

## School of Mathematics

**Course 123 - Mathematical Methods course for JF Natural Sciences.** 2003-2004  
(JF Natural Sciences)

**Lecturer:** C. Ford

**Requirements/prerequisites:** None

**Duration:** 24 weeks

**Number of lectures per week:** 2 + 1 problems class

**Assessment:** See below

**End-of-year Examination:** See below

### Michaelmas term

Inequalities, Lines and circles, graphs, functions, limits and continuity, differentiation.

### Hilary Term

Trigonometry, stationary points, inverse functions, integration, Fundamental Theorem of Calculus.

### Trinity Term

Logarithms and the exponential function, further integration, geometric series, linear algebra, matrices and determinants.

Assessment:

### **Grading:**

1. Frequent problem sheets (which do not contribute to the final mark).
2. Multiple-choice test at the end of Michaelmas and Hilary term. 3 hour examination at the end of Trinity term.

There will be a computer project during Hilary term. The contributions to the final mark are as follows: :

Michaelmas term test	10%
Hilary term test	10%
Computer project	10%
Final exam	70%

June 28, 2004