MERCYHURST UNIVERSITY

MATH 118 – Math for the Natural Sciences

COURSE SYLLABUS · SPRING 2020

INSTRUCTOR:	Roger Griffiths	**OFFICE HOURS:**
OFFICE:	Old Main 305	Mon: 11:30 - 12:30
EMAIL:	griffiths.roger@gmail.com	Mon: 3:00 - 3:50
PHONE:	824-2123	Tues: 08:50 - 09:20
CLASS TIME:	Mon, Tues, Wed, Fri: 2:00 - 2:50, (4 semester credits)	(in Hirt M209)
LOCATION:	Hirt M209	Tues: 11:30 - 12:30
PREREQUISITE:	Math Placement (ALEKS) Score 50 or higher	Thur: 08:00 - 09:20
WEB:	www.integral-domain.org/rgriffiths/courses/m118/	Thur: 2:00 - 2:50
TEXT:	Precalculus Essentials, (5th Edition) by Robert Blitzer	

PREREQUISITES

To remain enrolled in this course, you must satisfy at least one of the following criteria:

- scored of 50 or better on the ALEKS Mathematics Placement Assessment,
- passed Math 111 (College Algebra) or transfer credit for equivalent.
- began studying at Mercyhurst prior to Fall 2016,

If none of these apply, you should make arrangements to take the ALEKS Math Placement Assessment before the Add/Drop deadline on Friday, January 17th. **Students that do not meet the prerequisites by this deadline may be dropped from the course.** You will be contacted via email by the instructor reminding you to show proof of meeting prerequisites before any action is taken.

WHY UNDERSTANDING MATHEMATICS IS ESSENTIAL

If one does not understand or refuses to deal with mathematics, one has fatally impaired one's ability to comprehend the natural sciences, because not only are the ideas of the natural sciences expressed in mathematical form, but also the relationships among those ideas are established with mathematical reasoning.

COURSE DESCRIPTION

This course has been designed for students who plan to take calculus but may be deficient in some aspects of their mathematical preparation. While many of the topics covered are similar to those covered in a typical college precalculus course, there is more emphasis on the application, a faster pace is maintained, and a greater depth of understanding is required. It is expected that students have taken intermediate algebra and precalculus prior to this class; as stated, this course is intended to fix deficiencies.

The lack of the necessary prerequisite mathematics does not fix itself in the subsequent mathematics courses. Weak algebra skills tend to become a bigger problem and not a smaller one as you progress in your college career and take courses in any subject that require some manipulation or even interpretation of (numerical) results. In the big picture, this course is a small investment of your time that will earn you four credits which count towards graduation, and repay you with a greater success and satisfaction in the completion of your other mathematics and science courses.

The development of good study habits is essential for your success. One of our goals in this class is to learn how to do homework in a college-level mathematics course. You will often have to work hard to take the material covered in class and discover how to apply this to seemingly unrelated problems in your homework. The learning occurs when you can move yourself into the unknown territory, when you make these discoveries.

The course will cover the fundamental concepts of college algebra, precalculus, and a preparation for calculus. More specifically; the topics will include factoring, integer and rational exponents, simplifying algebraic expressions, solving equations and inequalities, basic trigonometry, function notation, polynomial and rational functions, exponential and logarithmic functions, trigonometric and inverse trigonometric functions, graphs of functions and applications.

Course Objectives

Upon successful completion of this course a student will be mathematically prepared to succeed in a college calculus course, and subsequent science courses. In particular:

- demonstrate a working knowledge of the basics of the language of mathematics,
- have acquired study habits necessary for continued success in your subsequent science and mathematics courses,
- apply your understanding of algebra as required in both calculus and applications in sciences,
- organize all of your mathematical tools, techniques, procedures, and problem solving skills further developed in this course. This will enable you to utilize the appropriate tools to restate, setup, and then solve problems in calculus and beyond,
- continue to develop your mathematical skills and thought processes subsequent to this course, given the solid foundation you built in this course.
- An essential aspect of all the objectives, is to perform all of these operations without the use of a calculator.

Textbook

Precalculus Essentials, by Robert Blitzer, 5th Edition. You will need this textbook, and be sure to check the edition when purchasing your textbook; other editions have similar material, but the assigned problems may be different. No other materials are required for this class. You do NOT need to purchase a subscription to MyMathLab or pay to access any other online resources. If you prefer to purchase an electronic version of the text, you're welcome to do so.

