# COURSE SYLLABUS-Spring 2018

**** Please read the following carefully, as you are responsible for its content!****

| **MAT*** | **137** | **Intermediate Algebra Online with Campus Requirement (CRN # 1321)** |
|---|---|---|
| Department | Course No. | Course Title |
| **3** | **3** | |
| Credit Hrs. | # lecture hrs./week | |

Prepared by **Dr. Joseph Murfin** (Faculty Member) **January 2018** (Date)

Course prerequisites:

- **Eligible for either ENG*101E or ENG*101, together with Math placement into MAT*137**
- OR **Eligible for either ENG*101E or ENG*101,** and **either MAT*085 or MAT*095 with a grade of "C+" or better**

Course Location (building/room number): **Online**

Meeting time (days/hours): **Online with On-Campus Requirement**

Scope of course:

**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.**

Textbooks and other required readings/computer software/materials/library reserve room:

- **Textbook: *Connecticut Intermediate Algebra Student Workbook, Version 1.3* (2017)**
- **MyOpenMath.com Account (Free)**
  **Course ID: 31339**
- **Graphing Calculator (TI-83 or TI-84)**
  *-Available for free check out from the library or for rent from the bookstore*

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|---|---|---|---|
| Office Location | **Wheaton Hall, Room 310** | Office Hours/ | **Monday 3:00-3:30**<br>**Tuesday 10:50-12:05**<br>**Thursday 10:50-12:05**<br>**Or by appointment** |
| Office Telephone: | **860-343-5744** | Office e-mail: | **jmurfin@mxcc.commnet.edu** |

## IMPORTANT INFORMATION-CAREFULLY READ EVERYTHING IN THIS SECTION!

**Blackboard Learn**: The 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

**MyOpenMath**: MyOpenMath is a free online math learning environment. This is where you will find video lessons and other helpful material for the course. This is also where you will complete homework, quizzes, and online exams. You will need to register for the website at http://myopenmath.com and use the course ID **31339** to enter my course. There is no enrollment key, so leave this blank.

**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.

**Homework**: Each week you will be assigned homework assignment(s) that you are to complete using MyOpenMath(MOM). Some of those homework may span more than one week.

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 MyOpenMath marks that question incorrect. When that happens, you may choose a "Similar Problem" and you will be given a new problem to try**. It is the expectation that you work on the material during the week/weekend, complete the homework by the due date and then move on to the proceeding material**. In general, homework assignments will be opened on Monday mornings.** Before attempting MOM homework, you will want to read the weekly notes and follow along with the media 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!**

**Online Quizzes/Exams**: Your quizzes and exams are also taken in MyOpenMath.

Exams/quizzes are timed, so you will have to complete them in one sitting. Once you open the assessment, the timer will start. The reason these 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 an exam or quiz, you will almost definitely run out of time. A short description of each assessment, including amount of time you have to complete will be in your weekly notes and will be listed on MyOpenMath. See the calendar in BB for specific dates. The expectation is that you are working on the homework all week and you take the quiz/test once you have completed that and feel comfortable with the material. Exams/Quizzes will be available approximately one week 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.

I will double-check exams and quizzes for typos (for example, typing a "." instead of a ",") after everyone has completed the assignment, so no need to email me about such issues unless you noticed that I overlooked an obvious typo. Typing in the wrong number is NOT a typo. **IMPORTANT! NO LATE EXAMS /QUIZZES WILL BE ACCEPTED EXCEPT IN THE MOST EXTREME CIRCUMSTANCES!**

**Labs**: You will have 2 mini-labs 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.

**Discussions**: You will have weekly discussions throughout semester. 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.

**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 MyOpenMath. The exam will be cumulative, and a set of review questions will be provided in MOM.

**IMPORTANT! 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.**

**Evaluation:**

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|---|---|
| Homework Average: | 20% |
| Quiz Average | 15% |
| Unit Exams Average (3 exams): | 30% |
| Discussions | 10% |
| Labs Average (2 labs) | 5% |
| Final Exam (Cumulative): | 20% |

**Grading:**

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

## MORE INFORMATION

**Getting Help:** The College offers free tutoring in the Academic Success Center. Please try to take advantage of this if you are having any difficulty with the material. I will also be available to meet with you by appointment. You may always email me with questions as well. It is critical that you address problems immediately with a math course, especially an accelerated course. You may also come see me during office hours (above) or contact me to set up a specific time to meet.

