Instructor: Nashini Khan
E-mail address: nashini.khan@fiu.edu
Section: U01
Office: GL 263
Class Meeting: **Monday, 10am**, DM100
Office hours: MTWR 11:00am – 1:00pm

Prerequisites: C or better in Intermediate Algebra or an adequate score on the placement test.

What you need for this course:
- **Textbook**: Algebra & Trigonometry by M. Sullivan 9th edition packaged with MyLabsPlus (MLP) access code OR MyLabsPlus Access Code alone (MyLabsPlus program contains an electronic version of the textbook)
- **iClicker** (available in the FIU bookstore) – In-class quizzes and participation are recorded using iClickers. You must register iClicker by Friday, January 11th.
- **Texas Instruments Calculator TI-30X II S**
- **Class Notebook**

Course Description and Objectives: The emphasis of the course is on functions and their properties. In particular, linear, quadratic, rational, exponential and logarithmic functions are discussed.

What we will do in this course:
- Develop the ideas behind variables and relationships among them.
- Distinguish between expressions and equations
- Solve different types of equations as well as systems of linear equations
- Define and explore functions and their properties
- Learn what graphs can tell us.

Components of the Course:
- Class meetings – **Meet 1 day a week on Mondays at 10:00 AM in DM 100**
  - In-class quizzes based on work done in the math lab.
  - Presentation and discussion of weekly topics
  - iClicker questions and interactive work
- Mastery Math Lab – At least 3 hours per week required. Sunday through Friday.
  - Practice doing your math where you can get help.
  - Ask Instructors and Learning Assistants about math concepts that you are having difficulty with.
  - Do MLP Homework and Quizzes.

Administrative Drop: You must register your iClicker and attend the Mastery Math Lab Orientation in GL 263 before 11:59 PM January 11th or you will be administratively dropped from the course. If you add the course between January 12th and 14th, provide me with your revised schedule and we will make arrangements for you to register your iClicker and make-up your orientation.

Calculating your course grade:

<table>
<thead>
<tr>
<th>Grade components</th>
<th>% of Grade</th>
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</thead>
<tbody>
<tr>
<td>Tests 1-3</td>
<td>15% each</td>
</tr>
<tr>
<td>MLP Homework assignments</td>
<td>8%</td>
</tr>
<tr>
<td>MLP &amp; In-class Quizzes</td>
<td>12%</td>
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<tr>
<td>Participation (Lab &amp; Class)</td>
<td>10%</td>
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<tr>
<td>Final exam</td>
<td>25%</td>
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<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
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Make-up Policy: There will be no make-up tests. If you miss a test due to illness or other emergency and provide documentation supporting your claim, your final exam will count in place of the missed test. There will be no make-ups for MLP assignments. Personal travel plans are not a valid reason for missing a test. University related absences that require special scheduling must be arranged one week prior to the test.
Graded Assignments: MyLabsPlus assignments are available at http://fiu.mylabsplus.com. Once you register for the class, an email will be sent to your Panther email account with login information. You will be able to access the site, but to gain access to assignments you must purchase an access code for MyLabsPlus.

Tests. There will be three 75 minutes tests. You will be provided with a TI-30X II S calculator. All tests will be taken in GL 263. They will be available in MyLabsPlus, so you must have access to the site. Each test will be administered during a three day period, Monday through Wednesday, 8am-4pm (See the class schedule for the dates). See Page 3 for a detail on registering for tests and testing policy.

Homework.  
- MLP weekly homework assignments are due each Friday by 11:59 PM (see the schedule) **Late submissions will not be accepted** under any circumstances, so please plan accordingly.
- A grade of 0 on a MLP homework will be assigned if you did not attempt that assignment before the deadline.
- Homework assignments can be attempted an infinite number of times.
- At the end of the semester, the homework with the lowest grade will be dropped.

Quizzes. 
**MyLabsPlus (MLP Quizzes)**
- MLP weekly Quizzes are due by 11:59 PM each Sunday (see the schedule for topics). Late submissions will not be accepted under any circumstances, so please plan accordingly.
- A grade of 0 on a MLP quiz will be assigned if you did not attempt that assignment before the deadline.
- To take a MLP quiz you have to complete associated homework assignment with a score of 80% or more. If you do not score at least 80% on the homework, you will not be able to take the associated quiz and therefore you will receive a 0% on that quiz.
- The MLP quizzes are designed to help you prepare for a test. Take the quiz with these conditions in mind. The quiz will be timed. You can take each quiz up to 5 times and only the highest score will be recorded.
- At the end of the semester, the quiz with the lowest grade will be dropped.