Calculators

Calculators are not required or even recommended for this course, and **you will not be permitted to use a calculator or computer on any quiz or exam.**
You are strongly encouraged to avoid using a calculator while working on homework. *All of our examinations are carefully designed to be taken "closed book" without the use of calculators, computers or "crib sheets".* Examination problems will focus on the basic formulas and problem solving techniques which every student of calculus must know without a calculator or textbook (we are preparing for calculus). This policy reinforces our stated learning objectives, in particular, furthering our understanding of the language of mathematics and preparing for success in calculus. We will be interested in learning to *write* mathematics (the process) not necessarily in answers.

Evaluation

Your letter grade in this course will be based on the following points.

- 100 points: **Quizzes** Quiz average out of 100 points, will drop 1 quiz score
- 400 points: **Exams:** 4 exams at 100 points each
- 200 points: **Final Exam** Comprehensive Final exam worth 200 points

700 points: **Total points** in the course

And assigned according to the following scale.

Total Class Points	Percent %	Letter Grade	Interpretation
630 - 700	90 to 100	A	Exceptional
609 - 629	87 to 89	B+	Outstanding
560 - 608	80 to 86	B	Very Good
539 - 559	77 to 79	C+	Good
490 - 538	70 to 76	C	Satisfactory
420 - 489	60 to 69	D	Unsatisfactory
0 - 419	Below 60	F	Failure

✓ Your overall performance in the course is measured by the total number of points you accumulate relative to the maximum 700 points possible. Your letter grade in this course will be based on the distribution above, the standard scale used in the Mathematics Department.

✓ These are the only points possible in this class, there is no extra credit (or 'make up'), your asking for extra credit is a clear indication that you have not read your contract (this syllabus).

Course Policies

✓ You are responsible for all that is announced or covered in class even if you are absent.

✓ You are responsible for all the material in a given section unless told otherwise, use the course schedule and suggested homework as a guide.

✓ A prerequisite for additional help outside the classroom is regular class attendance.

✓ Every student is required to establish a *class contact*, that is, a fellow classmate that you may contact in case you are having a problem with a particular homework exercise at night/weekend or in the event you miss class, you can get the class notes from them.

✓ If you miss class, you are responsible for getting the notes from your 'class contact' (see above).

✓ Email is great for **simple** communications, but more complex issues must be handled in person.

✓ Don't use email as an excuse to avoid personal contact.

✓ Due to the overwhelming amount of email I receive, any email requests that involve a complicated response may not get addressed in a timely fashion, please come see me in that case.

✓ I expect you to read this syllabus and get clarification of any items you do not understand the first week of class. After that, if you send me an email asking me about something covered in this syllabus, that email will likely be disregarded.

Homework

I do not collect or grade your written homework. You will be held accountable for the mastery of homework problems via the quizzes (which can occur any day). As such, you get no credit for *merely attempting the homework*, your goal is to master each type of problem assigned.

Homework Suggestions

- The textbook exercises typically begin with several groups of problems that cover small pieces of the material covered in that section. The exercises near the end of that section often put those ideas all together, necessitating mastery of the low-numbered exercises before attempting the latter. However, working only the low-numbered exercises will not prepare a student sufficiently for the quizzes or exams.

- Most of science and mathematics (and, I believe most endeavors) is learning how to recover from little failures (our mistakes, incorrect assumptions, crashes, etc), until at last we succeed. Any endeavor worth doing takes much practice to become proficient. Think about snowboarding, the violin, chess, ice hockey, and so on; you can practice for years and continue to get better, learn new tricks, reach the next level of proficiency. People work that hard for the love of their sport, hobby, or profession. Mathematics as an art is no different. Although, most of you will probably always view mathematics as a tool or possibly the language of science. But most of the modern world is built on the back of that science and engineering, which is built on mathematics. It is for that reason that you should be willing to expend the necessary effort, work through your frustrations and failures, and, in the end, achieve success in this, and subsequent mathematics courses.

- **Homework is far and away the single most important part of any mathematics course** because this is when most (all) of the learning takes place. Homework problems will be assigned regularly and I expect you to do them. If you are unable to do a problem I expect you to find out how to do it. You have at your disposal several means of meeting this expectation.
  - You can stick with it until you figure it out yourself.
  - You can discuss the problem with a classmate or several classmates (strongly encouraged).
  - You can arrange a tutor through the academic support tutoring web page.
  - You can see me individually during my office hours. I am always happy to talk to you during my office hours or at any other time if not otherwise committed; when coming to my office, be prepared to show me what you've already tried.
  - You can discuss the problem with anyone who can and is willing to help you.
  - You can ask me about the problem in class (time permitting).

