Middlesex Community College, Middletown CT
Course Syllabus

COURSE: Intermediate Algebra, MAT137 Spring 2016 Online w/Campus Requirement
CRN: 1124 **Credits:** 3
Instructor: Kegan Samuel, Ph.D.
Room and Meeting times: Online
Office: Wheaton 310 **Telephone:** 860-343-5714
Email: ksamuel@mxcc.edu **Office Hours:** Please see Blackboard for current office hours

Pre-requisites: *Eligible for ENG*101 and MAT *095or MAT* 085 with a grade of "C" or better OR eligible for ENG*101 and math placement.*

Course Description: This course is a further study of algebra and mathematical modeling of functions and relations represented by tables, graphs, words, and symbols. Polynomial functions and expressions with special attention to linear, quadratic, exponential, rational, and radical functions are studied. There is an emphasis on modeling and applications for all topics. A graphing calculator is required for this course.

Note: Course cannot be used to satisfy the Quantitative Reasoning competency for transfer programs or pathways.

Required Materials:

- *Mathematics in Action: Algebraic, Graphical and Trigonometric Problem Solving* 5th Edition, The Consortium for Foundations of Mathematics w/ MyMathLab Access Kit
  OR
  MyMathLab access purchased directly from www.mymathlab.com , which comes with e-book.

- TI 83 or 84 Graphing Calculator

General Expectations: Intermediate Algebra can be a very challenging course when taken in a traditional classroom. Taking the course online can make it that much more difficult to stay on top of the material. It is crucial that you are doing work several times each week during this semester to be successful. Please do not wait until the weekend the assignments are due to complete them. If we were to meet in a classroom, you would be spending about 3 hours in class, and a minimum of another 4-5 hours outside of class doing work. Please keep that in mind to give yourself a guideline as to how many hours you will need to dedicate to this course.

Blackboard Learn: The entire course is set up using Blackboard Learn. I am often going to abbreviate this to BB. In BB you will find links to complete your homework and assessments, read brief summaries on your weekly topics, follow the calendar, contact me and post discussions. There are also links for help on BB. It is your responsibility to be logging on to BB and checking for announcements and following along with the course calendar. There is a hotline available for BB help 24/7. The number for this is 866 940 1928.

Communication with me: Please contact me through Blackboard Messages or email. To contact me through Blackboard, go to BB Messages on the navigation bar on the left and you will be able to find my name to send me a message. Please allow 24 hours for me to get back to you once you have emailed me.

Calendar: You will find a one-page calendar with the topics, required activities and due dates for each week of the semester under *Calendar of Due Dates on* the left task bar in BB. I strongly encourage you to print this out during the 1st week of classes and use it as a reference each week so you don't miss any due dates.

Homework: Each week you will be assigned a homework assignment that you are to complete using My Lab Mastering/MyMathLab, abbreviated MML. You get to MML by using the link on Blackboard. **With your textbook, you should have purchased a MyMathLab Access Kit. In that kit is an access code that you will need in order to register with My Lab/Mastering.**

Once you have registered for the first time in MML, you can either access the course through BB, or log in directly to MML by going to www.pearsonmylab.com . Both links will take you to the same login page.

You can work on the homework as many times as you like before the due date. **You will get three attempts at each question before MML marks that question incorrect. When that happens, you may choose "Similar Problem" and you will be given a new problem to try.** All homework assignments are due at the end of the week the topic is covered. For example, MML HW #1 is due Sunday January 31. It is the expectation that you work on the material during the week/weekend, complete the homework by the end of the week and then move on to the next week's material. **HW assignments will open each Monday morning.** Before attempting MML homework, you will want to read the weekly notes and follow along with the videos, complete the required activities (and go through even the ones that aren't required). Doing these things before attempting HW will make the time it takes to complete the HW each week much shorter. **Because this class is online and you are doing the work independently, it is critical that you stay on top of the material. Please make sure you are submitting on time! There will be a 25% penalty for all late homework.**

