

**MAC 1105 College Algebra  
Summer A 2018**

**Instructor:** Ondrej Zjevik  
**Section:** B51A  
**Class Meeting Time:** Bay View 127; MW 9:30am-11:10am  
**E-mail:** [ozjevik@fiu.edu](mailto:ozjevik@fiu.edu)  
**Office Hours:** MW 11:15am – 12:15pm(AC1 326), 12:30pm – 1:30pm(AC1 389); F 11:00am – 1:00pm(AC1 326)  
**Office:** AC1 - 389

## **About the Course:**

This course is designed to help you learn algebra. There are several components including class preparation assignments, class meetings, problem solving sessions called Math Gym, and an individualized, computer-based algebra package in a dedicated Mastery Math Lab. All of the components are important: the class preparation assignments give you the framework and guidance for reading about and developing some of the mathematical ideas and topics for the upcoming week, the class meetings are designed to give you expert help and guidance in figuring out the more complex concepts, the Math Gym problem solving sessions give you a chance at asking questions about math problems that you are having difficulty solving the Mastery Math Lab provides a space and environment for asking questions about math problems that you are having difficulty solving, and the computer-based work provides you with the necessary practice and time doing math yourself (rather than watching someone else do it). Likewise, specific items like in-class quizzes and test reviews are included because they serve a purpose that is based on cognitive science – the science of learning. Working mindfully at all elements of this course will bring you success.

**Prerequisites:** C or better in Intermediate Algebra (MAT 1033) or an adequate score on the ALEKS placement test.

### **What you need for this course:**

- **Textbook:**  
Algebra & Trigonometry by Robert F. Blitzer 6<sup>th</sup> edition packaged with MyLabsPlus (MLP) access code  
**OR**  
MyLabsPlus Access Code alone (MyLabsPlus program contains an electronic version of the textbook)
- A portable device connected to the internet that can access MyLabsPlus
- Texas Instruments Calculator TI-30X II S. You will not be allowed to use other calculators on the exams.
- Dedicated class notebook and graph paper. Binder is suggested.

### **Things you need to do the first week:**

- Read and understand the syllabus. Questions? Ask!
- Sign up for Math Gym. An email will be sent to your FIU email account on Monday, May 7th at 12 PM. The link and instructions will be in the email.
- Print your Course Schedule and put in your notebook.

**Things you need to do every week:**

- Look at your Course Schedule. Do this at the same time every week. Maybe Saturday or Sunday afternoons as you plan your study and homework for the week ahead.
- Read sections in textbook and take notes in your well-organized notebook. Try some examples.
- Complete Class Preparation Assignments listed in the weekly schedule prior to coming to class.
- Attend and participate in every class.
- Complete 4 lab hours every week.
- Complete homework assignment and quiz on MyLabsPlus.
- Attend 1 hour of Math Gym every week

**Things I will do:**

- Prepare lessons that address challenging topics
- Be available for office hours for 2 hours every week
- Work in the lab 4 hours every week
- Create questions designed to identify common misunderstandings
- Engage you in class discussions
- Update your gradebook every other Tuesday
- Communicate with you. I will respond to emails within 2 work days but check the lab and office hours above to find me in person. For emergencies call the Math Office 305-349-2743.

## **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 10 mph on the Palmetto
- Determining if you are better off buying an unlimited phone plan or one with 900 anytime minutes and unlimited texts
- Drawing conclusions about the long term value of a college education on a data plot

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. In fact, that is what algebra is.

Algebra is the thing that allows us to

- do these calculations multiple times with different numbers
- generalize the process (that is where all the letters come from – they represent numbers that we don’t yet know)
- communicate it efficiently to others
- have a clear and consistent means of describing the relationships and the processes we use to figure out those relationships

Algebra has been refined and formalized for over a thousand years, but it is essentially a language used to describe relationships between and actions on numbers. 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 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. Struggling with the concepts is ok. 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.

**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, their graphs, and their properties – there are a lot of functions that we will look at so this single objective is a large portion of the class.
- Learn what graphs can tell us.

## **Components of the Course:**

- In-class quizzes based on work done in the class that day.

