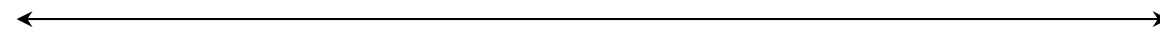


Topics in Calculus and Statistics



This is a good choice for a math course in a busy Senior year. Its purpose is to introduce students to several branches of mathematics which can be further studied in college. It covers a variety of topics which include probability, statistics, and principles of logic. The essential themes of calculus, (the limit, derivative and integral), are introduced conceptually and reinforced through discussions, graphical analysis and “real” world problems. It addresses sequences and series, which are taught in earlier years, in greater detail. It also uses these principles to analyze financial problems.

In this class, students get the opportunity to develop their technology skills. Many assignments require students to use the Internet, spreadsheets, and PowerPoint to both learn and present their work. Many activities, exercises and projects are based on group work and presentation. Early in the year, groups are assigned a “family” to use as a case study for the financial principles studied in the course. They guide their family through budgeting, planning holidays, purchasing insurance, tax season, as well as other events.

Students are evaluated (with approximate relative weight) through homework and quizzes, tests, fall-semester exam, various multimedia projects and the spring semester project. The spring semester project is a capstone project that students develop to showcase their math studies. Students are allowed to take a creative approach during these weeks, as they research their idea, and develop a presentation of their findings to the class.