

2024 CP Precalculus summer Course outline

Students should bring a notebook, and a TI-84 or TI-Aspire Graphing Calculator. The Learning Center provides the textbook, Houghton Mifflin Larson Hostetler : Precalculus. Depending on the lesson, students may be given a Chromebook for eBook resources. The teacher will add supplementary materials when needed.

Every effort is made to follow the New Jersey Department of Education Student Learning Standards for Mathematics and to prepare students for exams at their schools in August. (Please see:

<https://www.nj.gov/education/standards/math/Index.shtml>

The course topics cover, but are not limited to, the following: linear, quadratic, and polynomial functions; inequalities; exponents and logarithms; analytic geometry; trigonometric functions, equations and applications; triangle trigonometry; trigonometric addition formulas; polar coordinates; complex numbers; vectors and determinants; sequences and series; matrices; combinatorics; probability; statistics; curve fitting and models; limits, series and iterated functions.

Course Description

This course is an accelerated study of high school Precalculus and is meant to fulfill the credit requirement. It is a six-week program, Monday through Friday, four hours per day, or 20 hours per week, plus three sections of midterm and final review and assessment, totaling 130 hours.

The course follows the NJSLS, while accounting for possible variations in schools represented by attending students. All classroom instructors are certified math teachers with years of teaching experience.

Student progress is assessed daily. Homework is required and reviewed every day. There are two tests per week, lasting either an hour or ninety minutes depending on the material covered. On days when there is no test, quizzes will be given. Course grade depends 60% on test performance, 35% on quizzes, and 5% on homework. Also, students must show all their homework and classwork to receive full credit.

