

MATH0370: Introduction to Applied Mathematics 2

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This course aims to develop a basic understanding of Newton's Laws of motion and their application to simple examples of dynamics, and to introduce the concepts of linear momentum and energy. See the Module Catalogue for more details.

There will be 21 lectures, 10 examples classes (starting in week 2 of this term), and up to 20 optional drop-in tutorials (also starting in week 2). The assessment will be based on a 2 hour written examination (worth 85% of the final mark) and coursework (worth 15%). The last examples class and last lecture will be revision for the exam.

Schedule

Lectures: Mondays 12–1 (RSLT 21) and Thursdays 2–3 (RSLT 20)
Examples classes: Fridays 9–10 (Chemistry West Block LT F)
Tutorials: Thursdays 1-2 RSLT 11 and Fridays 12-1 RSLT7

Homework

There will be nine or ten example sheets, which will be handed out on a Monday and due in the lecture on a Monday two weeks later. The example sheets will include some questions for handing in and other questions for discussion during the examples class. Homework is to be handed at the **start** of the lecture on the due date. Homework handed in by 5pm on the same day will lose 20%. **Homework handed in later than this will not be graded.** Homework will be returned in the examples classes.

Office hours

My office hours are 2–3 on Mondays in my office (8.17f) or by appointment.

Suggested texts

- P. J. Horril, Applied Mathematics, Longman, 1989.
- L. Bostock & S. Chandler, Applied Mathematics 1, Stanley Thornes, 1975.
- P. Dyke & R. Whitworth, Guide to Mechanics, Macmillan, 1992.
- T. Heard, Mechanics and Vectors, Cambridge, 1986.

Useful resources

- Course web page: <http://www.maths.leeds.ac.uk/~alastair/MATH0370>
- The Library has lots of books on mechanics beyond the ones listed.
- The Leeds Skills Centre has a Maths drop-in service open every day during term. They can be found at 15 Blenheim Terrace; see http://skills.library.leeds.ac.uk/one_to_one.php.
- There is online help at: http://skills.library.leeds.ac.uk/topic_improving_your_maths.php and at http://www.mathcentre.ac.uk/students.php/all_subjects/mechanics/.