

HUDSON COUNTY COMMUNITY COLLEGE
STEM DIVISION

MAT070/073 - BASIC ALGEBRA SYLLABUS
CREDITS: 4 (Basic Algebra: 3 // Workshop: 1)



TITLE OF COURSE: Basic Algebra NUMBER MAT 070/073 -

TERM: /YEAR CLASS MEETING TIMES:

PREREQUISITE(S): MAT071-Basic Math or Accuplacer Math Computation Score of 78 or above

INSTRUCTOR:

EMAIL ADDRESS: @hccc.edu

1. COURSE DESCRIPTION:

- This course is designed to help students understand the basic fundamental mathematical concepts. Topics covered include symbols and sets of numbers; exponents; order of operations; adding, subtracting, multiplying, and dividing of real numbers. Solving quadratic equations by factoring, and graphing linear equations.

2. COURSE OBJECTIVES:

Upon successful completion of Basic Algebra, student should be able to do the following:

1. Solve systems of linear equations and inequalities of one or two variables, including application problems in a variety of fields: natural sciences, economics, and others.
2. Solve linear equations and inequalities
3. Perform basic operations (addition, subtraction, multiplication, division, and composition) involving real numbers, exponents, and polynomials.
4. Simplify and perform operations on polynomial expressions
5. Simplify radicals and apply the laws of exponents.
6. Solve quadratic equations by factoring and by using the quadratic formula.

3. REQUIRED MATERIALS:

Textbook: Pre-Algebra & Introductory Algebra ,5th Edition
Elayn El Martin-Gay, *University of New Orleans, Lakefront*
ISBN 13: 978-0-13-470763-1
ISBN 10: 0-13-470763-X

MyMathLab: A MyMathLab access code is required for this course. It is bundled with the text book sold through the HCCC Bookstore or may be purchased separately. Further instructions regarding MyMathLab will be provided.

Calculators are permitted to be used at any time.
HCCC Email and CANVAS (User Name and Password same as Portal)

4. ATTENDANCE:

Students are only permitted **2 absences** in this course. Missing more than 2 classes may result in failure. Regular attendance is essential for the successful completion of this course. Absence is not an excuse for coming to class unprepared. You are responsible for all work on the date that it is due. Leaving class early or arriving late requires instructor permission.

Make-up tests will only be permitted for absences due to a documented family or medical emergency. In order to qualify for a make-up test, the student must contact the instructor **within 24 hours** of the absence by phone or email and be prepared to provide documentation validating the absence if requested.

5. HOMEWORK:

A homework assignment in MyMathlab will be given at the end of each class. This assignment is due, fully completed, at the beginning of the next class and is not to be worked on while instruction is being given. Late homework for any section(s) will only be accepted with the permission of your instructor.

Students are required to complete all of the corresponding assignments at 70% or better before the administration of each of the three tests and the exit exam.

6. EVALUATION METHODS:

A student who has not correctly completed at least 70% of the assigned work will not be permitted to take the Exit Exam and will fail the class.

In order to help students demonstrate mastery of the material and prepare for the Exit Exam, there will be **three** tests given during the semester:

- Test 1 (Chapters 9-10)
- Test 2 (Chapters 11-12)
- Test 3 (Chapters 13-15)

If students do not take Test 1, Test 2, or/and Test 3 on time, because of an incomplete homework, they will receive a penalty; first time: minus 5 points; second time: minus 10 points, and third time: minus 20 points.

Grades:

Grades are based on the following criteria:

Homework	10%
Test 1	15%
Test 2	15%
Test 3	15%
Exit Exam	45%

Assignment of Final Grades:

GRADE	Criteria	Next Class
E (Exit)	70% or higher	MAT 100 College Algebra
R (Repeat) **	60% to 69%	Retest or Enrichment Program

F (Fail)	less than 60%	Repeat Basic Math MAT070/073
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** Students with a **final grade of R and exit exam score greater than or equal to 65%** are eligible to **retest**. Students with **final grade R and exit exam score below 64%** should take the **Enrichment Program** or repeat the class.

