

Mathematics (HL) 11

Time: 8x 35 minutes per week

Course Description:

The Mathematics HL course focuses on developing important mathematical concepts in a comprehensible, coherent and rigorous way. It is a demanding course and is intended for students with good mathematical background and are competent in a range of analytical and technical skills. The students are being prepared to sit for the IB Mathematics Higher Level examinations at the end of grade 12.

Resources:

P. Fannon, V. Kadelburg, B. Wooley, S. Ward. Mathematics Higher Level for the IB Diploma. Cambridge University Press.

Main Topics Covered:

Semester 1

- Sequences and series
- Exponents and logarithms
- Counting principles and Binomial expansion
- Functions and their graphs
- Transformation of graphs
- Polynomial functions
- Algebraic structures
- Mathematical Exploration

Semester 2

- Circular functions and trigonometry
- Vectors
- Differentiation
- Mathematical Exploration

Assessment

| Internal Assessment for Reports | Weighting |
|--|---------------|
| Quarter 1 – CA1 only Quarter 2 (end of semester 1) – CA1+ CA2 + SA1 Quarter 3 – CA3 only Quarter 4 (end of semester 2) – CA3+ CA4 + SA2 • End of Semester Examinations (SA1 Or SA2) • Continual Assessment (CA1 + CA2 Or CA3 + CA4) including: <ul style="list-style-type: none"> - Topic tests - Class work - Homework | 70 20 + 10 |
| | 100 |