- In studying mathematics, you must be careful not to let a tutor or friend *think* for you. It is essential that you can work problems **completely on your own, without help from any resource,** by the time you take a quiz or exam.

- You should continue to work problems of a given type (even beyond the assigned problems) until you see the pattern yourself, without assistance of any type (i.e. without using your notes, worked examples, or any prior problems).

- Attending every class is not enough; mathematics can only be learned through practice (like anything worth mastering).

- This 'PRACTICE' is how you master the material, you will want to practice in the manner you will be accessed. That means *write mathematics*, your focus should not be on 'the correct answer', but rather, what you write as your solution. If you need further help on this important aspect of the class please see the mathematics tutors provided for this class.

- Remember, the general rule of thumb for a college level class is that one should put in at least 2 hours of work outside class for every hour in class. This means that you should be working on this course for about 8 hours a week outside of class. I expect you to do this.

- Experience has shown that the additional effort one puts into this class will be greatly rewarded in subsequent science classes.

Quizzes

- You will be given quizzes regularly. Keeping up with the homework, as detailed above, will ensure that you are prepared for the quizzes.
- The quizzes will be based largely on the suggested homework, and should be expected any day (if you are paying attention in class, I generally suggest when the next quiz will occur).
- Everyone is allowed to miss one quiz without penalty (for any reason); thus, there are NO make up quizzes. If you end up taking all of the quizzes, you may drop your low quiz score. Athletes or other individuals missing for school activities are to let me know BEFORE missing the quiz (or it lands above).
- Quiz grades will not be based strictly on whether or not you found the correct answer. Your work must also be written clearly, and with proper notation, to receive full credit.
- The quizzes serve as an immediate assessment of the extent to which you mastered a particular assignment. Good quiz results should serve as positive feedback, but poor quiz results suggest that you must go back and master that material. Repeatedly failing quizzes will almost certainly lead to failing the course, you must take immediate and corrective action if you ever do poorly on a quiz.

Exams

- There will be four midterm exams given throughout the semester, in addition to the final exam. The material on the exams will be similar to topics covered on quizzes and homework.
- Students are required to take all exams at the scheduled hour as they appear on the syllabus and course schedule.
- There will be no late *'make-up'* exams, as this is unfair to the rest of the class. If you know in advance you are going to miss a scheduled exam, let me know well in advance of the exam and we arrange a time to take the exam early. Athletes, carefully review our exam schedule looking for conflicts.
- A missed exam will result in the final exam being worth 300 points (you do not loose any points for the missed exam, those points simply roll into the final exam). A second missed exam will receive a grade of 0 (zero).
- The material covered on the first exam will appear on all the subsequent exams!
- Our goal is not simply a 'correct answer'. But rather, you are to demonstrate the extent to which you understand each problem, this means *write mathematics*. A good write-up includes: connecting your work, proper notation, and an explanation of steps as you see necessary.
- Important Dates to Remember:
  - Exam 1: Friday, February 7th.
  - Exam 2: Friday, February 28th.
  - Exam 3: Tuesday, April 7th.
  - Exam 4: Friday, May 1st.
  - Final Exam: Friday, May 8th, 1:00-3:00 PM.

Academic Honesty

Students are required to uphold academic integrity throughout the course. In particular, plagiarism of any sort, unauthorized collaboration on exams, quizzes and other assignments, and other incidences of academic dishonesty will be handled according to the policies set forth in the Student Handbook.

In this course, academic honesty means submitting quizzes and exams that are genuine reflections of your understanding of the material. A first attempt to unfairly increase your grade on a quiz or exam (by using restricted notes, calculators or any other electronic devices, by copying work from a classmate, etc) will result in a grade of 0 for that quiz or exam. This grade *will not* be dropped or replaced when determining your final grade. A second attempt will result in an Academic Dishonesty report and may affect your enrollment in the course and the University.

Services:

Support of the Mercy Mission

This course supports the mission of Mercyhurst University by creating students who are intellectually creative. Students will foster this creativity by: applying critical thinking and qualitative reasoning techniques to new disciplines; developing, analyzing, and synthesizing scientific ideas; and engaging in innovative problem solving strategies.

