

# Syllabus for Spring 2020 MATH 0965 Section 13319

Cuyahoga Community College Business, Technology & Mathematics Eastern Campus

Course: MATH 0965 Intermediate Algebra

Lecture Hours: 06 hours Laboratory Hours: 00 hours

Instructor: Mike McCraith

Office: EMHC 210

Office Phone: 216-987-2320

Office Hours: MW 9:00 - 10:00 am, 12:00 pm - 1:30 pm  
TTH 9:00 - 10:00 am, 11:30 am - 1:00 pm

Email: [mike.mccraith@tri-c.edu](mailto:mike.mccraith@tri-c.edu)

Website: <http://www.mathaccordingtomike.com>

Text: Intermediate Algebra, 2<sup>nd</sup> edition, Messersmith\*

Scientific Calculator Recommended

Section 13319: TTH 1:00 - 2:40 pm EMHC 124

## \*Inclusive Access / First Day

This course is part of the Inclusive Access/First Day program; you should NOT purchase any course materials as they are part of your course registration. In the event you drop this course from your schedule on or prior to the last day of the DROP/ADD period, your account will be fully refunded automatically. If you received a physical textbook you will need to return the textbook to the store and your account will be refunded at that time. If you would like a print version of the text to accompany the ALEKS program, a full color binder-ready version of the text and can be purchased from your campus Bookstore at a discounted price

## Prerequisites

Math 0955, or sufficient score on math placement test; or departmental approval. Math 0960 and Math 0980 taken prior to Fall 2016

## Course Description

Second of two developmental mathematics courses. Topics include factoring, solving equations by factoring, rational expressions, rational equations, systems of three linear equations in three variables, radical expressions, radical equations, expressions with rational exponents, equations with rational exponents, quadratic equations involving the Zero Product Property, Square Root Property, Completing the Square, and the Quadratic Formula, graphing quadratic functions, exponential expressions, and graphing exponential functions. Includes applications and activities to build skills in problem solving.

## Class Schedule

For the first few minutes of class (on test days), I will go over exercises that the student could not complete. The person who asks a question may be asked what they did not like about the problem or what they didn't understand. A traditional lecture will occur on the first half of the course, and if time permits, the other half will be used for homework and group work. Bring your printed out homework or laptop to every class!

## Attendance

It is your responsibility to attend every class. Attending more classes increases the chance of a better grade. **You are also responsible to find out what you missed and your responsibility to contact a classmate for any notes you have missed.** Students are expected to arrive on time and stay for the entire class. Regular class attendance is expected. Tri-C is required by law to verify the enrollment of students who participate in federal Title IV student aid programs and/or who receive educational benefits through other funding sources. Eligibility for federal student financial aid is, in part, based on your enrollment status.

Students who do not attend classes for the entire term are required to withdraw from the course(s). Additionally, students who withdraw from a course or stop attending class without officially withdrawing may be required to return all or a portion of the financial aid based on the date of last attendance. Students who do not attend the full session are responsible for withdrawing from the course(s).

Tri-C is responsible for identifying students who have not attended a course, before financial aid funds can be applied to students' accounts. Therefore, attendance will be recorded in the following ways: For in-person courses, students are required to attend the course by the 15th day of the semester, or equivalent for terms shorter than 5-weeks, to be considered attending. Students who have not met all attendance requirements for an in-person course, as described herein, within the first two weeks of the semester, or equivalent, will be considered not attending and will be reported for non-attendance and dropped from the course.

At the conclusion of the first two weeks of a semester, or equivalent, instructors report any registered students who have "Never Attended" a course. Those students will be administratively withdrawn from that course. However, after the time period in the previous paragraphs, if a student stops attending a class, wants or needs to withdraw, for any reason, it is the student's responsibility to take action to withdraw from the course. Students must complete and submit the appropriate Tri-C form by the established withdrawal deadline.

Tri-C is required to ensure that students receive financial aid only for courses that they attend and complete. Students reported for not attending at least one of their registered courses will have all financial aid funds held until confirmation of attendance in registered courses has been verified. Students who fail to complete at least one course may be required to repay all or a portion of their federal financial aid funds and may be ineligible to receive future federal financial aid awards. Students who withdraw from classes prior to completing more than 60 percent of their enrolled class time may be subject to the required federal refund policy.

