; or appropriate score on the math placement test.

# **Course Content:**

In this course we will cover the great majority of the topics from Chapters 1 through 5 and Chapter 11 of the text by Hungerford and Shaw. The sections in the text correspond to the lecture notes for MA 109. The course schedule can be found in the Course Calendar link on the main course web page. The topics include Solving Equations and Inequalities, Systems of Equations, Application Problems, the Cartesian Coordinate System, Functions, Function Notation, Graphs of Functions, Rates of Change, Difference Quotients, Polynomial Functions, Rational Functions, Exponential Functions, and Logarithmic Functions.

## **Student Learning Outcomes:**

Students who successfully complete this course will be able to:

- Recognize that the equation of a line can take many forms. In particular, there are times when point-slope form is more appropriate than slope-intercept form and vice- versa.
- Describe the connection between the slope of a line and a rate of change.
- Solve equations algebraically.
- Convert a verbal problem description into a symbolic problem description.
- Understand the Cartesian coordinate system.
- Recognize the relationship between the solutions of an equation and the graph of an equation.
- Recognize the graphs of functions including linear, quadratic, polynomial, rational, step, exponential, and logarithmic.
- Utilize a variety of problem solving techniques to solve multi-step problems.

#### **Important Dates:**

Thursday, June 7	Classes begin
Monday, June 11	Last day to add
Tuesday, June 19	Last day to drop without a W
Wednesday, July 4	Independence Day, no class
Tuesday, July 17	Last day to drop with a W
Thursday, August 2	Last day of term (final exam)
Monday, August 6	Deadline to submit grades

Parking may be interesting due to freshman orientation on June 18-27 and July 1-13.

#### Grading:

The course grade will be based on two midterm exams, a final exam, a homework score, and an attendance/quiz score. The points available for each are outlined below.

Midterm Exam 1	100 points
Midterm Exam 2	100 points
Final Exam	100 points
Homework	150 points
Attendance/Quizzes	50 points
Total	500 points

Your final grade for the course will be based on the total points you have earned as follows:

A: 450-500 B: 400-449 C: 350-399 D: 300-349 E: 0-299

# Exams:

As I already mentioned, each midterm exam is worth 100 points and the final exam is worth 100 points. Tentative dates and times for the exams are as follows:

- Exam 1: 29 June 2018 (Friday) in class
- Exam 2: 18 July 2018 (Wednesday) in class
- Exam 3: 2 August 2018 (Thursday) in class

# All on campus exams will be taken in Whitehall Classroom Building 345.

## **Disability Accomodation:**

If you have a documented disability that requires academic accommodations, please contact me as soon as possible. In order to receive accommodations in this course, you must provide me with a Letter of Accommodation from the Disability Resource Center (725 Rose Street MDS Bldg Suite 407, 859-257-2754) for coordination of campus disability services available to students with disabilities.

## Time Conflicts for Exams:

If you have a time conflict with the regularly scheduled exam due to a university excused absence, you will be permitted to take an alternate exam. Students who need an alternate exam should contact me at least one week before the regularly scheduled exam. If you miss an exam for an excused absence or emergency, you must provide me with proper documentation in order to make up the exam by placing it in my mailbox in POT 715 or scanning and emailing it to me. Whenever possible, students are encouraged to contact me at least two weeks prior to the regularly scheduled exam.

#### Homework:

Each student has an individual, personal version of the web-based homework assignments to work and submit.

Homework extensions are extremely rare. You must have a university excused absence even to apply for an extension. (see 5.2.4.2 in Section IV of Student Rights and Responsibilities)

If you are requesting an extension for an online assignment, you must request an extension through WebAssign. If you miss assignments because of a serious illness or family emergency, please notify me of your absence by email as soon as possible.

As soon as you can, submit an extension request to me.

Your homework grade is based on the percentage of correct problems out of the total number of possible points. To calculate your current homework score use the following formula:

$$150 \cdot \frac{\text{\# of HW Questions Correctly Answered}}{\text{Total \# of HW Questions}}$$

# Quizzes/Attendance:

You will also have several quizzes throughout the semester. They are meant to encourage you to keep up with the material and prepare you for exams. In addition you will be able to earn points towards your final grade for simply showing up to class. The attendance score should be helping everybody's grade.

# Emails:

I will answer emails sent to me within 24 hours on the weekdays and 48 hours on the weekends. If I have not replied to you in the amount of time mentioned above please send me another email. In the subject line of the email please include class and section number, last name, and a topic, such as: MA109-011 (Last Name) (Topic). For example, if I am a student in MA109 section 11 and I have a question about upcoming exam, then in the subject line I would write MA109-011 Zadorozhnyy Upcoming Exam Question. If you have a question send me an email as soon as you can and do not wait until the last moment. Please plan accordingly!

# Classroom Behavior, Decorum, and Civility:

The university, college and department has a commitment to respect the dignity of all and to value differences among members of our academic community. Obviously, the accepted level of civility would not include attacks of a personal nature or statements denigrating another on the basis of race, sex, religion, sexual orientation, age, national/regional origin or other such irrelevant factors. Students who are not respectful, not civil, or disruptive in any way may be asked to leave the class.

#### Academic Honesty:

All assignments, projects, and exercises completed by students for this class should be the product of the personal efforts of the individual(s) whose name(s) appear on the corresponding assignment. Cheating or plagiarism is a serious offense and it will not be tolerated. It will be thoroughly investigated, and it might lead to failure in the course or even to expulsion from the university. See Student Rights and Responsibilities in the University Senate Rules (Sections 6.3.1 and 6.3.2) for information on cheating, plagiarism, and penalties. A summary of recent changes to rules on cheating can be found at the Academic Ombud website. It's not worth it, so don't do it.

I reserve the right to alter these policies as necessary with proper notification.