#### Math E-8

College Algebra

**Spring 2020** 

Instructor:David S. Abbruzzese, Jr.Email:abbruzz@g.harvard.eduTeaching Assistant:Bryan JansonEmail:bryanjanson@gmail.com

Classes: Lectures – Wednesday 5:50-7:50 pm, TBA

Sections – Monday, 4-5 pm, TBA

**Required Text:** The Math Workshop: Algebra by Deborah Hughes-Hallett (available at the Coop)

Website: http://canvas.harvard.edu/courses/54729

# **Course Description:**

Math E8 is a 4-unit, undergraduate course. We begin with a review of geometry and then start with our treatment of algebra. We'll proceed to cover algebraic expressions and equations, both linear and quadratic, their manipulation and use in problem solving. From there, we will look at word problems, polynomial, fractional and simultaneous equations, inequalities, absolute value, graphing and lines. The main goal of this course is to lay a solid foundation for you in algebra, and to instill a sense of confidence in analytic courses in general.

### **Requirements:**

You must take the math placement exam and score satisfactorily. Also, the course requires you spend about 15 hours per week doing homework and additional problems. Students who have not been able to do this typically do not fare well in the class. Please consider this if you decide to enroll.

### **Examinations:**

Exam I: Feb 19 Exam II: Mar 25 Exam III: Apr 22 Final: May 13

**Makeup exams are not given** nor is extra credit assigned. Your lowest midterm grade will be dropped. This is really intended for students who have to miss an exam due to work, sickness, etc. If you take all three exams, your lowest score will still be dropped.

#### Homework:

Weekly homework assignments are due each *Monday at 4 pm* (in section) or *Wednesday at 5:50 pm* at the start of lecture. Due dates are indicated at the top of each assignment. Solutions will be posted on the website the next day. Late homework assignments cannot be accepted.

#### **Grades:**

Your grade will be assessed as follows:

Homework	20%	
Midterm exams	40 %	(20% each)
Final exam	40 %	

# Extra Help:

# Discussion sections – Monday, 4-5 pm, TBA

These are the review sections for our class. Even if you may not need help, it is often a good idea to attend these sessions just to get more practice in solving the problems. Also, coming to these sessions affords you the opportunity to get to know your classmates and benefit from the wealth of knowledge they bring with them. Sections will begin the week of *Feb 3*.

# The Math Question Center - Mondays at 6-8 pm and Tuesdays at 7:30-9:30 pm in TBA

This is a walk-in anytime, first come-first served basis, question and answer session. Several tutors will be there to help you. Note that this section is open to most of the Extension math classes, so try to arrive early. Distance students can get help online by logging into the Math Question Center Canvas Website

### **Extension School policies on Accessibility and Academic Integrity:**

### Official Harvard Extension School Policies

The Extension School is committed to providing an accessible academic community. The Accessibility Office offers a variety of accommodations and services to students with documented disabilities. Please visit <a href="https://www.extension.harvard.edu/resources-policies/resources/disability-services-accessibility">https://www.extension.harvard.edu/resources-policies/resources/disability-services-accessibility</a> for more information.

You are responsible for understanding Harvard Extension School policies on academic integrity (https://www.extension.harvard.edu/resources-policies/student-conduct/academic-integrity) and how to use sources responsibly. Not knowing the rules, misunderstanding the rules, running out of time, submitting the wrong draft, or being overwhelmed with multiple demands are not acceptable excuses. There are no excuses for failure to uphold academic integrity. To support your learning about academic citation rules, please visit the Harvard Extension School Tips to Avoid Plagiarism (https://www.extension.harvard.edu/resources-policies/resources/tips-avoid-plagiarism), where you'll find links to the Harvard Guide to Using Sources and two free online 15-minute tutorials to test your knowledge of academic citation policy. The tutorials are anonymous open-learning tools.

# **Course Outline**

Class	Date	Topics	Sections
1	Jan 29	Geometry / Algebraic Expressions / Polynomials	Appendix, 8, 9.1
2	Feb 5	Polynomials / Order of Operations / Factoring	9.2, 9.4–9.8
3	Feb 12	More Factoring / Algebraic Fractions	9.9, 10
4	Feb 19	Exam I	
5	Feb 26	Linear, Fractional and Quadratic Equations	11, 12, 14.1–14.4
6	Mar 4	Word Problems	13
7	<b>Mar 11</b>	Word Problems	13
	<b>Mar 18</b>	Spring Break - No Class	
8	<b>Mar 25</b>	Exam II	
9	Apr 1	Polynomial, Fractional and Radical Equations / Simultaneous Equations	15, 16.1–16.3
10	Apr 8	More Simultaneous Equations / Inequalities	16.4–16.6, 17
11	<i>Apr 15</i>	Absolute Value	18
12	<i>Apr</i> 22	Exam III	
13	<i>Apr 29</i>	The Cartesian Plane	19
14	May 6	Review	
15	May 13	Final Exam	