If illness or emergency should necessitate a brief absence from class, students should confer with instructors upon their return. Students having problems with class work because of a prolonged absence should confer with the instructor or a counselor.

## ALEKS and PowerPoint Package

We will be using the ALEKS software for this course. Unlike other software packages, ALEKS only shows the exercises that you are ready for, that is, it's geared directly to you. You'll need to visit the site <http://www.aleks.com> to access the software and you'll need the **Class Code WFGFN-PA3JN** to register for the course. You will have to do an Initial Knowledge Check which can take around 45 minutes. **You absolutely need to take the Initial Knowledge Check seriously as it dictates the remainder of the course.**

There will be three many components that you will need to work on in ALEKS: Objectives, Pie Progress, and Knowledge Checks. Objectives are the personalized homework problems that are computer generated based on your Initial Knowledge Check. Pie Progress will track the number of Objectives you have completed. And the Knowledge Checks will ensure that you are retaining the information that you learned.

As the course progresses, all of the planned class examples are videos posted on YouTube and also on my website. Corresponding to each section of the text is a PowerPoint slide with the examples already typed. You can find these slides on Blackboard. You will be required to come to class with these slides and write the answer to the exercise as we work it out together in class. They are worth 10 points per test. **Whatever sections the test covers is what you will need to turn in for the PowerPoint Package on the day of the test before the class begins.**

### Grade Replacement Policy

If the Pie Progress on ALEKS is at least 80% by the end of the semester and no cheating has occurred during the semester, then the lowest test score is **replaced** by the Final if the Final is higher. Otherwise, all test and Final scores are kept.

### Partial Credit Policy

While grading tests, partial credit will be given based on the amount of work shown and how correct the work is. For example, a student who gets their answer straight from the calculator without showing any work will receive very few points—even if the answer is correct. Whereas a student who does the correct work but somehow arrives at an incorrect answer will receive the majority of the credit. Arithmetic mistakes warrant only a few points lost; however, conceptual errors will not earn many points of partial credit. I understand that there are times where you must use the calculator to get the answer, and thus in those cases, the policy does not apply.

### Tests

Tests will be taken in the testing center. Tests will open up on Monday of the testing week and close on Wednesday. It is up to you to determine the testing center's hours and ensuring that you have two hours to take the exam. They are located in ESS 1108. A 200-point Final will be given on the last day of class in the classroom. Tests may consist of homework-style problems and short answer. **The test must be done in pencil. A test not done in pencil or one that is done in poor handwriting will not be graded. All steps must be shown on the test or full credit will not be given (in Math, how you get the answer is sometimes more important than the actual answer.)** A test will not be given to a student if the student arrives on the day of the test **after** the first test has been handed in. Be sure to get to the class early on test days.

It is *highly* recommended that you view the previous tests using the Web site. On the Website, click on "Classes" and then on "Math 0965". Take those tests and use the answer keys to check your work.

### Make-ups

There will be no make-ups offered for any reason. Be sure to have all materials on the day and by the time that they are required which is the beginning of class. Materials turned in after the class has begun will not be graded. If you know you will not be able to make it to class when an assignment is due, you can send a scanned copy of your work to my email. You may also take a photo with your cell phone and email it to me. Make sure the file size is not large or the email may not be received. The deadline for scanned material remains the same as if you were in class. **Extra time will NOT be given for any reason.**

### Cell Phone Policy

Tests are already stressful parts of any math class, but, a disruption, like a cell phone, can make the entire experience worse. Due to this, if any disruption is caused during a test from a cell phone, the student with the cell phone will be required to write a paper. See below for information on the paper. If the paper is not turned in within one week, the student will receive a zero on the test.

The paper should focus on disruptions during a test caused from cell phones. You may also briefly discuss other forms of disruptions. End the paper with a summary of what you have learned in this process. The paper is to be three pages in length, double-spaced, with an additional page of references. You must cite two references using the MLA format.

If after all of this and the same student allows their cell phone to disrupt another test, the student will be asked to leave the class and will receive a zero on their test.

