

**COURSE TITLE:** IB Mathematics: Applications and Interpretations

Level of Difficulty	Estimated Homework	Prerequisites
Difficult	30-60 minutes	<b>District:</b> Full-Diploma Student Math Analysis CP <b>Department Suggestion:</b> Click here to enter text.

**Course Description:**

This course recognizes the increasing role that mathematics and technology play in a diverse range of fields in a data-rich world. As such, it emphasizes the meaning of mathematics in context by focusing on topics that are often used as applications or in mathematical modelling. To give this understanding a firm base, this course also includes topics that are traditionally part of a pre-university mathematics course such as calculus and statistics.

The course makes extensive use of technology to allow students to explore and construct mathematical models. This course will develop mathematical thinking, often in the context of a practical problem and using technology to justify conjectures. All external assessments involve the use of technology and therefore the effective use of a graphical display calculator is a focus of the course.

Syllabus topics are as follows: Number and algebra, functions (with an emphasis on modelling), geometry and trigonometry, statistics, probability, and introductory calculus.

**Grading:**

Grades for each semester of the course are determined by a weighted average of homework/classwork, an Exploration (12-to-20-page paper involving mathematics of the student's choice), and chapter tests. The weights for each of these categories are as follows: final exam, chapter tests, and other assessments are 90%; homework and classwork are 10%.

**Syllabus:**

See individual teacher canvas page for course syllabi. Go to <http://tinyurl.com/272vduah> to view the IB Subject brief for this course.

**Supplemental Information:**

This course fulfills the UC/CSU Subject Area "c" requirement.

This course qualifies for a weighted grade point scale.