Get Set: Mechanics

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Aim of the course:

- To provide a brief overview of the Mechanics content included in the reformed Mathematics A level
- To introduce the basic concepts of Mechanics including motion-time graphs, modelling constant acceleration, forces and Newton's Laws of motion.
- To demonstrate effective teaching ideas including showing how ICT and practical work can be used to improve students' understanding.

Is the course appropriate for me?

This course will be particularly relevant for those who have not previously taught mechanics. It will cover the topics which underpin the mechanics content in the reformed A level Mathematics specifications.

What background knowledge will be expected?

Knowledge of GCSE Higher tier content and a working knowledge of AS pure mathematics is desirable, but not essential.

What do I need to bring on the day?

A calculator and something to write with.

What is the content of the day?

The course day will contain a brief overview of the mechanics content included in the reformed A level Mathematics. The mathematical content of the day will focus on two key areas, motion and force. We will consider effective teaching approaches including simple practical activities which can easily be incorporated into lessons.

What is not covered on the day?

We will not be covering topics such as projectile motion, friction and moments.

What follow up support can I access?

All course materials will be provided electronically on the day. The course leader will be available for follow-up support via email.

Outline of the day:

09:30 Arrival, registration and refreshments
10:00 Kinematics 1: Motion graphs
11:15 Break
11:30 Kinematics 2: Constant & variable acceleration
12:15 Overview of mechanics content
12:45 Lunch
13:30 Introduction to forces 1: Statics
14:30 Break
14:45 Introduction to forces 2: Dynamics
15:45 Evaluation
16:00 Close

For course fees, application forms and further details please see www.mei.org.uk/2017-pd