A disruptive cell phone includes one that rings and one that is on vibrate. I completely understand that life occurs outside of the classroom. If it is a test day and you are expecting an important call, simply place the cell phone on your desk and put it on silent. The cell phone will still light up to let you know there's an incoming call or text. If that occurs, turn your test over and quietly leave the room to answer the call. That way, you will minimize the disruption and it should not break the concentration of fellow students.

During class, cell phones are considered to be participating in disruptive behavior and will not be tolerated in class. Cell phones may not be used on quizzes and tests. They must be turned off or on silent- **not vibrate**. **Anyone using one to text message during any class period will be asked to leave for that day.**

### Student Solution Manual/Back of Book

In a math class, you can never learn by working towards the answer. Make sure that you understand where the answer came from as I am highly likely to ask conceptual questions. Be sure to use the student solution manual as a guide. Copying from the student solutions manual will be deemed as cheating. Please see the Cheating policy for more information.

### Cheating Policy

Cheating will not be tolerated by the instructor. It includes having any extra materials not approved by the instructor. Cheating also includes having these materials in your possession. For instance, if you borrow a calculator, you are obligated to make sure there are no formulas in the calculator.

Misuse of external resources (including, but not limited to, other texts, the internet, and the student solution manual) by submitting work that is not their own also constitutes cheating. For example, if a student copies from the student solution manual and turns that in as their homework, it is considered cheating. If you do not understand how to get the answer, do not simply copy down the work from an external source. Instead, ask me to help you with the problem. Copying down from an external source does not demonstrate mastery of the material and will not help you on the exam and on the final. Never give me the impression that you are cheating. Never look over at other student's work and never talk during the quiz or test **for any reason**.

On the first instance of cheating, the grade received for that entire assignment/exam will be a zero, and the final grade will be lowered by one letter. For the second instance of cheating, automatic failure in the course will result and a Student Conduct Hearing will take place. See the Student Handbook for more information.

### Instructor's Expectations

Please be courteous to all members of the class. Actions deemed rude such as disruptive behavior, including talking, whispering, tardiness, early departure or insulting or disrespectful comments or actions towards anyone will not be tolerated. Math is a difficult subject for most people, so I strongly encourage you to ask any questions you may have (without having to worry.)

**Come to class prepared for the day's lesson by reading ahead.** This is the best way to take more out of the day's lecture. Be sure homework is done in a timely manner and that you adequately schedule your time to include homework and studying. Studying only a "couple hours" for a test is never enough. Be sure to start to study for a test at least 2 days before the test. That way, you leave enough time for the material to be understood and to ask any questions. Do not wait until the last minute to get the help you might need! If you do not ask questions when you have them, then you are shorting yourself of an opportunity to learn the material. I will answer all questions in a respectful, patient, and timely manner.

As for a hint: be sure not to only write down what I write down on the board, but also what I say *in between* the steps. This will greatly help you as you study. Also, if you need to audio record the class, feel free to do so. Believe it or not, this could help you fill in the gaps to your notes. Please, no children in the class.

## Grading

Grades will be based on the following†: **Final grades are based on:**

About Me*	15	Percent	Points	Final Grade
Weekly Planner*	10	90 - 100	783 - 870	A
Syllabus Quiz	10	80 - 89	696 - 782	B
Objectives	135	70 - 79	609 - 695	C
Pie Progress	20	60 - 69	522 - 608	D
PowerPoint Package*	40	0 - 59	Below 522	F
Scheduled Knowledge Checks	40			
Exams	400			
Final	200			
<b>TOTAL</b>	<b>870</b>			

† Total point value subject to change due to time

\* Graded on an all-or-nothing basis

## College Calendar

Date	Calendar Description
January 13, 2020	Spring Semester Full Term and Session A (First 8 Weeks) Begin
January 20, 2020	Martin Luther King Day - College Closed - No Classes Scheduled
January 27, 2020	Last Day to Withdraw from Full Term (16 Weeks) with NO RECORD
March 9 - 15, 2020	Spring Break - No Classes Scheduled
March 20, 2020	Academic Progress Reporting for Full Term (16 Weeks) Due
April 10, 2020	Last Day to Withdraw from Full Term (16 Weeks) Course with a "W" Grade
May 4 - 10, 2020	Final Exam Week - Full Term
May 10, 2020	Spring Semester Full Term, Session B (Second 8 Weeks) and Session O (14 Weeks) End
May 12, 2020	Final Grades Due: Full Term, Session B (Second 8 Weeks) and Session O (14 Weeks)

## Assistance

Tutoring is available in the Learning Center (ESS 1202) on a free, walk-in basis. Free online tutoring is available with a link under Student Services in My Tri-C Space through eTutoring and Smarthinking.