**In-Class**
- There will be weekly in class quizzes at the start of class – so be on time!
- The quiz will be based on work done in MLP the week before and will target challenging topics. Check the Math Lab Website every Saturday for updates on quiz topics.
- Responses to In-classes quizzes will be recorded using the iClicker. In-class quizzes are a separate grade from the participation points that you will receive using the iClickers during class.

**Participation**
**In-class Participation:** You are expected to attend all classes.
- In order to provide us (you and me both) with immediate feedback in the classroom, we are using a personal response system called the iClicker. You will be graded on that feedback and/or your in-class participation.
- In general, you will receive 1 pt when you respond to a clicker question but 2 pts if you respond correctly. So paying attention and doing your in-class work will benefit your grade in this course.
- We will be using i>clicker in almost every class and that participation will make up 10% of your final grade in this course.
- Come to class prepared to participate with a functioning remote every day.
- Missing a class does not change the due dates for your MLP assignments. If you have an excused absence with documentation, please contact me via email as soon as possible.

**Mastery Math Lab Participation**
- You are required to spend at least 3 hours in the lab in each week. The week runs Sunday through Friday. You need to complete your lab hour requirement by Friday at 8 PM. The time can be continuous or broken into smaller time periods. The total time you spend in the lab will be recorded and if it is smaller than 3 hours = 180 minutes (179 IS smaller than 180), you will get 0 for that period. Again, participation makes up 10% of your grade in this course.
- The hours you spend in the lab do not “roll over” to the next period. If you spend 4 hours in one week, you still have to spend a minimum of 3 hours in the next week. There is also no partial credit for earning less than required 3 hours.
- When a time period contains a holiday, the minimum number of required hours is still 3.
- You are responsible for tracking your own hours. You will know how much time you’ve spent in each visit. Keep a record of your hours in your notebook.

**Math Gym Participation** You are required to attend 50-minute weekly Math Gym sessions.
- Work with your peers on concepts and problems that typically are challenging for College Algebra students.
- You have to sign up for one of twelve 15-student weekly Math Gym sessions.
- They are scheduled from Monday through Friday. An email will be sent to your PantherMail with the information on choosing a weekly session and its location. Be sure to sign up for a session without delay as they might fill up quickly.
**Final Exam.** There will be a comprehensive 2-hour final exam. The final exam will take place in the lab during the time scheduled by the University (see the class schedule for the date/time). **You will not be allowed to take the final at any other time, so do not make any travel arrangement that would conflict with that time.** You do not have to register for the final.

**Testing:**

**Scheduling a test:**
A week prior to each test, you will be able to choose, using a dedicated website, a 2-hour period in which to take the exam. To access the scheduling website click on “Schedule a Test” on the left panel in MylabsPlus. All tests must be scheduled during this designated time period. You can change your reservation during this time period, but once this period has ended, no changes will be allowed. If you do not schedule your test, you will receive a 0 for that test. It is your responsibility to make sure that the registration for a test was successful. You are not registered for an exam unless, when you log in into the scheduling website, you see your reservation listed under “Check reservation”. You will receive an email confirmation of this registration. It is a good idea to print that out and bring it with you to the test.

**Testing:**
You must take the test during the time you registered for. If you don’t show up for your scheduled appointment you will receive a grade of 0 for this test. If you come at a time other than your scheduled time, you will not be permitted to take the exam and will receive a grade of 0. You will be provided with a TI-30X II S calculator for the test.

For each exam you must bring the following items:
- Valid FIU Panther Card
- Knowledge of your MylabsPlus login information
- Pen or pencil

You will not be allowed to take a test, if you don’t have your Panther card. You will not be allowed to use any other type of a calculator.

All your personal items will have to be stored in a book-bag and placed under the desk. All electronic devices must be turned off.