Learning Differences

Mercyhurst University is committed to making reasonable accommodations to assist individuals with disabilities in reaching their academic potential. Students with disabilities requiring accommodations should complete and submit this form and the required documentation to the Director of Equal Opportunity Programs (DEOP), aagnew@mercyhurst.edu. Accommodations will not be granted prior to approval by the DEOP and will not be provided retroactively. Further information is available by visiting the Learning Differences website: http://www.mercyhurst.edu/academics/learning-differences-program.

Additional (Free) Resources

- **Khan Academy Algebra II**: https://www.khanacademy.org/math/algebra2
  Includes material on manipulating functions, polynomials, rational functions, complex numbers, and modeling.
- **Khan Academy Trigonometry**: https://www.khanacademy.org/math/trigonometry
  Includes material on right triangle trigonometry, trig functions and graphs, and solving trig equations.
- **Wolfram Alpha**: https://www.wolframalpha.com
  A great way to check your work. Free, with subscription available to access step-by-step solutions to problems.
- **Trigonometry Textbook**: https://stitz-zeager.com/szct07042013.pdf
  Free textbook by Carl Stitz and Jeff Zeager. Covers functions, graphing, polynomials, rational functions, modeling, exponential and logarithmic functions, and more, with practice exercises and some solutions.
- **Precalculus Textbook**: https://www.opentextbookstore.com/precalc/
  Free textbook by David Lippman and Melonie Rasmussen. Covers just about everything in Math 118, in the same sequence.

Section	Exercises
Day One	→ Carefully RE-READ and UNDERSTAND the Syllabus ←
§ P1: Algebraic Expressions	9, 11, 15, 20, 25, 29, 43, 49, 57, 59, 69, 91, 93, 95, 99, 101, 107 - 119(odd), 159, 160
§ P.2: Exponents and Sci. Notation	1, 3, 5, 12, 21, 29, 33, 37, 39, 41, 43, 47, 51, 59, 63, 65, 67, 95, 99, 107, 143
§ P.3: Radicals and Rational Exponents	1, 3, 5, 11, 25, 29, 35, 37, 41, 49, 51, 61, 65, 71, 73, 79, 87, 91, 93, 95, 101, 103, 109, 111, 119
§ P.2: Exponents and Sci. Notation § P.3: Radicals and Rational Exponents	From § P.2: 55, 57, 61, 77, 83, 103, 109, 111, 112, 113, 114, 145 From § P.3: 21, 31, 43, 53, 80, 81, 89, 97, 99, 107, 110, 112, 113, 114
§ P.4: Polynomials	13, 17, 21, 29, 39, 45, 65, 69, 85, 87, 89, 93, 95, 107, 108, 111, 113
§ P.5: Factoring Polynomials	9, 11-15(odd), 23, 29, 37, 41, 45, 47, 55, 59, 65, 71, 79, 83, 93, 97, 103, 117
§ P.6: Rational Expressions (I)	5, 9, 15, 17, 27, 29, 33, 39, 43, 51, 53, 56, 63, 69, 73, 75, 79
§ P.6: Rational Expressions (II)	65, 71, 74, 80, 83, 87, 107
§ P.7: Equations	11, 15, 21, 25, 35, 37, 39, 47, 51, 71, 75, 79, 91, 99-115(odd), 121, 127
§ P.5: Factoring Polynomials § P.6: Rational Expressions § P.7: Equations	87, 101, 104, 105, 109, 112, 113, 120, 121, 138 40, 41, 67, 72, 76, 81, 85, 88, 117 39, 41, 73, 100, 112, 123, 128, 131, 167, 169
§ P.9: Inequalities and Absolute Value	5, 15, 27, 31, 33, 41, 51, 55, 59, 65, 73, 75, 77, 85, 89, 91, 95
Chapter Review: Algebra Worksheet	Work exercises from sections 1.1.1 - 1.1.7; Ex 1 - 124 (OMIT: # 51, 52, 117, & 118)
Exam 1	
§ 1.1: Basics of Graphs	25, 55, 57, 59, 79-86(all)
§ 1.2: Basics of Functions and Graphs	13, 15, 29, 33, 35, 43, 45, 59, 61, 62, 71-75(odd), 81, 87, 89, 93, 95, 122-126
§ 1.3: More on Functions & Graphs	1, 3, 5, 11, 13, 39, 45, 47, 51, 53, 61, 63, 77, 85-91(odd), 90, 92
§ 1.4: Linear Functions and Slope § 1.5: More on Slope	7, 15, 27, 33, 37, 43, 59, 67, 85 1, 5, 9, 11, 25 (may use calculator for some calculations)
§ 1.5: Average Rate of Change § 1.6: Transformations of Functions (1)	15, 17, 29, 31 (may use calculator for some calculations) 17-23(odd), 33, 35, 36, 53, 55, 145
§ 1.6: Transformations of Functions (2)	27, 47, 52, 57, 59, 67, 69, 71, 77, 146, 147, 151, 152
Mid-Chapter	Work on Algebra Worksheet (1.1.1 - 1.1.7); Get caught up on other sections.
§ 1.7: Composite Functions	9, 27, 35, 47, 53, 59, 63, 67, 73, 75, 83, 85, 91, 93, 95, 124
§ 1.8: Inverse Functions	3, 5, 7, 17, 19, 25, 27, 28, 29-33(all), 36, 37, 53, 55, 57, 59, 63, 86
§ 1.9: Distance Formula § 1.10: Modeling with Functions	53, 57, 63 15, 18, 23, 25, 27, 31, 33, 41
Exam 2	
§ 2.1: Complex Numbers § 2.2: Quadratic Functions	5, 7, 17, 21, 27, 37, 49, 51 1-4, 5, 7, 8, 11, 17, 31,