- Presentation and discussion of weekly topics
- In-class questions and interactive work – this counts for 6 % of your grade (the difference between a 67% and a 71%! – i.e. it can be the difference between passing and failing)
- Math Gym one hour of your weekly class time is spent in Math Gym. Learn how to think about solving math problems so that you are not just memorizing steps or guessing what comes next.
- Chance to address questions that you have about the material in a small group setting.
- Get feedback and support on how to succeed from students like you that already have.

Mastery Math Lab – At least 4 hours per week required. Lab hours are Monday---Friday, 8am--8pm, and Sunday, 1pm--6pm. Practice doing your math where you can get help.

- Ask Instructors and Learning Assistants about math concepts that you are having difficulty with.
- Do MyLabsPlus Homework and Quizzes. You can read math text or watch course videos too.  
Spend time working on math where you will not be distracted by TV, friends, pets, sleep, etc.

## MyLabsPlus & Learning Catalytics

**Graded Assignments:** MyLabsPlus assignments are available at <http://fiu.mylabsplus.com>. Once you have registered for the class and soon before the start of the semester, 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. Learning Catalytics is a system within MyLabsPlus that can be accessed from the course home page. You will be expected to access Learning Catalytics during classes.

Here is information on how to access/register:

### **MyLabsPlus**

#### **Access code:**

- Purchase an access code at FIU bookstore together with the textbook or as stand alone item. Keep your access code!!!! If you have to retake the class you can reuse this code for up to one year.

#### **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 gain full access and work on the assignments your first day of classes by selecting the 'pay later' option when you open HW 1. You will have access to the assignments for only 14 calendar days with the 'pay later' option. After that you will be prompted to enter a permanent code or purchase a 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 access expires.

#### **Repeating the course**

- If you took this course at FIU during Fall 2017 or Spring 2018 and entered a permanent access code during that time, then you will have immediate free permanent access to MyLabsPlus for all of Summer 2018.

**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. You can borrow calculators from us while you are working in the lab.

## Graded Component - Participation:

**In-class Participation:** You are expected to attend all classes.

- Preparation for class is expected. The expectation includes reading and taking notes of the section(s) to be discussed in class that day. Learning Catalytics or written quizzes on the readings should be expected.
- In order to provide us (you and me both) with immediate feedback in the classroom, we are using a personal response system called Learning Catalytics. 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 Learning Catalytics question but 2 pts if you respond correctly. So paying attention and doing your in-class work will benefit your grade in this course.
- You may also have Class Preparation or “Pre-Class” assignments. This is work designed to be done in ~20-30 minutes to remind you of material that you will have already covered in previous math courses and that is necessary for the day’s class. Class Preparation assignments must be submitted at the start of each class.
- We will be using Learning Catalytics or paper quizzes in every class and that participation and in-class quiz grade will make up 6% of your total grade.
- Come to class prepared to participate with a functioning internet enabled device every day.

### **Mastery Math Lab Participation**

- You are required to spend at least 4 hours in the lab each week. The week runs Monday through Sunday. You need to complete your lab hour requirement by each Sunday at 6 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 4 hours = 240 minutes (239 IS smaller than 240), you will get 0 for that period. Again, lab participation makes up 7% of your grade in this course.
- The hours you spend in the lab **do not “roll over”** to the next period. If you spend 5 hours in one week, you still have to spend a minimum of 4 hours in the next week. There is **also no partial credit** for earning less than required 4 hours
- When a time period contains a holiday, the minimum number of required hours is still 4 unless notified by faculty.
- 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. This is good advice.
- You need to sign out whenever you leave the lab. This includes to take a phone call or visit the restroom.
- Summer A, the lab will be located on both the BBC and MMC campus:
  - On BBC: Mondays, Wednesdays and Fridays in AC1 326 from 8:30am – 2:30pm, Tuesdays and Thursdays in AC1 326 from 9:30am to 4:30pm.
  - On MMC: Monday and Wednesday 8am – 3pm and Tuesday and Thursday 8am – 5pm in GL 263
- There is no food, gum or drink allowed in the lab.