**Grading policy:**
Your final grade will be assigned according to the following scale.

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<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>A</td>
<td>93 – 100</td>
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<tr>
<td>A-</td>
<td>89 – 92</td>
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<td>B+</td>
<td>86 – 88</td>
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<tr>
<td>B</td>
<td>83 – 85</td>
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<tr>
<td>B-</td>
<td>79 – 82</td>
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<tr>
<td>C+</td>
<td>75 – 78</td>
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<tr>
<td>C</td>
<td>70 – 74</td>
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<tr>
<td>C-</td>
<td>65 – 69</td>
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<tr>
<td>D+</td>
<td>60 - 64</td>
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<tr>
<td>D</td>
<td>55 - 59</td>
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<tr>
<td>F</td>
<td>0 - 54</td>
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</table>

**Students that register for class but never attend or submit an assignment and do not drop the course will receive a grade of F0.**

**Incomplete Grade Policy:** The incomplete grade (IN) is given to a student who has substantially completed most of the course work but is unable to finish an exam or another assignment because of circumstances beyond the student's control. An incomplete grade must be made up within two semesters. There is no extension of the two semester deadline. The student must not register again for the course to make up the incomplete. Every incomplete grade must be approved by the Mathematics Department. An IN grade cannot be given if it is necessary for the student to repeat the course.

**Drop Date:** The last day to drop a course is March 18th, 2013.

**Academic Misconduct:** Includes (but is not limited to) giving or receiving assistance on a test, quiz, or homework assignment for which such assistance is not permitted, falsifying a document to obtain an excusal from a test, using unauthorized notes on a test or quiz and using unauthorized calculator. A more complete definition of Academic Misconduct is given in the Student Handbook. Penalties for Academic Misconduct range from an F in the course to expulsion from the University.

**Academic Misconduct Specific to MAC 1105**
- Using another student’s iClicker in class or having someone use your iClicker for you.
- Signing into the lab with a Panther ID that is not your own.
- Accessing your cell phone during a test.
**Etiquette:** Student conduct which disrupts the learning process may lead to disciplinary action and/or removal from class or lab.

**Lab**  
- To access the lab, you must have your Panther Card. It will be used to sign-in and out of the lab, recording your lab hours.  
- While in the lab, you are expected to be actively working on your College Algebra assignments. This is a part of your participation grade for the course...so you need to participate!  
- No food or drink is allowed in the lab.  
- Like on an airplane, all electronic devices must be turned off and stowed away. There is a hook under the desk for your things.  
- Disregarding lab policy or being disruptive in the lab will result in a 0 for your lab hours for that week, even if all required hours have been completed  
- Please remember that the lab will be opened Monday through Friday, 8 am - 8 pm and Sunday, 1-6pm. It might happen that you will have to wait before a computer becomes available. Please plan accordingly. Do not wait until the last day to complete your lab hours. Log onto MasteryMath.fiu.edu or follow us on Twitter, @MathLabFIU, to get regular updates on lab capacity.  
- Please bring your math notebook if you plan to work on your homework. Take notes for future reference. If you plan to take a quiz, use a clean sheet of paper.

**Classroom**  
- Come prepared to the class and be on time (remember you will be taking quizzes first thing!)  
- Electronic devices such as cell phones, iPods, and computers must be turned off and put away during class.

**Communicating:**

**E-mail:** During the semester, you will receive several important messages from your instructor. All communication will be sent to you Panthermail (FIU email account). So...check that email regularly. Major announcements will also be posted on the Mastery Math Lab website MasteryMath.fiu.edu.

**Social Media**  
- People learn best when communicating their ideas. Take advantage of our social media sites to get help, share your aha moment, or let people in on your study plan for getting an A in the class.  
- Use your discretion when posting and/or sending emails. These are FIU accounts and part of the course (similar to Blackboard or Moodle).

**Twitter:** We will tweet regular updates (@MathLabFIU) about the lab capacity.

**Writing to Faculty:** In order to ensure effective communication with your instructor, please include in a subject line the following: Course and section number, your first and last name, and an identifying topic. Clear, professional emails will generally bring resolution more quickly. It is a good idea to reread before you send.

**Technology:**

**MyLabsPlus**  
**Access code:**  
- Purchase an access code at FIU bookstore together with the textbook or as standalone item.  
  **OR**  
- Purchase it online directly from Pearson while attempting to use the MyLabsPlus site (valid credit card required).

- If you are not able to purchase an access code immediately, you can use a temporary access code. A temporary access code can be obtained directly from the MylabsPlus site. A temporary access code is valid for ONLY 17 calendar days and it allows you to get started with your assignments on the first day of classes. After the code expires (17 days after the start of the semester), you will be prompted to enter the permanent code or purchase the code using a credit card. You will not be allowed to continue your course until a permanent code is entered. You cannot buy/enter a permanent code until the temporary code expires.