Quizzes/Tests: Your quizzes and tests are also taken in MyMathLab. Exams are timed, so you will have to complete them in one sitting. Once you open the quiz/exam, the timer will start. The reason tests are timed is to make sure that everyone has been fully prepared and mastered the material BEFORE taking the test. If you find that you are running out of time on these assessments, it is most likely because you have not practiced enough. If you are spending a good deal of time looking through your book/notes while you are taking a test, you will almost definitely run out of time. A short description of each exam, including amount of time you have to complete will be in your weekly notes. All tests/quizzes must be completed by midnight on the due date. See the calendar in BB for specific dates. Each week you will have at least a quiz or test due, as well as your discussion and weekly homework in MML. The expectation is that you are working on the homework all week and you take the test once you have completed that and feel comfortable with the material. Tests/Quizzes will be available the Monday before the due date. You will able to view your test grades as soon as you have submitted your answers, but you can only review your answers once the due date has passed. Please follow the calendar so you do not miss a due date. **NO LATE TESTS/QUIZZES WILL BE ACCEPTED UNLESS YOU HAVE A PHYSICIAN'S NOTE OR SOME DOCUMENTATION STATING YOU WERE UNABLE TO TAKE THE EXAM ON TIME.**

****Note about partial credit—My Lab/Mastering will give partial credit if you get one part of a question correct but not another part. However, since it is a computer grading these tests/quizzes, it will not award you partial credit if you have an answer wrong due to rounding, or some other very minor error. Once each due date passes, please review your test/quiz in MML. You can email me if you that feel there are some questions that you deserve partial credit on, along with your work. I can adjust the grade manually if I find you deserve more credit than you were given.

Mini-Projects: You will have 2 mini-projects to complete throughout the semester. The description and guidelines for these projects will be posted approximately 1 ½ to 2 weeks before they are due. The due dates can be found on the Calendar of Topics and Due Dates in BB.

Final Exam: You will be required take your final exam on campus during one of the two provided times. The two options for times will be provided to you during the first month of class so that you can plan ahead. The format of the exam will be exactly the same as every other exam, and taken on MML. The exam will be cumulative, and a set of review questions will be provided in MM.

YOU MUST EARN AT LEAST A 60% ON THE FINAL EXAM IN ORDER TO PASS THE COURSE. Failure to earn a 60% will result in an F for the course, regardless of your calculated average.

Discussions: You will have weekly discussions throughout semester, the first one being due on Sunday January 31. The due dates are on your calendar. Not all of the discussions will be mandatory. You will see if the discussion is OPTIONAL or MANDATORY when you read the description. Go to DISCUSSIONS on the navigation bar in BB to get full description and to post your response to the discussion. Some of these discussions will be open ended questions like "Tell the class one thing that you are having difficulty with this week", and some will be problems that relate to the material we are covering. For some discussions you will be able to read other responses' and some you will be replying directly to me.

Use of the Calculator: We will use the graphing calculator for almost every topic we cover. It is extremely important that you get comfortable using the calculator from the very beginning of class. The best calculator for you to have is the TI-83 or 84. Your textbook also provides the steps for using the TI graphing calculators.

**There is a great Calculator Guide in MML, under Tools for Success. Check it out once you get registered with MyMathLab.

Grading: Your final grade will be comprised of the following:

Homework	15 x 10 pts = 150 pts
Quizzes	15 x 10pts = 150 pts
Mini-Projects	2 x 50 pts = 100pts
Discussions	15 x 5 pts = 75pts
Tests	3 x 125 pts = 375pts
Final	150 pts
	1000 pts

The final grade will be your total points divided by 10.

Grading Scale: The following is the grading scale for MxCC College:

A	A-	B+	B	B-	C+	C	C-	D+	D	D-	F
93 – 100	90 – 92	87 – 89	83 – 86	80 – 82	77 – 79	73 – 76	70 – 72	67 – 69	63 – 66	60 – 62	< 60

Tutoring: MxCC offers **FREE TUTORING** on campus (Chapman Hall 711), and at the Meriden Center. For more information, visit the College Learning Center Website (click "College Learning Center" on the www.mxcc.commnet.edu homepage) or call (860) 343-5770. Take advantage of these services and start to excel in your classes!

***Withdrawal*:** You may withdraw from this class any time before the end of the 11th week of the semester. A completed and signed withdrawal form must be on file in the Records Office by the deadline in order to receive a "W" on your transcript. If you fail to complete this process on time, you will receive a letter grade at the end of the semester, which will include zeroes for any work not submitted. Course withdrawals may affect financial aid and veteran's benefits, so please make this decision carefully, and with the help of your advisor. Please see the Academic Calendar and the College Catalog for specific dates and procedures regarding the withdrawal process.

Math Placement Tests: The purpose of the Math Placement Exam is to assess a student's background and place him/her in an appropriate level of mathematics so as to increase the likelihood of a student's success. If a student believes that he/she has been misplaced in a math class, the student is responsible for speaking with his/her math teacher during the first week of class. If, after reassessing the placement, the math teacher believes that the student should be reassigned to another math class, the student must complete the course change process before the second week of class.