## **Graded Component – Math Gym:**

- Sign up for Math Gym. An email will be sent to your FIU email account on Monday, May 7<sup>th</sup> at 12 PM. The link and instructions will be in the email.
- Complete your Math Gym assignments each week prior to going to Math Gym. A completed packet is necessary for entering Math Gym. If you are not sure, try. It is ok to write down incorrect things. Mathematicians do it all the time.
- Participate in your Math Gym sessions each week. This is the place to work with your peers and solidify your understanding of the material.
- Questions are intended to add depth to your understanding and focus on the main concept(s) of the week. The MLP assignments allow you to practice your algebra manipulation skills while the Math Gym allows you to check your understanding – understanding is essential if you want to retain your ability to use your algebra skills.
- Ask questions in Math Gym about stuff you don't get in class. There is space in your Math Gym workbook labeled Other Questions just for that.
- Missing a class does not change the due dates for your Math Gym assignments. If you have an excused absence with documentation, please speak with your instructor.

## **Graded Component – Homework:**

### **Homework.**

- MLP weekly and semi-weekly homework assignments are due on by 11:59 PM on the dates listed on the weekly schedule of topics (see the schedule). We do not accept late submissions, so please plan accordingly.
- You must get an 80% on the homework to proceed to the quiz. But...get the 100%. We will take many questions for the quizzes from the tail end of the homework!
- A grade of 0 on a MLP homework will be assigned if you did not attempt that assignment before the deadline – and you will not be able to take the quiz! Start the homework early!
- Homework assignments can be attempted an infinite number of times up until the closing date.
- At the end of the semester, the homework with the lowest grade will be dropped. This is to help account for times when life happens and you cannot complete an assignment.



## **Graded Component – Quizzes:**

### **MyLabsPlus (MLP Quizzes)**

- MLP weekly and semi-weekly Quizzes are due by 11:59 PM on dates listed on the weekly schedule of topics (see the schedule for topics). We do not accept late submissions, so please plan accordingly. These quizzes can be attempted in the lab only, and must be done individually without any learning aids (notes, books, phones, etc.). You may have out and use a blank sheet of paper and a TI-30X II S calculator.
- 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 twice and only the highest score will be recorded.
- 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.
- At the end of the semester, the quiz with the lowest grade will be dropped.

### **In-Class**

- There will be daily in-class quizzes.
- The quiz will be based on work done in class that day and will target challenging topics.
- Responses to in-classes quizzes will be recorded using the Learning Catalytics or on paper. In-class quizzes are a separate grade from the participation points that you will receive using the Learning Catalytics during class.

### **Writing Quizzes**

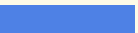




- Weekly writing quizzes on MLP are due by 11:59 PM on dates listed on the weekly schedule of topics (see the schedule for topics).
- It will be graded out of 2 points: 1 point for doing the work and 1 point for putting thought into your answers.
- Weekly writing quizzes must be submitted in

## Graded Component – Tests:

### **Preparation for the tests:**

- Make sure that you understand what you're doing on your homework and quizzes. They are meant to prepare you for the tests!
- If you are relying on the "Help Me Solve This" function of MLP to do all of your work or you are trying to memorize the steps based on what a problem "looks like", then you are not ready to take a quiz! Get help from a faculty or an LA so that you can understand why the steps work to get you the answer!
- Notice what your fellow students have to say about the quizzes in this course!

### **7. Do you agree or disagree that homework and quizzes are good preparation for the exams?**

| # | Answer                     |                                                                                   | Response | %    |
|---|----------------------------|-----------------------------------------------------------------------------------|----------|------|
| 1 | Strongly Agree             |  | 431      | 53%  |
| 2 | Agree                      |  | 285      | 35%  |
| 3 | Neither Agree nor Disagree |  | 54       | 7%   |
| 4 | Disagree                   |  | 33       | 4%   |
| 5 | Strongly Disagree          |  | 8        | 1%   |
|   | Total                      |                                                                                   | 811      | 100% |

Excerpt from results of anonymous student survey given in Fall 2015 for the MAC 1105 and MAT 1033 students using the Mastery Math Lab.

### **Taking the Test:**

- You must take the tests at 9:30am in the lab AC1 326 on the testing dates listed on the Weekly Class Schedule.
- The tests will be 60-90 minutes. Some tests may be 60 minutes and some may be 90.
- You will be provided with a TI-30X II S calculator.
- The tests are created in MyLabsPlus, so you must have access to the site, your login information and your Panther ID card.
- All your personal items will have to be stored in a book-bag and placed under the desk. You may not access your phone at any time once you enter the lab.

