12 FB - Mathématiques Expertes

Term. (12th Grade FB) *[3 periods per week]*

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Course Description

The 12th grade elective Higher-level Math curriculum is focused on three main themes.

Complex numbers

Number theory

Matrix and graphs

This course is completely separate from the regular 12FB specialty math curriculum and will not be a way to strengthen it.

During this course student will learn how to solve problems using some new tools.

The theme "Arithmetic" is a very demanding program as students will have to use their critical thinking in order to solve exercises.

Timeline

The time dedicated for each chapter could change depending on the students' needs.

Part 1: Complex number

Chapter 1: Algebraic approach

Chapter 2: Geometric approach

Part 2: Arithmetic

Chapter 1: Divisibility, Euclidean division, congruence

Chapter 2: LGD, Diophantine equation

Chapter 3: Prime numbers

Part 3: Matrix and graphs

Chapter 1: Matrix (definition and computation)

Chapter 2: Inverse matrix

Chapter 3: Graphs and Markov chain