**Repeating the course**  
- If you took this course in Fall 2011, Spring 2012 or Summer 2012 and used MyMathLab for online assignments, you will receive an access code for free after providing proper documentation (Mymathlab records from your MAC 1105 class and an unofficial transcript).  
- If you took this course in Fall 2012, you will still automatically have access to MyLabsPlus.
iClicker Web Registration:
- Register your iClicker2 remote online by January 11th (see note regarding Administrative Drop on page 1 of this syllabus).
- To register online go to http://www.iclicker.com/registration.
- Complete the fields with your first name, last name, student ID, and remote ID. Your student ID should be your FIU EMAIL e.g. mrock008@fiu.edu. The remote ID is the series of numbers and sometimes letters found on the bottom of the back of your iClicker2 remote. It can also be found on the LCD screen upon powering on your iClicker2 remote. You must come to class at least once and vote on at least one question in order to complete the registration.
- If you have lost or broken your i>clicker remote, you will have to purchase another one. Please email me with your new Remote ID so that I can manually register your new remote.

iClicker Technical support
- Contact (866) 209-5698 or via email support@iclicker.com from 9AM-11PM EST, M-F.
- The iClicker website (www.iclicker.com) also has support documentation, video tutorials, and FAQs for students.

Calculator Policy: Graphing calculators are not allowed in this course. You can use the scientific calculator TI-30X II S. This is the calculator that you will get for the test so it will be better for you to get one and get used to using it. No other calculator can be used on a test. There are some parts in few problems in some online assignments that ask for the use of graphing calculator. Please complete the parts that do not require a graphing calculator and disregard those parts that do.

Some last thoughts....

Tips for Being Successful in College Algebra
- Use your resources! Textbook, class notes, topic videos and, most of all, your Instructors and Learning Assistants.
- Before class –read and try some examples, view the powerpoints or watch the videos, have questions about things you do not understand. You are the one that needs to acquire the knowledge. It cannot be given to you!
- Form a study group and then work as a group (not just 4 people doing their own homework sitting next to each other). Research indicates that this is one of the most effective ways to learn.
- Use your schedule of topics – try to connect ideas from the last class to the new topics. This will help you tie the content together. That will help you recall things when you take a quiz or test.
- Look at the Study Plan in MyLabsPlus. Get help figuring out where you went wrong
- Use the LAs! They are not just good at math they are good at helping you learn math. Take advantage of Math Gym sessions posted in the Math Lab.

What is Algebra?
You probably do algebra every day. Figuring out how long it will take you to get to FIU when traffic has slowed to 20 mph, determining if you are better off buying an unlimited phone plan or one with 900 anytime minutes and unlimited texts, or drawing conclusions about the long term value of a college education on a data plot, all require you to do the stuff of algebra. Generally, when we do algebra in our everyday lives, it is “in our head” and we do not communicate the processing that we do – just the answers. However, we’re still using algebra as a way to figure out the unknown. If we want to be able to do this multiple times, generalize it, or communicate it efficiently to others, it helps to have a clear and consistent means of describing the relationships and the processes— which is precisely what algebra does for us. In fact, that is what algebra is. It has been refined and formalized over millennia, but it is essentially a language used to describe relationships between and actions on quantities. In this course we will learn the formalized form of this language, using technology so that you can practice the necessary skills and get feedback so you know where to focus your study time.

