

MATH 110-20: PRECALCULUS

Ramapo College of New Jersey
School of Theoretical and Applied Science

Summer 2026 Hybrid Course

Course and Instructor Information			
Course	Math 110-20: Precalculus	Instructor	Dr. Atul Anurag
Credits	4 Credits	Position	Visiting Assistant Professor
Semester	Summer 2026 Hybrid	Office	G128-H
Class Time	1:15 PM – 4:50 PM		
Classroom	G237	Email	aanurag@ramapo.edu
Prerequisite	Math 024 or CLM Test	Office Hours	5:00 PM – 6:00 PM By appointment via email

Course Description

A preparatory course for calculus with trigonometry. Topics include absolute values and inequalities; analytic geometry of conic sections; functions (linear, polynomial, rational, exponential, and logarithmic); and plane trigonometry including trigonometric functions, inverse trigonometric functions, identities, equations, and formulas.

Course Objectives

- Develop the algebraic and trigonometric skills necessary for success in Calculus.
- Improve quantitative reasoning and mathematical communication.
- Strengthen analytical problem-solving skills.
- Build fluency with functions, graphs, equations, and transformations.

Textbook and Online Homework

Required Platform: WebAssign (Cengage)

Textbook: *Precalculus: Mathematics for Calculus* (7th Edition)
Stewart, Redlin, and Watson

Website: <https://www.webassign.net>

Class Key: ramapo 1865 1496

Students do not need a physical textbook because WebAssign includes an integrated eBook.

Grading Policy

Assessment	Weight
Participation	10%
Homework Assignments	10%
Quizzes	5%
Midterm Exam	25%
Cumulative Final Exam	50%

Letter Grade	Percentage
A	95–100
A-	90–94
B+	85–89
B	80–84
B-	75–79
C+	70–74
C	65–69
C-	60–64
D+	55–59
D	50–54
F	Below 50

Exams and Quizzes

- One in-person midterm examination
- One cumulative in-person final examination
- Weekly quizzes administered through WebAssign
- No make-up exams without documented approval
- Calculators are permitted on exams
- Full credit requires all work to be shown clearly

Academic Integrity

Students are expected to follow Ramapo College's Academic Integrity Policy. Academic dishonesty, including plagiarism and cheating, will result in disciplinary action.

Students with Disabilities

Students requiring accommodations should contact the Office of Specialized Services and meet with the instructor early in the semester.

Communication

All course communication will be conducted through Ramapo email and Canvas.

Course Schedule

Day	Date	Topics
1 & 2	July 6 & July 8	§1.5 Rational, Radical, and Absolute Value Equations
		§1.8 Linear and Absolute Value Inequalities
		§2.1–2.3 Graphs of Functions
		§2.5–2.7 Linear Functions and Transformations
		§2.8 One-to-One Functions and Inverses
		§3.1 Quadratic Functions
3	July 13	§3.2 Polynomial Functions and Graphs
		§3.3–3.4 Dividing Polynomials and Real Zeros
		§10.7 Partial Fractions
		§3.7 Polynomial and Rational Inequalities
		§4.1–4.3 Exponential and Logarithmic Functions

Day	Date	Topics
4	July 15	§4.4 Laws of Logarithms §4.5 Exponential and Logarithmic Equations §4.6 Modeling with Exponential Functions
5	July 20	Midterm Exam (Chapters 1–4) 1:15 PM – 2:55 PM
6 & 7	July 23 & July 27	§6.1–6.2 Angle Measure and Right Triangle Trigonometry §6.3 Trigonometric Functions of Angles §6.5–6.6 Laws of Sines and Cosines §5.1–5.2 Unit Circle and Trigonometric Functions
8 & 9	July 29 & August 3	§5.3–5.4 Trigonometric Graphs §5.5 and §6.4 Inverse Trigonometric Functions §7.1 Trigonometric Identities §7.2–7.3 Addition and Double-Angle Formulas §7.4–7.5 Trigonometric Equations
10	August 6	Final Exam (Cumulative) 1:15 PM – 4:50 PM

This syllabus is subject to change at the instructor's discretion.