# Bronx Community College, City College University of New York Department of Mathematics and Computer Science 

Syllabus: MTH05 Elementary Algebra (0 credits, 6 hours) taught by Professor Natalia Novak Textbook: reference text by Professor Uma Iyer (version 4, Summer 2016)
Prerequisites: MTH01 or equivalent and RDL 01 if required. Corequisite: RDL 02 if required

| Topics | WeBWork HW |
| :---: | :---: |
| 1.1 Review of Fractions | HW 01 |
| 1.2 Addition and Subtraction of Real Numbers, 1.3 Multiplying and Dividing Real Numbers | HWs 02, 03, 04 |
| 1.4.1-1.4.2 (ignore radicals for now) Exponents and Radicals, and 2.1 Order of operations | HW 05 |
| 3.2.1 Transition to Algebra, <br> 2.2 Evaluating algebraic expressions | HWs 06, 07 |
| 3.1 Solving Linear Equations | HW 09 |
| 3.3 Literal Equations, <br> 3.4 Linear Inequalities in One Variable | Hws 10, 13 |
| Sample Test 1 |  |
| Test 1 |  |
| 4.1 Linear equations in two variables | HW 14 |
| 4.2 The cartesian coordinate system 4.3 Graphing linear equations | Hws 15, 16 |
| 4.4 The slope of a line <br> 4.5 Equations of lines (to be continued next week) | HW 17 |
| 4.5 Equations of lines (continues) working on the homework assignment | HW 18 |
| 4.5 Equations of lines (finishing up) |  |
| 4.5 Equations of lines (few more examples), <br> 4.7 Systems of linear equations (solving by graphing, by elimination and substitution methods) | HW 20 |
| 4.7 Systems of linear equations (continues), working on homeworks |  |
| 4.6 Graphing linear inequalities in two variables | HW 21 |
| 4.6 Graphing linear inequalities in two variables | HW 19 |
| Preparing for Test 2 |  |
| Test 2 |  |
| 5.1 Integer Exponents | HWs 22, 23 |
| 5.2 An introduction to polynomials | HW 25 |
| 5.3 Adding and Subtracting Polynomials, | HW 26 |


| 5.4 Multiplying Polynomials |  |
| :--- | :--- |
| 5.5 Division of polynomials by monomials | HW 27, 28 |
| Factoring polynomials: |  |
| 5.6.1 The Greatest Common Factor |  |
| 5.6.2 The Grouping Method |  |
| 5.6.3 Special Products |  |
| Factoring polynomials (continues) |  |
| 5.6.4 - 5.6.5 Factoring Trinomials | 5W 29 |
| 5.6.6 Summary | Solving Quadratic Equations by Factoring |
| 5.8 Solving Word Problems Using Quadratic Equations | HW 30 |
| Review/Sample Test 3 |  |
| Test 3 | HWs 31, 32 |
| 6.1 Roots and Radicals, including Pythagoran Theorem and Distance Formula | HW 33 |
| 6.2 Operations on Radicals | HW 34 |
| 6.3 Complex Numbers | HWs 35, 36 |
| 7.1 Solving Quadratic Equations (completing the square and quadratic formula) |  |
| 7.2 Introduction to Parabolas |  |
| Test 4 practice |  |
| Test 4 |  |
| Final Exam Practice |  |

## Instructor: Natalia Novak

## E-mail: natna20@gmail.com or natalia.novak@bcc.cuny.edu

Our course will be supported by the web-page that can be found here: natna.info/teaching.html

Office hours: at CP 122
Monday, 2:00pm - 3:00 pm and Wednesday, 10:00 am - 11:00 am
Math Tutoring Lab: Learning Commons (Meister Hall, Sub-Basement, Suite 05); Phone: 718-289-3139
Monday - Friday: 10 am - 8 pm
Saturday \& Sunday: $10 \mathrm{am}-3 \mathrm{pm}$

Cell phones policy: please, respect other students and me. Turn off or switch to silent mode your phones before entering the class room. Text messaging is prohibited in class.

| Grade distribution: |  |
| :--- | :--- |
| HWs | $20 \%$ |
| Tests | $45 \%$ |
| Final Exam | $35 \%$ |

Grading policy:
in order to pass MTH05 class you need to get at least 70\%

## Homework assignments:

- You'll be given homework assignments in each class.
- All the homework must be done and submitted online, through the WeBWork system
- Homeworks are graded, and they make up 20\% of your final MTH05 grade.

Tests:

- we will have four tests,
- before each test, we will have a separate class where we will review the material that will be on it or will work on a sample test
- a week before this review I'll distribute/post the review problems


## Final Exam:

- Final Exam is a computerized multiple choice exam.
- There are 25 questions and it is timed at 100 minutes.
- You will be taking Final Exam at the testing office in NI 200A, date to be provided by the college
- We will allocate two classes for preparation to the Final Exam

The Tests and the Final Exam are closed book and closed notes. You can use simple calculators, but no smartphones.

Attendance: I will be taking attendance in every class

- If you are more than $\mathbf{3 0}$ minutes late to class, you are considered to be absent.
- It is the policy of this class, that if If you get $\mathbf{6}$ inexcusable absences (without a genuine and documented reason) you automatically get $\mathbf{F}$ as a course grade.
- If you miss a class, it is your responsibility to get the material we covered in class and the HW assignment. Make sure you come prepared to the next class and submit homework assignment on time.

Please, note that there will be no extra assignments in order to raise your grade, so please do the homework and submit it on time, prepare well for the Tests and the Final Exam.

TextBook: reference text by Professor Uma Iyer (version 4, Summer 2016)

Unfortunately, the hard copy of this book will not be distributed. The pdf file (electronic version of the book) is available on our department's web-site and on our class web-page.

WeBWork: Visit out class web-page http://natna.info/MTH05/, to get the link to it.
Instructions on how to log-in into the WeBWork first time:
User name: firstlast
example: Jane Smith would be janesmith
Note: no spaces, no capitalization, apostrophes are taken out, hyphens stay in (e.g O'brien will be obrien and Megan Weber-Smith will be meganweber-smith )

Password: same as the user name

## After logging-in:

1) Please change your password using the 'password/email' link in the menu on the left, 2) add your preferred email address (same location as for item 1 ). It is especially important to add the email as a means of communication with me!!!

If you have trouble signing in, make sure that your last name is in all lower case letters, and that the last four digits of your social security number are correct, and you are using this same correct format for your password. If you have verified that this is correct and you still cannot sign in, send me an email.