…continued on the next page…

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Section	Exercises
§ 2.2: Quadratic Functions (2)	39, 41, 57, 65, 71
§ 2.3: Polynomial Functions	3-9(odd), 13, 15-18, 23, 25, 31, 37, 43, 47, 57, 67, 69
§ 2.4: Dividing Polynomials	9, 11, 13, 15, 27, 29, 43, 44, 45 (you do NOT have to use synthetic Division here)
§ 2.5: Zeros of Polynomial Functions	23, 24, 25, 27, 29, 43, 45, 47
§ 2.5: Zeros of Polynomial Functions (2)	46, 49, 53, 58
§ 2.6: Rational Functions (1)	5, 7, 15-20, 25, 27, 29, 31, 37, 39, 49, 57, 65, 95
§ 2.6: Rational Functions (2)	33, 35, 43, 55, 73, 91, 93, 97
§ 2.7: Rational Inequalities (1)	17, 27, 35, 43, 53, 55, 61, 66, 68, 70
§ 2.7: Rational Inequalities (2)	25, 37, 39, 41, 57, 59, 63, 65, 67, 69
§ 3.1: Exponential Functions (1)	19-24, 35, 39, 41, 42, 55 (calculator)
§ 3.1: Exponential Functions (2)	52, 61, 63, 64, 73, 75 (calculator) , 88, 90, 91, 93
§ 3.2: Logarithmic Functions	1, 7, 9, 13, 21, 23, 27, 33, 43, 48-52, 65, 73, 83-93(odd), 97, 99, 101, 107, 109, 111, 150, 152
§ 3.3: Properties of Logarithms	5, 9, 13, 29, 30, 37, 41, 57, 68, 69, 83, 88, 93, 94, 96, 97, 99, 137 Take advantage of this time to get caught up on your weak sections
§ 3.4: Exponential and Log Equations (1)	5, 9, 19, 21, 33, 41, 43, 63, 71, 75, 83, 89, 91, 94, 95, 99, 102
§ 3.4: Exponential and Log Equations (2)	16, 22, 37, 42, 45, 64, 79, 87, 92, 93, 97, 100, 101
Exam 3	
§ 4.1: Angles and Radian Measure	15, 19, 25, 29, 41, 43, 45, 47, 63, 65, 69, 77, 80, 81
§ 4.2: Trig Functions: The Unit Circle	3, 5, 7, 17, 19, 23, 31, 35, 41, 55, 57, 59, 63, 67, 71, 77, 107
§ 4.3: Right Triangle Trigonometry	1, 7, 9, 11, 19, 29, 33, 35, 53, 55, 56, 57
§ 4.4: Trig Functions of Any Angle	1, 9, 11, 13, 16, 19, 25, 29, 31, 66, 67, 78, 85, 87, 91, 93, 95, 99 Any instructions: "for each of the six trig functions", just work the $\sin, \cos, \tan, \sec$
§ 4.5: Graphs of Sine and Cosine § 4.6: Graphs of Other Trig Functions	From § 4.5: 5, 11, 39, 57, 61, 65, 66 From § 4.6: 1-4
§ 4.7: Inverse Trig Functions (1)	1, 9, 11, 15, 25, 29, 33, 35, 39, 43, 55, 57, 65, 71
§ 4.7: Inverse Trig Functions (2)	41, 45, 61, 63, 67, 72, 79
§ 5.1: Verifying Trig Identities (1)	13, 21, 25, 32, 43, 45, 47, 51, 54, 67
§ 5.1: Verifying Trig Identities (2)	27, 29, 35, 37, 41, 49, 55, 57, 59
§ 5.5: Trigonometric Equations (1)	9, 23, 25, 27, 39, 45, 67, 99, 105, 113, 160
§ 5.5: Trigonometric Equations (2)	100, 101, 106, 115, 117
Exam 4	