## **Graded Component - Final Exam:**

- There will be a comprehensive final exam.
- Your final exam will be at on Friday, June 15<sup>th</sup> in the lab at 9:30am.

**Final Exam Policy:** The practice of reflecting back on our work is a process that can help us optimize the learning strategies we use, and organize our attention and effort better on future assignments. After Test 1 and Test 2 you will be given an opportunity to complete a test reflection activity, which you would then submit to me for feedback. The test reflections, along with additional information and instructions about them, will be distributed after each test.

If you have taken both Test 1 and Test 2 (or you have missed one test and it was due to an excused absence), and have satisfactorily done the exam reflections, then your final exam will replace your lowest test grade, as long as it is beneficial to your overall grade. You may not replace more than one test grade with the final. Note that this means your final exam grade has substantially more impact on your overall result in the class (45% of your overall grade).

**Travel plans are not an excused absence.** Check the Schedule now and make sure you know when your tests are!

## **Grading policy:**

Your final grade will be assigned according to the following scale.

**Calculating your course grade:**

|             |                 |             |                |             |                |            |              |
|-------------|-----------------|-------------|----------------|-------------|----------------|------------|--------------|
| <b>A :</b>  | <b>93 – 100</b> | <b>B+ :</b> | <b>86 – 88</b> | <b>C+ :</b> | <b>75 – 78</b> | <b>F :</b> | <b>0--59</b> |
| <b>A- :</b> | <b>89 – 92</b>  | <b>B :</b>  | <b>83 – 85</b> | <b>C :</b>  | <b>70 – 74</b> |            |              |
|             |                 | <b>B- :</b> | <b>79 – 82</b> | <b>D :</b>  | <b>60 – 69</b> |            |              |

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

| <b>Grade components</b>  | <b>% of Grade</b> |
|--------------------------|-------------------|
| Tests 1-2                | 20% each          |
| MLP & In-Class Quizzes   |                   |
| MLP Quizzes              | 7%                |
| Writing Quizzes          | 2%                |
| In-Class Quizzes         | 3%                |
| Participation            |                   |
| Lab Hours                | 7%                |
| Class                    | 3%                |
| MLP Homework assignments | 8%                |
| Math Gym                 | 5%                |
| Final Exam               | 25%               |

**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 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

**Make-up Policy:** There will be **no make-up** tests. If you miss a test due to illness or other emergency and provide documentation, 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.

**Incomplete Grade Policy:** The incomplete grade (IN) is given to a student who has substantially completed most of the course (60% of the course and is passing at the time) 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 Monday, June 1<sup>st</sup>, 2018

**Note:** FIU **does not** automatically drop students that stop coming to class.

**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 MLP account to access Learning Catalytics
- Leaving the lab without signing out
- Signing into the lab with a Panther ID that is not your own or having someone sign you in when you are not present
- Accessing your cell phone during a test period or while others are taking a test.

# **Mastery Math Lab and Classroom Policy:**

## **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 MLP assignments. This is a part of your participation grade for the course....so you need to participate! You may not work on assignments for other classes.
- No food or drink is allowed in the lab. None. Zip. Zero. Nada. Nothing – not even water. If you are hungry or need a coffee boost, take a break! It will be good for your brain anyway.
- Like on an airplane, all electronic devices must be turned off and stowed away. There is a hook under the desk for your things.
- You have access to the Mastery Math Lab for additional help.
- Summer A, the lab will be located on both the BBC and MMC campus:
  - On BBC: Mondays, Wednesdays and Fridays in AC1 326 from 8:30am – 2:30pm, Tuesdays and Thursdays in AC1 326 from 9:30am to 4:30pm.
  - On MMC: Monday and Wednesday 8am – 3pm and Tuesday and Thursday 8am – 5pm in GL 263
- It might happen that you will have to wait before a computer becomes available – especially on a Friday at the beginning of the semester. Please plan accordingly. Do not wait until the last day to complete your lab hours. Log onto [MasteryMath.fiu.edu](http://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.
- Listening to music. Although all the research tells us that listening to music while working is bad (see the work of Richard E. Mayer for clinical studies on this), we know that many of you feel the need to do so. We have allowed access to the radio websites Pandora and Spotify. You may bring wired earphones and access these sites. You will not be allowed to access your own personal electronic devices (unfortunately we tried this and students took advantage of that privilege so we have found a reasonable compromise).
- Student conduct which disrupts the learning process may lead to disciplinary action and/or removal from class or lab. Removal from the lab for 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.