**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 if it is during the week. I may periodically check email over the weekend, but please do not expect a response until the following Monday.

If you have a specific question on a homework problem, you can click "message my instructor" in MyOpenMath. This will send me a link to the problem and is preferably to emailing about a specific problem.

**Calendar**: You will find a one-page calendar with the topics, required activities and due dates for each week of the semester under the Course Schedule 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.

**NOTE: The instructor reserves the right to make changes to the above syllabus as necessary.**

## 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:
http://mxcc.edu/catalog/academic-policies.

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*

- *Anastasia Pych*
  *Director of Human Resources and Labor Relations, Middlesex Community College*
  *apych@mxcc.edu; 860-343-5751; Founders Hall Room 115*

# COURSE OUTLINE

| MAT* | 137 | Intermediate Algebra | 3 |
|---|---|---|---|
| **Dept. Abbr.** | **Course No.** | **Course Title** | **Credits** |

| Prepared by | Math | Pam Frost | | Mary Rayappan | November 2013 |
|---|---|---|---|---|---|
| | **Department** | **Faculty** | **Program Coordinator** | **Division Chairperson** | **Date** |

***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.

*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<br>2. Determine identifying characteristics of linear functions<br>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<br>2. Determine identifying characteristics of exponential functions or expressions<br>3. Evaluate, simplify, and perform operations on exponential functions or expressions<br>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<br>2. Determine identifying characteristics of quadratic functions or expressions (e.g., factors)<br>3. Evaluate, simplify, and perform operations on quadratic functions or expressions<br>4. Solve quadratic equations algebraically (e.g., factoring, square root method, and quadratic formula with rational solutions) and/or graphically<br>5. Solve real world applications involving quadratic equations and functions and recognize the appropriate domain of each application |
| 4 | Rational Functions and/or Expressions | 1. Provide multiple representations (e.g., words, symbols, graphs, tables) of simple rational functions or expressions by hand and/or using technology<br>2. Determine identifying characteristics of rational functions or expressions |

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|---|---|---|
| | | 3. Evaluate, simplify, and perform operations on simple rational functions or expressions<br>4. Solve simple rational equations algebraically and/or graphically<br>5. Solve real world applications involving rational functions and identify the appropriate domain of each application |
| 5 | 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<br>2. Determine identifying characteristics of radical functions or expressions<br>3. Evaluate, simplify, and perform operations on simple radical functions or expressions<br>4. Solve simple radical equations algebraically and/or graphically<br>5. Solve real world applications involving radical functions and identify the appropriate domain of each application<br>6. Identify imaginary numbers |

# Blackboard Learn

Blackboard Learn (BB) will be used in this class. If you have not used this before you can follow the directions below on how to access this resource:

## Access Blackboard Learn

1. Open a web browser.
2. Go to **my.commnet.edu**.
3. Enter your **NetID** and **password**, click Login.

**NetID**: BannerID@student.commnet.edu,
Do not know your NetID? Visit this site to find out:
https://www.commnet.edu/netid/lookupnetid.asp

**Password:** The same password to log on to a campus computer at any of 12 Connecticut community colleges.

If you have never logged on to a campus computer, the initial password is a combination of your first 3 letters of birth month (capitalize the first letter), & (shift+7), and last four digit of your social security number.

For example, if you are born in April and the last four digits of your social security number are 4575, then your initial password is Apr&4575 (case sensitive).

After you logon with the initial password, you will be prompted to change to a new password. The new password MUST have 8 or more characters and satisfy 3 of the 4 rules as follows: Upper case, Lower case, Numbers, and Special character (Example: Flower2010).

4. Access Blackboard

Once you are in myCommNet, click **Blackboard** icon at upper right. Click on your **course name.** To go to another course, click **My Blackboard** (upper right) and click on the course name (MAT*137 for this course).

For technical assistance with logging on and use of Blackboard Learn, visit

**www.mxcc.commnet.edu/distance**