## Disabilities

Students with disabilities at Cuyahoga Community College are expected to take an assertive role in communicating with faculty and staff members about their need for reasonable accommodation. If you need course adaptations or accommodations because of a disability, you should contact the ACCESS Office located in ESS1213-1216. The ACCESS office phone number is 216-987-2052.

## Incomplete Grades

The grade "I" is only given if a student meets **both** of the following conditions:

- The student has a **passing status** in the class and has completed at least 70% of the course work, AND
  - The student is unable to complete the rest of the required course work due to circumstances *judged by me* to be beyond his/her control.
- A notation of "I" indicates that you must complete the course requirements within five (5) weeks of the next semester (summer excluded) or the "I" will be automatically changed to an "F". See Student Handbook for more information.

## Academic Credit

Academic Credit According to the Ohio Department of Higher Education, one (1) semester hour of college credit will be awarded for each lecture hour. Students will be expected to work on out-of-class assignments on a regular basis which, over the length of the course, would normally average two hours of out-of-class study for each hour of formal class activity. For laboratory hours, one (1) credit shall be awarded for a minimum of three laboratory hours in a standard week for which little or no out-of-class study is required since three hours will be in the lab (i.e. Laboratory 03 hours). Whereas, one (1) credit shall be awarded for a minimum of two laboratory hours in a standard week, if supplemented by out-of-class assignments which would normally average one hour of out-of class study preparing for or following up the laboratory experience (i.e. Laboratory 02 hours). Credit is also awarded for other hours such as directed practice, practicum, cooperative work experience, and field experience. The number of hours required to receive credit is listed under Other Hours on the syllabus. The number of credit hours for lecture, lab and other hours are listed at the beginning of the syllabus. Make sure you can prioritize your time accordingly. Proper planning, prioritization and dedication will enhance your success in this course.

## Extra Information

Office hours! Use them to your advantage. Let no question go unasked. **Be sure to have your questions prepared in advance to maximize efficiency during office hours.** There is not time to redo the lecture during office hours so come prepared to ensure all students are given a chance for help.

I am also available for online tutoring using Skype. Use my Tri-C email address to find me on Skype. **If you wish to meet with me, please give me advance notice by emailing me at my Tri-C address.** I do not log on unless I know someone is there.

I have also made videos for this course. On the website, click on "Videos" and select your course.

## PERFORMANCE OBJECTIVES FOR MATH 0965:

Upon successful completion of MATH-0965 Intermediate Algebra, the student should be able to:

- A. Factor polynomials and solve equations by factoring.
- B. Simplify rational expressions and solve rational equations.
- C. Solve systems of linear equations in three variables.
- D. Graph radical expressions, simplify radical expressions, simplify expressions containing rational exponents, and solve radical equations and equations with rational exponents.
- E. Solve quadratic equations and graph quadratic equations.
- F. Define and evaluate exponential expressions and graph exponential functions.

The complete course outline may be found at <http://www.tri-c.edu/student-resources/curriculum/>