*Enrichment is a FREE program to help students who did not exit Basic Math/ Basic Algebra. Students will be tested at the end of the program. Eligibility requirement apply.
For additional questions reach out to Pat Barroero (pbarroero@hccc.edu)*

7. CLASS ROOM RECORDING POLICY:

Hudson County Community College prohibits the audio-visual recording, transmission, and distribution of classroom sessions. Classes may only be recorded with the advance written permission of the instructor. The complete classroom recording policy is listed in the student handbook.

8. ACCESIBILITY SERVICES STATEMENT:

Hudson County Community College is committed to the creation of an inclusive and safe learning environment for all students. The Office of Accessibility Services is responsible for determining reasonable accommodations for students who encounter barriers due to disability (conditions can include but are not limited to: mental health, attention-related, learning, cognitive/developmental, vision, hearing, physical or health impacts). When the student completes the request process and reasonable accommodations are determined to be necessary and appropriate, an Accommodation Letter (Letter) will be provided. The student must provide the Letter to each course instructor. This should be done as early in the semester as possible as accommodations are not retroactive. You can contact Accessibility Services by phone at 201-360-4157, by email at as@hccc.edu; visit their website at <http://www.hccc.edu/accessibility-services/> or visit them at 71 Sip Avenue, L011, Jersey City, NJ and all information provided will be kept confidential.

9. BEHAVIORAL EXPECTATIONS:

The College assumes that entering students are adults who have developed mature behavior patterns, positive attitudes, and conduct above reproach. Students are treated according to this belief and are expected to behave in the classroom in a manner that is supportive of the learning environment.

10. USE OF ELECTRONIC COMMUNICATION DEVICES

The use of any electronic device is strictly prohibited during class. All phones and mobile devices must be turned off or silenced during class and stored out of sight.

11. ACADEMIC INTEGRITY STATEMENT:

Academic Integrity Standards:

Academic integrity is central to the pursuit of education. For students at HCCC, this means maintaining the highest ethical standards in completing their academic work. In doing so, students earn college credits by their honest efforts. When they are awarded a certificate of degree, they have attained a goal representing genuine achievement and can reflect with pride on their accomplishment. This is what gives college education its essential value.

Violations of the principle of academic integrity include:

- Cheating on exams
- Reporting false research data or experimental results
- Allowing other students to copy one's work to submit to instructors
- Communicating the contents of an exam to other students who will be taking the same test
- Submitting the same project in more than one course, without discussing this first with the instructor
- Submitting plagiarized work. Plagiarism is the use of another writer's words or ideas without properly crediting that person. This unacknowledged use may be from published books or articles, the Internet, or another student's work

When students act dishonestly in meeting their course requirements, they lower the value of education for all students. Students who violate the college's policy on academic integrity are subject to failing grades on exams or projects, or for the entire course. In some cases, serious or repeated instances of academic integrity violations may warrant further disciplinary action.

Detailed information on the College's Academic Integrity policy may be found in the *HCCC Student Handbook*. The handbook also contains useful information for students on completing research projects and avoiding plagiarism.

12. MANDATORY USE OF HCCC EMAIL ADDRESS

Members of the HCCC community are required to check their official HCCC email address in order to stay current with College and course communications. All college business communication between faculty, students, and staff must be sent via an official HCCC email address. If an employee or student elects to forward or link his/her HCCC email to a separate and private account, that individual remains responsible for all material transmitted to that account. Employees of HCCC shall not be responsible for any material that remains undelivered, due to defects in the private non-HCCC accounts. Failure in the operations of private email accounts shall not be cause for excuse from communications between the student and the employee. Students that encounter difficulty with HCCC email should view the FAQ's section on the Portal.

13. TUTORING

Early intervention is important to succeed in the class, extra help with the material is offered at the Lower level of the Library Building and Supplemental Instruction sessions and tutoring are also available at STEM building Room S514.

14. DIVERSITY, EQUITY, AND INCLUSION STATEMENT

Hudson County Community College (HCCC) fosters a welcoming environment that celebrates and encourages culturally responsive curricula, respects diverse viewpoints, and values discussions without censure or hostility. Our classrooms are strengthened by embracing all student voices and identities.

