Math 1011Q- Introductory College Algebra and Mathematical Modeling
Instructor: Bianca Munteanu - bianca.munteanu@uconn.edu
Meeting: Tuesday and Thursday, 8:00 – 9:15 AM in MONT113
Office Hours: in MONT129 Tuesday and Thursday 12:00 – 1:30 PM, or by appointment.

Math 1011Q is a course designed to serve as preparation for all the other Q courses offered at UConn. A first component of this class is made up of the collection of fundamental algebraic concepts and their manipulations. Most of this material is taught in High Schools and Community Colleges under the name Intermediate Algebra or Algebra II. Math 1011Q covers this material using a college algebra approach. The second component consists of using these algebraic concepts for solving multi-step problems from other disciplines. This practice is called Mathematical Modeling, and is the part of the course that gives Math 1011Q its unique interesting flavor, liveliness and usefulness beyond a usual Intermediate Algebra course.

You are expected to attend all classes. You are responsible for everything that happens in class. If you miss a class, you are expected to find out what happened either from your Instructor or from your classmates. You are also expected to work outside of class about 4 hours per week. Most of all, I hope that as the course progresses you will get excited about what you are learning and delight in your own, perhaps unexpected, ability to solve mathematical problems.

Individual homework assignments are assigned after every section. The assignments assigned on this week's covered sections will be due next week on Friday at the beginning of the class. I will select some of the questions from homework and grade them for correctness, and the rest of them will be graded for completeness (I will check if the questions have a solution written with details, not just the final answer). The assignments are on the outline, and I will also announce at the end of the week what you must complete for your homework. Most of homework assignments are done outside of class, but we devote will devote some time every week to questions related to difficulties in the homework. **You are encouraged to work with other students in this class on all your homework assignments. It is expected of you to write your own solution, please do not copy someone else's solution, if you work in group on a homework**.
On Thursdays, at the beginning of the class, you will have a quiz based on the previous week's material. The quiz will be one or two questions relevant to that material.

Grading

Homework	15%
Quizzes	10%
Midterms	15% each
Final exam	30%
Total	100

Week	Content	Assignments
1	1.2 Algebraic expressions and sets of numbers 1.3 Operations with real numbers 1.4 Properties of real numbers 2.1 Linear equations in one variable	Pg 16: 1,5,7,31-36,5961,73,78-80,83,97 Pg 28: 1,9,11,17,21,27,31,35,37,45,47,53,67,73,79,91 Pg 40: 3,9,11,15-20,25-34,41,53,55,76,80,109 Pg 57: 1,11,13,17,23,26,35,43,47
2	2.2 Introduction to problem solving 2.3 Formulas and problem solving 2.4 Linear inequalities and problem solving	Pg 65: 1,3,5,11,13,30,31 Pg 75: 1,3,7,13,29,52 Pg 87: 3,5,9,13,33,43,51,59,63,66,71
3	2.6 Absolute value equations 3.1(+3.3) Graphing equations	Pg 102: 5,9,15,21,29,37,47,59,67 Pg 129: 1-9(odd),17,19,21,27,33,41,47
4	**Midterm 1-- September 20- in class**	
5	3.2 Introduction to functions 3.4 Slope of a line	Pg 142: 1,3,15,17,23,25,29,35,39,53,55,57,69,71,73,75 Pg 164: 5,9,13,29,31,35,43,45,61,69,89,91
6	3.5 Equations of lines 4.1 Linear equations in two variables *******	Pg 175: 7,9,11,15,17,19,25,29,43,45,65,71 Pg 216: 1,7,9,17,21,25,29,41,57,61,
7	5.1 Exponents 5.2 Exponents 2 5.3 Polynomials and Polynomial functions	Pg 267: 1,3,5,7,15,25,27,33,43,47,53,61,73,75,85 Pg 273: 1,7,9,17,21,25,29,33,41,47,49,57,65 Pg 284: 19,23,29,31,35,41,47,53,57,67,85
8	**Midterm 2-- October 18 – in class**	
9	5.4 Multiplying polynomials 5.5 The greatest common factor 5.6 Factoring trinomials	Pg 293: 11,19,25,37,39,43,45,51,57,73,87 Pg 299: 1,3,5,9,11,15,17,21,25,47,57,61 Pg 308: 3,11,13,15,21,29,59,87
10	5.7 Factoring special products 5.8 Solving quadratic equations 6.1 Multiply and divide rational expressions	Pg 314: 5,7,11,13,17,21,23,45,63 Pg 327: 3,9,13,21,23,25,49,59 Pg 351: 3,15,17,23,33,45,51,63
11	6.2 Add and subtract rational equations 7.1 Radicals and radical functions 7.2 Rational exponents 7.6 Radical equations	Pg 359: 1,11,17,19,21,25,29,33,45,59,69 Pg 423: 1,3,7,11,19,25,39,47,61,71,73,87 Pg 431: 3,5,13,15,21,23,31,37,39,43,51,53,67,71 Pg 460: 5,7,13,39,51,55

Week	Content	Assignments
12	**Midterm 3 – November 15 – in class**	
13	**Thanksgiving Break**	
14	9.3 Exponential functions 9.5 Logarithmic functions 9.6 Properties of logarithms	Pg 567: 3,17,18,19,20,21,27,31,35,49 Pg 581: 3,5,13,19,21,25,31,39,41,47,51,63,65 Pg 587: 3,5,9,13,15,19,21,25,31,49,51,53,55,57
15	9.8 Exponential and logarithmic equations Review	Pg 599: 13,17,21,31,33
16	**Final's Week – Date and room TBA on Student Admin**	**Good luck on your finals!**