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Monday	Tuesday	Wednesday	Friday
Jan 13 Course Introduction & Assessment	Jan 14 § P.1: Algebraic Expressions	Jan 15 § P.2: Exponents and Scientific Notation	Jan 17 § P.2: Exponents § P.3: Radicals / Exponents
Jan 20 No Class: MLK Day	Jan 21 § P.3: Radicals and Rational Exponents	Jan 22 §§ P.2 & P.3: Wrap-up exponents	Jan 24 § P.4: Polynomials
Jan 27 § P.5: Factoring Polynomials	Jan 28 § P.6: Rational Expressions (I)	Jan 29 § P.6: Rational Expressions (II)	Jan 31 § P.7: Equations
Feb 3 §§ P.5 - P.7: Expressions - Equations	Feb 4 § P.9: Inequalities and Abs Value Inequalities	Feb 5 § 1.1: Basics of Graphs	Feb 7 **Exam 1**
Feb 10 § 1.2: Functions and Graphs	Feb 11 § 1.3: More on Functions and Their Graphs	Feb 12 §§ 1.4 & 1.5: Linear Functions and More on Slope	Feb 14 § 1.5: Avg Rate of Change § 1.6: Transformations (1)
Feb 17 § 1.6: Transformations (2)	Feb 18 Mid-Chapter **Algebra Quiz**	Feb 19 § 1.7: Composite Functions	Feb 21 § 1.8: Inverse Functions
Feb 24 § 1.9: Distance Formula § 1.10: Modeling Functions	Feb 25 § 1.10: Modeling Functions	Feb 26 § 2.1: Complex Numbers § 2.2: Quadratic Functions	Feb 28 **Exam 2**
Spring Break			
Mar 9 § 2.2: Quadratic Functions	Mar 10 § 2.3: Polynomial Functions & Graphs	Mar 11 § 2.4: Dividing Polynomials (1)	Mar 13 § 2.4: Dividing Polynomials (2) § 2.5: Zeros of Polys (1)
Mar 16 § 2.5: Zeros of Polys (2)	Mar 17 § 2.6: Rational Functions (1)	Mar 18 § 2.6: Rational Functions (2)	Mar 20 § 2.7: Rational Inequalities (1)
Mar 23 § 2.7: Rational Inequalities (2)	Mar 24 § 3.1: Exponential Functions (1)	Mar 25 § 3.1: Exponential Functions (2) **Algebra Quiz**	Mar 27 § 3.2: Logarithmic Functions
Mar 30 § 3.3: Properties of Logarithms	Mar 31 No Class: Advising Day	Apr 1 § 3.4: Exp & Log Equations (1)	Apr 3 § 3.4: Exp & Log Equations (2)
Apr 6 § 4.1: Angles and Radians	Apr 7 **Exam 3**	Apr 8 § 4.2: Trigonometric Functions	Apr 10 No Class: Easter Break
Apr 13 No Class: Easter Break	Apr 14 *Last day to withdraw* § 4.3: Right Triangle Trigonometry	Apr 15 § 4.4 : Trigonometric Functions of Any Angle	Apr 17 §§ 4.5 & 4.6: Graphs of Trig Functions
Apr 20 § 4.7: Inverse Trig Functions (1)	Apr 21 § 4.7: Inverse Trig Functions (2)	Apr 22 § 5.1: Verifying Trig Identities (1)	Apr 24 § 5.1: Verifying Trig Identities (2)
Apr 27 § 5.5: Trigonometric Equations (1)	Apr 28 § 5.5: Trigonometric Equations (2)	Apr 29 §§ 4.4 - 5.1, 5.5: Trig Wrap up	May 1 **Exam 4**
		Friday May 8	**Final Exam 1:00 - 3:00**