IMPORTANT COLLEGE POLICIES!! PLEASE READ CAREFULLY!

For information about the college's policies and procedures regarding academic honesty, accessibility/disability services, attendance, audio-recording in the classroom, grade appeals, plagiarism, religious accommodations, weather and emergency closings, and more, please go to the following website: www.mxcc.edu/catalog/syllabus-policies/ or scan the QR code with your smart phone. Also, please become familiar with the policies regarding nondiscrimination, sexual misconduct, and general student conduct at the following website: www.mxcc.edu/nondiscrimination/.

NON-DISCRIMINATION STATEMENT

Middlesex Community College does not discriminate on the basis of race, color, religious creed, age, sex, national origin, marital status, ancestry, present or past history of mental disorder, learning disability or physical disability, sexual orientation, gender identity and expression or genetic information in its programs and activities. In addition, the College does not discriminate in employment on the additional basis of veteran status or criminal record.

The following people have been designated to handle inquiries or complaints regarding non-discrimination policies and practices:

- Primary Title IX Coordinator
  Dr. Adrienne Maslin
  Dean of Students/Title IX and Section 504/ADA Coordinator
  amaslin@mxcc.edu; 860-343-5759; Founders Hall Room 123

- Secondary Title IX Coordinator
  Ms. Queen Fordham
  Coordinator of the Meriden Center Welcome Desk
  qfordham@mxcc.edu; 203-608-3011

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Prerequisite: Eligible for ENG*101 (including ENG*101E) and MAT*085 or 095 with a grade of "C" or better OR eligible for ENG*101 (including ENG*101E) and math placement

General Objectives of the Course

This course introduces the student to basic non-linear mathematical relationships and prepares them for further study in mathematics. It also includes the following Combined Mathematics Standards/Quantitative Literacy Outcomes:

1) Exhibit perseverance, ability, and confidence to use mathematics to make sense of and solve problems
2) Perform mental arithmetic and use proportional reasoning
3) Analyze problem situations through numerical, graphical, symbolic and/or verbal approaches and modeling
4) Use appropriate tools strategically in solving problems
5) Recognize patterns, draw inferences
6) Communicate and interpret results
7) Demonstrate an understanding and appreciation of the usefulness of mathematics in everyday life

Unit #	**Instructional Unit**	**Specific Objectives of Unit**
1	Linear Functions	1. Provide multiple representations (e.g., words, symbols, graphs, tables) of linear functions by hand and/or using technology 2. Determine identifying characteristics of linear functions 3. Model and solve real world applications with linear functions (e.g., car depreciation) and systems of linear equations
2	Exponential Functions and/or Expressions	1. Provide multiple representations (e.g., words, symbols, graphs, tables) of exponential functions or expressions by hand and/or using technology 2. Determine identifying characteristics of exponential functions or expressions 3. Evaluate, simplify, and perform operations on exponential functions or expressions 4. Identify exponential functions within real world applications and recognize the appropriate domain of each application
3	Quadratic Functions and/or Expressions	1. Provide multiple representations (e.g., words, symbols, graphs, tables) of quadratic functions or expressions by hand and/or using technology 2. Determine identifying characteristics of quadratic functions or expressions (e.g., factors) 3. Evaluate, simplify, and perform operations on quadratic functions or expressions 4. Solve quadratic equations algebraically (e.g., factoring, square root method, and quadratic formula with rational solutions) and/or graphically 5. Solve real world applications involving quadratic equations and functions and recognize the appropriate domain of each application
4	Rational Functions	1. Provide multiple representations (e.g., words, symbols, graphs,

	and/or Expressions	tables) of simple rational functions or expressions by hand and/or using technology 2. Determine identifying characteristics of rational functions or expressions 3. Evaluate, simplify, and perform operations on simple rational functions or expressions 4. Solve simple rational equations algebraically and/or graphically 5. Solve real world applications involving rational functions and identify the appropriate domain of each application
	Radical Functions and/or Expressions	1. Provide multiple representations (e.g., words, symbols, graphs, tables) of simple radical functions or expressions by hand and/or using technology, with primary emphasis on square root 2. Determine identifying characteristics of radical functions or expressions 3. Evaluate, simplify, and perform operations on simple radical functions or expressions 4. Solve simple radical equations algebraically and/or graphically 5. Solve real world applications involving radical functions and identify the appropriate domain of each application 6. Identify imaginary numbers