15. MASKS AND VACCINES MANDATES

In efforts to keep our community healthy and in response to the concerns related to COVID-19 variants, HCCC requires all students attending on-ground classes or utilizing on-ground services to be fully vaccinated.

Masks are required for all students, faculty, and staff inside all HCCC buildings. For those that would like them, N95 masks are available at security desks. N95 masks are recommended as they provide more protection than cloth masks. In addition to these precautions, and most importantly, everyone should monitor themselves for symptoms and stay home if they are sick. Please refer to the Return to Campus webpage: (www.hccc.edu/community/returntocampus/index.html), the Return to Campus FAQs:

(www.hccc.edu/community/returntocampus/faq.html), and all Return to Campus email communications for more information and updates.

WEEK	SECTION	TOPICS	Book Pages
1	9	Equations, Inequalities, and Problem Solving	658
	9.1	Symbols and Sets of Numbers	659-667
	9.2	Properties of Real Numbers	668-676
	9.3	Further Solving Linear Equations	677-687
2	9.4	Further Problem Solving	688-701
	9.5	Formulas and Problem Solving	702-713
	9.6	Linear Inequalities and Problem Solving	714-736
3	10	Exponents and Polynomials	738
	10.1	Exponents	739-750
	10.2	Negative Exponents and Scientific Notation	751-760
	10.3	Introduction to Polynomials	761-770
4	10.4	Adding and Subtracting Polynomials	771-777
	10.5	Multiplying Polynomials	778-784
	10.6	Special Products	785-794
	10.7	Dividing Polynomials	795-801
5		EXAM 1(CHAPTERS 9-10)	
6	11	Factoring Polynomials	817
	11.1	The Greatest Common Factor	818-827
	11.2	Factoring Trinomials of the Form $x^2 + bx + c$	828-834
	11.3	Factoring Trinomials of the Form $ax^2 + bx + c$	835-841
7	11.4	Factoring Trinomials of the Form $ax^2 + bx + c$ by Grouping	842-846
	11.5	Factoring Perfect Square Trinomial and the Differ. of Two Squares	847-857
	11.6	Solving Quadratic Equations by Factoring	858-865
	11.7	Quadratic Equations and Problem Solving	866-874
8	12	Rational Expressions	888
	12.1	Simplifying Rational Expressions	889-899
	12.2	Multiplying and Dividing Rational Expressions	900-909
	12.3	Adding and Subtracting Rational Expressions with the Same Denominator and Least Common Denominator	910-917
9	12.4	Adding and Subtracting Rational Expressions with Different Denominators.	918-924
	12.5	Solving Equations Containing Rational Expressions	925-935
10		EXAM 2 (CHAPTERS 11-12)	
11	13	Graphing Equations and Inequalities	967
	13.1	Reading Graphs and the Rectangular Coordinate System	968-980
	13.2	Graphing Linear Equations	981-990
	13.3	Intercepts	991-1000
	13.4	Slope and Rate of Change	1001-1017
	13.5	Equations of Lines	1018-1031
12	14	Systems of Equations	1082
	14.2	Solving Systems of Linear Equations by Substitution	1094-1101
	14.3	Solving Systems of Linear Equations by Addition	1102-1109
12	15	Roots and Radicals	1136
	15.1	Introduction to Radicals	1137-1144
	15.2	Simplifying Radicals	1145-1152
	15.3	Adding and Subtracting Radicals	1153-1156
13		EXAM 3– (Chapters 13-15)	
14		Exit Exam Review	
15		Departmental Exit Exam	

Weekly outline:

16. MYMATHLAB

Syllabus/Contract

I, _____, received a copy of the Basic Algebra syllabus, and I had ample time to read it and ask questions about the format of the course and the policies. Furthermore, I understand that success in this class requires my:

- (1) Attending all my classes on time.
- (2) Practicing and completing assignments.
- (3) Understanding and obeying the rules of the class.
- (4) Respecting the ideas and opportunities of others.
- (5) Completing all the requirements in order to take the final exit exam.

(Signature)

(Date)

Student Contact Information

Please fill in the following information where I might reach you during the semester:

Home phone	()
Work phone	()
Cell phone	()