## **Classroom**

- Come prepared to the class and be on time (remember you will be taking quizzes!)
- 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 daily. Major announcements will also be posted on the Mastery Math Lab website [MasteryMath.fiu.edu](http://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 the subject line the following: Course and section number, your first and last name, and an identifying topic. Remember, while you may have 5 or maybe 6 instructors in a semester, your instructors have 300 - 500 or more students each semester. Clear, professional emails will generally bring resolution more quickly. It is a good idea to reread before you send.

## **Tips for Being Successful:**

- Schedule time for each thing you need to do every week
  - Read the text, take notes, and try some problems (you may not get it but at least you will be ready to ask questions)
  - Go to class
  - Go to math gym
  - Do homework
  - Take Quizzes
- Do your work in an organized fashion. Set-up problems neatly and write down the steps line by line. Trying to keep the steps in your head is the best way to mess up!
- Keep your notebook organized by Chapter (or better yet Topic). Date your notes.
- Know what the learning objectives are for each topic.
- 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.

### Weekly Class Schedule

| Summer A<br>2018 | Date | Chapter Sections                      | Topics                                                                                                                                                                                                                                                                                                                                        | Last day to complete MLP<br>assignments                                                                             |
|------------------|------|---------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|
| Week - 1         | 5/7  | Chapter P – review (P4, P5, P3, P6)   | <p><b>Pre-Class Worksheet:</b> Exponents (P.3), Polynomials (P.4), Operations on Polynomials (P.4), Factoring (P.5)</p> <p><b>In-Class:</b> Polynomials (P.4), Operations on Polynomials (P.4), Factoring (P.5), Rational Expressions (P.6), Rational Exponents (P.3)<br/>Lab Orientation</p>                                                 | <p>HW 1 : W 5/9<br/>Quiz 1 : Th 5/10</p> <p>HW 2: Sa 5/12<br/>Quiz 2: Su 5/13<br/>Writing Quiz Week 1: 5/13</p>     |
|                  | 5/9  | Chapter 1- review (1.2, 1.4, 1.5 1.6) | <p><b>Pre-Class Worksheet:</b> Solving Linear Equations and Intro to Quadratic Equations</p> <p><b>In-Class:</b> Solving Linear Equations (1.2), Solving Quadratic Equations (1.5), Complex Numbers (1.4), Solving Radical Equations (1.6), Equations Quadratic in Form and Factorable Equations (1.6), Solving Linear Inequalities (1.2)</p> |                                                                                                                     |
|                  |      |                                       |                                                                                                                                                                                                                                                                                                                                               |                                                                                                                     |
| Week – 2         | 5/14 | 1.1, 2.3, 2.4                         | <p><b>Pre-Class Worksheet:</b> Coordinate systems, Intercepts, Symmetry, Slopes</p> <p><b>In-Class:</b> Graphs of Equations (1.1), Parallel and Perpendicular Lines (2.3), Midpoint Formulas (2.4)</p>                                                                                                                                        | <p>HW 3 : W 5/16<br/>Quiz 3 : Th 5/17<br/>Writing Quiz Week 2: 5/17</p> <p><b>Test 1 review quiz : Fri 5/18</b></p> |
|                  | 5/16 | 2.4, 2.8                              | <p><b>Pre-Class Worksheet: Pythagorean Theorem and Distance</b></p> <p><b>In-Class:</b> Midpoint Formula and Distance Formula (2.4), Circles (2.8)</p>                                                                                                                                                                                        |                                                                                                                     |
|                  | 5/18 | <b>Test 1</b>                         | <p><b>Test 1 date: 5/18 in the lab. Test 1 covers Weeks 1 and 2 material.</b></p>                                                                                                                                                                                                                                                             |                                                                                                                     |
| Week – 3         | 5/21 | 1.7, 2.1, 2.2, 2.4, 2.6               | <p><b>Pre-Class Worksheet:</b> Interval notation</p> <p><b>In-Class:</b> Functions (2.1), Domain and Range (2.1), Functional Notation (2.1), Find Sum Difference (2.6), Graphs of Functions (2.1), Properties of Functions (2.2), Difference Quotient (2.2), Average Rate of Change (2.4)</p>                                                 | <p>HW 4 : W 5/23<br/>Quiz 4: Th 5/24</p> <p>HW 5 : Sa 5/26<br/>Quiz 5 : Sun 5/27<br/>Writing Quiz Week 3: 5/27</p>  |
|                  | 5/23 | P.1, P.3, 2.2, 2.5, 2.6               | <p><b>Pre-Class Worksheet:</b> Absolute value (P.1), Radicals (P.3)</p> <p><b>In-Class:</b> Absolute Value (P.1), Radicals (P.3), Library of Functions (2.5), Product and Quotient of Functions (2.6), Piecewise Functions (2.2), Graphing Techniques and Transformations (2.5), Constructing Functions-Mathematical Models (2.6)</p>         |                                                                                                                     |



