

Basic Course Information Spring 2021 Semester: Instructor Name: Mr. Voldman Math 094 Support to Course Title & #: **Precalculus** Email: alex.voldman@imperial.edu Webpage (optional): CRN #: 21578 **Online** Office #: Classroom: 2764 Contact via e-mail/zoom M-TH Office Hours: 1:30-2:30 Class Dates: 01/15/21-6/8/21 Monday and Wednesday Office Phone #: 760-355-6299(only via e-mail) Class Days: 760-355-6155, 760-355-6201 Division Class Times: Support 9:15-10:15am **Emergency Contact:** Secretary Class Format:

Online (S)

Course Description

This course is intended for students to take concurrently with Math 190. Included will be the review of exponents, operations on polynomial, rational and radical expressions, solving polynomial, rational and radical equations, fundamentals of trigonometric functions. (Nontransferable, nondegree applicable)

Course Prerequisite(s) and/or Corequisite(s)

MATH 190

Student Learning Outcomes

Units:

Upon course completion, the successful student will have acquired new skills, knowledge, and or attitudes as demonstrated by being able to:

Demonstrate problem solving strategies by identifying an appropriate method to solve a given problem, correctly set up the problem, perform the appropriate analysis and computation, and share their interpretation of the conclusion or the outcome, using correct grammar or in an oral presentation. This outcome will be assessed through selected exercises on exams throughout the semester. (ILO1, ILO2)

Course Objectives

Upon satisfactory completion of the course, students will be able to:

- 1. Perform operations on polynomial expressions.
- Perform operations on rational expressions.
- Perform operations on radical expressions.
- Graph linear, quadratic, and radical functions.
- Solve linear, quadratic, radical and rational equations.
- Demonstrate skills in the basic trigonometric concepts, including evaluating trigonometric functions, graphing and fundamental identities.

Textbooks & Other Resources or Links

Blitzer, Robert 2017. Precalculus 6th. Pearson ISBN: 978-0134469140 (The same textbook as for Math 190)



Course Requirements and Instructional Methods

Students will complete course activities.

Course Grading Based on Course Objectives

Grading: You need to earn at least 70% overall grade on assignments to pass this course.

Pass/No pass only

Course Policies

Attendance

- The first day of attendance is critical and important. If you cannot attend the first support, please contact me at <u>alex.voldman@imperial.edu</u> and explain your reason for being absent.
- A student who fails to attend the first meeting of a class or does not complete the first mandatory activity of an
 online class will be dropped by the instructor as of the first official meeting of that class. Should readmission be
 desired, the student's status will be the same as that of any other student who desires to add a class. It is the
 student's responsibility to drop or officially withdraw from the class. See General Catalog for details.
- Regular attendance in all classes is expected of all students. A student whose continuous, unexcused absence exceed
 the number of hours the class is scheduled to meet per week may be dropped. For online courses, students who fail
 to complete required activities for two consecutive weeks may be considered to have excessive absences and may
 be dropped.
- Absences attributed to the representation of the college at officially approved events (conferences, contests, and field trips) will be counted as 'excused' absences.
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Anticipated Class Schedule/Calendar

Lab Outline

- 1. Sets
 - a. Language and Notation
 - b. Union and Intersection
 - c. Interval Notation
- 2. Polynomials
 - a. Factor Polynomial Expressions



a. Simplify rational expressions	
b. Operations with rational expressions	
c. Simplify complex fractions	
4. Radical Expressions	
a. Simplify radical expressions	
b. Operations on radical expressions	
c. Rationalize denominator of radical expressions	
5. Solve equations	
a. First Degree Equations	
b. Quadratic Equations, involving solve by factoring,	square root property, complete the square, and the
quadratic formula	
c. Rational Equations	
d. Radical Equations	
6. Trigonometric Topics	
a. Angles	
b. Definition of Trigonometric Functions	
c. Special Angles	
d. Fundamental Identities	
e. Graphs of the basic trigonometric functions	
Subject to change without prior notice	

b. Operations of polynomial expressions

3. Rational Expressions