What we want you to get out of this course....
We also want you to leave this class with confidence in your own ability to do math and the understanding that problem solving is often about perseverance. You will gain mathematical and analytical tools not only to succeed in future coursework but also to become a critical consumer of mathematical information you encounter in everyday life. We want you to become the agent of your own learning.
<table>
<thead>
<tr>
<th>Week - 1</th>
<th>Date</th>
<th>Sections</th>
<th>Topics</th>
<th>Last day to complete MLP assignments (Homework and Quizzes)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1/7</td>
<td>R1, R2, R4, R5, R7</td>
<td>Numbers and Number Line, Absolute Value, Interval Notation, Polynomials and Operations on Polynomials, Rational Expressions</td>
<td>HW 1: 1/11, Quiz 1: 1/13</td>
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<tr>
<td>Week - 2</td>
<td>1/14</td>
<td>R8, 1.1, 1.2</td>
<td>Exponents, Solving Linear and Quadratic Equations</td>
<td>HW 2: 1/18, Quiz 2: 1/20</td>
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<td>Week - 3</td>
<td>1/21</td>
<td>1.3, 1.4</td>
<td>Complex Numbers, Solving Radical Equations, Equations Quadratic in Form and Factorable Equations</td>
<td>HW 3: 1/25, Quiz 3: 1-27</td>
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<td>Week - 4</td>
<td>1/28</td>
<td>1.5, 2.1, 2.2</td>
<td>Solving Linear Inequalities, Coordinate System, Distance and Midpoint Formulas, Graphs Of Equations, Intercepts and Symmetry</td>
<td>HW 4: 2/1, Quiz 4: 2/3, Test 1 Review Quiz: 2/6, Scheduling period for test 1 (1/28 - 2/2, 11:59pm)</td>
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<td>Week - 5</td>
<td>2/4</td>
<td>2.3, 2.4</td>
<td>Test 1 (Weeks 1-4: Ch R, 1, 2.1, 2.2) Slope of the Line, Parallel and Perpendicular Lines, Circles</td>
<td>Test 1: 2/4 - 2/6, HW 5: 2/8, Quiz 5: 2/10</td>
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<tr>
<td>Week - 6</td>
<td>2/11</td>
<td>3.1, 3.2, 3.3</td>
<td>Functions, Domain and Range, Functional Notation, Find Sum Difference, Product and Quotient of Functions, Graphs of Functions and Properties of Functions</td>
<td>HW 6: 2/15, Quiz 6: 2/17</td>
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<tr>
<td>Week - 7</td>
<td>2/18</td>
<td>3.4, 3.5, 3.6</td>
<td>Library of Functions, Piecewise Functions, Graphing Techniques (Shifting, Compressing, Reflecting), Constructing Functions-Mathematical Models</td>
<td>HW 7: 2/22, Quiz 7: 2/24</td>
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<tr>
<td>Week - 8</td>
<td>2/25</td>
<td>4.3, 4.4</td>
<td>Quadratic Functions and Their Graphs, Mathematical Models</td>
<td>HW 8: 3/1, Quiz 8: 3/3, Test 2 Review Quiz: 3/6, Scheduling period for test 2 (2/25 - 3/2, 11:59pm)</td>
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<td>Week - 9</td>
<td>3/4</td>
<td>4.5, 5.4</td>
<td>Test 2 (Weeks 5-8: Ch 2.3, 2.4, 3, 4.3, 4.4) Solving Polynomial and Rational Inequalities</td>
<td>Test 2: 3/4 - 3/6, HW 9: 3/8, Quiz 9: 3/10</td>
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<tr>
<td>Week - 10</td>
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<td>Spring Break</td>
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<tr>
<td>Spring 2013</td>
<td>Date</td>
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<td>Topics</td>
<td>Last day to complete MLP assignments (Homework and Quizzes)</td>
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</table>
| Week -11   | 3/18  | 6.1, 6.2 | Composition of Functions, One-to-one Functions, Inverse Functions | HW 11: 3/22  
Quiz 11: 3/24 |
| Week -12   | 3/25  | 6.3, 6.4 | Exponential Functions, Logarithmic Functions | HW 12: 3/29  
Quiz 12: 3/31 |
| Week -13   | 4/1   | 6.5, 6.6 | Properties of Logarithms, Solving Exponential and Logarithmic Equations | HW 13: 4/5  
Quiz 13: 4/7  
Test 3 Review Quiz: 4/10 |
|            |       |          |        | **Scheduling period for test 3**  
(4/1 - 4/6, 11:59pm) |
| Week -14   | 4/8   | 5.2, 5.3 | **Test 3 (Weeks 9-13: Ch 4.5, 5.4, 6)**  
Rational Functions: Domain, Asymptotes, and Graph | Test 3: 4/8 - 4/10  
HW 14: 4/12  
Quiz 14: 4/14 |
| Week -15   | 4/15  | 12.1, 12.6 | Systems of Linear and Nonlinear Equations | HW 15: 4/19  
Quiz 15: 4/21 |
| Week -16   | 4/22  |          | **Final Exam (TBA)** | Final Exam Review Quiz: 4/26 |