



人朝分实验学校

RCF EXPERIMENTAL SCHOOL

Course Outline

AS Mathematics 1-year

2025-2026 School Year

“Tell me and I forget. Teach me and I remember. Involve me and I learn.”

- Benjamin Franklin

Teacher

Blake Rooker

Contact: brooker@rdfzcygj.cn

Office: Room 203 of the Main Building

Description

Cambridge International AS Level Mathematics provides a foundation for the study of mathematics and related courses in higher education. Equally, it is suitable as part of a course of general education. Students taking this AS course will study two components: Pure Math 1 (some topics of which we already covered in June) and Mechanics.

Pure Math 1 Topics covered:

- Algebra (covered in June)
- Sequences and Series (covered in June)
- Coordinate Geometry (covered in June)
- Functions
- Differentiation
- Integration
- Trigonometry

Mechanics Topics covered:

- Kinematics of motion in a straight line
- Forces and equilibrium
- Newton's laws of motion
- Momentum
- Energy, work and power

Assessments

- First semester:
 - o Participation (5%)
 - o Quiz (25%): there will be three quizzes worth 5%, 10%, and 10% respectively
 - o Midterm (20%)
 - o End of Term Exam (50%)
- Second Semester:
 - o Participation (5%)
 - o Quiz (25%): there will be two quizzes worth 10% and 15% respectively
 - o Mock Exam (70%): comprised of one paper for each component (Pure Math 1 and Mechanics)
- Resit:
 - o No resit for missed quiz or midterm. If an assessment is missed, the result of the missing assessment will be the same as the result of the next major assessments (midterm, end of the term or mock exam).

Class policies:

- Respect is the golden rule in my classroom.
- Students must bring a notebook, paper, pencil/pen, and a scientific calculator to class.
- No computers, cell phones are allowed in class.
- Students are expected to be engaged and participate in class discussion and to follow instructions to the best of their ability. Repeatedly failing to comply with the classroom rules will be met with demerits and disciplinary action.
- Each week, there will be at least one formative assessment – either an assignment to submit or an in-class test announced in advance. Missing or neglecting these assessments will result in a reduction of participation marks.

Feedback, suggestions, and asking for help:

You can always reach out to me via brooker@rdfzcygj.cn or by visiting my office in Room 203 of the Main Building.

Please communicate with me, and if there is a problem tell me ahead of time.

Student's English name: _____ Student's signature: _____

Parent's signature: _____ Date: _____