



# RANCHO MIRAGE HIGH SCHOOL

31001 Rattler Road, Rancho Mirage, CA 92270 (760)202-6455  
[www.rmhs.us](http://www.rmhs.us)

## EXPLORATIONS IN DATA SCIENCE

**Length of Course:** 1 Year    **Grades:** 11-12    **Prerequisites:** IM III    **Credits:** 10    **Type:** Elective

This course provides an introduction to the field of data science, covering fundamental concepts, techniques, and tools used in the analysis and interpretation of data. Students will gain hands-on experience with data manipulation, statistical analysis, machine learning, and data visualization. The course aims to equip students with the foundational skills necessary to extract valuable insights from data and make informed decisions.

## FASHION DESIGN

**Length of Course:** 1 Year    **Grades:** 9-12    **Prerequisites:** NONE    **Credits:** 10    **Type:** Elective

This course introduces students to fashion, through the study of the Elements and Principles of Design. Students will explore and demonstrate knowledge of the cultural and social influences of the fashion industry, in both two dimensional and three-dimensional design. They will utilize visual arts vocabulary and color theory, as well as various media as textiles, to create fashion. Students will become familiar with prominent designers (past and present) and recognize the impact of other art movements on the fashion industry. Students will create sketches, figures drawings, and conduct research.

## FINANCIAL ALGEBRA

**Length of Course:** 1 Year    **Grades:** 11-12    **Prerequisites:** IM III    **Credits:** 10    **Type:** Elective

Financial Algebra is a 4th year math course which helps students apply algebra to everyday financial situations. Students will use linear, exponential and quadratic expressions and equations to analyze topics such as employment, budgets, credit and running a business. Students will graph and interpret functions as they relate to topics such as savings, investment, stocks, inflation and large purchases. Students will also apply probability as they consider insurance and risk. Students will learn to reason and communicate about the world of finance equipped with algebra to support their claims.

## PRE-CALCULUS - ADVANCED PLACEMENT

**Length of Course:** 1 Year    **Grades:** 11-12    **Prerequisites:** IM III    **Credits:** 10    **Type:** Elective

AP Precalculus prepares students for other college-level mathematics and science courses. Through regular practice, students build deep mastery of modeling and functions, and they examine scenarios through multiple representations. The course framework delineates content and skills common to college precalculus courses that are foundational for careers in mathematics, physics, biology, health science, social science, and data science.