# Math 0965 Extremely Tentative Schedule:

Day of	Sections Covered
January 14, 16	<b>Introduction</b> 7.1. The Greatest Common Factor and Factoring by Grouping 7.2 Factoring Trinomials of the Form $x^2 + bx + c$ 7.3 Factoring Trinomials of the Form $ax^2 + bx + c$ ( $a \neq 1$ )
January 21, 23	7.4 Factoring Special Trinomials and Binomials 7.5 Solving Quadratic Equations by Factoring 7.6 Applications of Quadratic Equations
January 28, 30	8.1 Rational Expressions and Functions 8.2 Multiplying and Dividing Rational Expressions 8.3 Finding the Least Common Denominators
February 4, 6	8.4 Adding and Subtracting Rational Expressions <b>Test 1 (Covering 7.1 - 7.5, 8.1 - 8.3) Available Monday, February 3 - Wednesday, February 5</b>
February 11, 13	8.5 Simplifying Complex Fractions 8.6 Solving Rational Equations 8.7 Applications of Rational Equations
February 18, 20	5.5 Solving Systems of Three Equations and Applications 10.1 Finding Roots 10.2 Rational Exponents
February 25, 27	10.3 Simplifying Expressions Containing Square Roots 10.4 Simplifying Expressions Containing Higher Roots 10.5 Adding, Subtracting, and Multiplying Radicals
March 3, 5	10.6 Dividing Radicals 10.7 Solving Radical Equations <b>Test 2 (Covering 8.4 - 8.7, 5.5, 10.1 - 10.5) Available Monday, March 2 - Wednesday, March 4</b>
March 10, 12	<b>Spring Break! Celebrate National Pi Day March 13<sup>th</sup>!</b>
March 17, 19	10.8 Complex Numbers (Objective 1) 11.2 The Square Root Property and Completing the Square 11.3 The Quadratic Formula
March 24, 26	11.4 Equations in Quadratic Form 11.5 Formulas and Applications 12.1 Relations and Functions (Objectives 3, 4 and 5)
March 31, April 2	12.2 Graphs of Functions and Transformations (Objective 2) 12.3 Quadratic Functions and Their Graphs 12.4 Functions and Their Graphs (Objectives 1, 2 and 3)
April 7, 9	13.1 Inverse Functions 13.2 Exponential Functions <b>Test 3 (Covering 10.6 - 10.8, 11.2 - 11.5, 12.1 - 12.4) Available Monday, April 6 - Wednesday, April 8</b>
April 14, 16	13.3 Logarithmic Functions 13.4 Properties of Logarithms
April 21, 23	13.5 Common and Natural Logarithms and Change of Base 13.6 Solving Exponential and Logarithmic Equations
April 28, 30	<b>Test 4 (Covering 13.1 - 13.6) Available Monday, April 27- Wednesday, April 29</b> <b>Review</b>
<b>Tuesday, May 5</b>	<b>Final 1:45 - 3:45 pm Same Classroom</b>

# Due Dates

Step 1: Get a daily planner

Step 2: Write these dates in the planner

Step 3: Become organized

The first date is when the assignment is available. The second date is when it is due.

## ALEKS Objectives Availability

Section(s)	Dates Available	Section(s)	Dates Available
7.1 - 7.3	Tuesday, January 14 - Monday, January 20	10.6 - 10.7	Tuesday, March 3 - Monday, March 9
7.4 - 7.6	Tuesday, January 21 - Monday, January 27	10.8, 11.2 - 11.3	Tuesday, March 17 - Monday, March 23
8.1 - 8.3	Tuesday, January 28 - Monday, February 3	11.4 - 11.5, 12.1	Tuesday, March 24 - Monday, March 30
8.4	Tuesday, February 4 - Monday, February 10	12.2 - 12.4	Tuesday, March 31 - Monday, April 6
8.5 - 8.7	Tuesday, February 11 - Monday, February 17	13.1 - 13.2	Tuesday, April 7 - Monday, April 13
5.5, 10.1 - 10.2	Tuesday, February 18 - Monday, February 24	13.3 - 13.4	Tuesday, April 14 - Monday, April 20
10.3 - 10.5	Tuesday, February 25 - Monday, March 2	13.5 - 13.6	Tuesday, April 21 - Monday, April 27

## Scheduled Knowledge Checks

SKC 1: Sunday, February 2 - Wednesday February 5

SKC 2: Sunday, March 1 - Wednesday March 4

SKC 3: Sunday, April 5 - Wednesday April 8

SKC 4: Sunday, April 26 - Wednesday, April 29

All items are due at 11:59 pm of the second date listed. No exceptions for any reason.  
The last day to complete the Pie Progress is Tuesday, May 8, 2018

## Test Availability

Test 1 (Covering 7.1 - 7.5) Available Monday, February 3 - Wednesday, February 5

Test 2 (Covering 8.1 - 8.6, 5.2 - 5.3) Available Monday, March 2 - Wednesday, March 4

Test 3 (Covering 9.1 - 9.8) Available Monday, April 6 - Wednesday, April 8

Test 4 (Covering 10.1 - 10.6, 11.2, 11.5) Available Monday, April 27 - Wednesday, April 29