|          |      |                                        |                                                                                                                                                                                                                                                                                          |                                                                  |
|----------|------|----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|
|          |      |                                        |                                                                                                                                                                                                                                                                                          |                                                                  |
| Week – 4 | 5/28 | <b>Holiday-No Class and Lab Closed</b> |                                                                                                                                                                                                                                                                                          | HW 6 : W 5/30<br>Quiz 6 : Th 5/31<br>Writing Quiz Week 4: 5/31   |
|          | 5/30 | 1.7, 3.1, 3.6                          | <b>Pre-Class Worksheet:</b> Graph of a quadratic function intro<br><br><b>In-Class:</b> Quadratic Functions and Their Graphs (3.1), Mathematical Models (3.1), Solving Linear Inequalities in One Variable (1.7), Solving Polynomial and Rational Inequalities (3.6)                     | <b>Test 2 review quiz : Fri 6/1</b>                              |
|          | 6/1  | <b>Test 2</b>                          | <b>Test 2 date: 6/1 in the lab. Test 2 covers Weeks 3 and 4 material.</b>                                                                                                                                                                                                                |                                                                  |
| Week – 5 | 6/4  | 3.5                                    | <b>Pre-Class Worksheet:</b> Rational expressions and review of domain<br><br><b>In-Class:</b> Rational Functions--Domain, Asymptotes, and Graph (3.5)                                                                                                                                    | HW 7 : W 6/6<br>Quiz 7 : Th 6/7                                  |
|          | 6/6  | 2.6, 2.7, 4.1, 4.2, 4.4                | <b>Pre-Class Worksheet:</b> Input, Output, and the Mechanics of Functions<br><br><b>In-Class:</b> Composition of Functions (2.6), One-to-one Functions (2.6), Inverse Functions (2.7)<br><br>Exponential Functions (4.1), Logarithmic Functions (4.2), Basic Exponential Equations (4.4) | HW 8 : Sa 6/9<br>Quiz 8: Sun 6/10<br>Writing Quiz Week 5: 6/10   |
|          |      |                                        |                                                                                                                                                                                                                                                                                          |                                                                  |
| Week - 6 | 6/11 | 4.3, 4.4                               | <b>Pre-Class Worksheet:</b> Rules of exponents and properties of logs<br><br><b>In-Class:</b> Properties of Logarithms (4.3), Solving Exponential and Logarithmic Equations (4.4)                                                                                                        | HW 9 : Wed 6/13<br>Quiz 9 : Th 6/14<br>Writing Quiz Week 6: 6/14 |

|  |      |                   |                                                                                                                                                                      |                                          |
|--|------|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|
|  |      |                   | <b>Pre-Class Worksheet:</b> solving systems of equations by graphing<br><br><b>In-Class:</b> Systems of Linear Equations (8.1), Systems of Nonlinear Equations (8.4) | <i>Final exam review quiz : Fri 6/15</i> |
|  | 6/13 | 8.1, 8.4          |                                                                                                                                                                      |                                          |
|  | 6/15 | <b>Final Exam</b> | <b>Final exam date: 6/15 in the lab. The Final Exam is cumulative.</b>                                                                                               |                                          |