
Pure mathematics M208

Presentation pattern October to June

Module description

This module introduces the main topics of pure mathematics. *Group theory* explores sets of mathematical objects that can be combined such as numbers, which can be added or multiplied, or rotations and reflections of a shape, which can be performed in succession. *Linear algebra* explores 2- and 3-dimensional space and systems of linear equations, and develops themes arising from the links between these topics. *Analysis*, the foundation of calculus, covers operations such as differentiation and integration arising from infinite limiting processes. Students are assumed to have a sound knowledge of mathematics, as developed in the OU modules *Essential mathematics 1* (MST124) and *Essential mathematics 2* (MST125).

Person specification

The person specification for this module should be read in conjunction with the [generic person specification](#) for an associate lecturer at The Open University.

As well as meeting all the requirements set out in the generic person specification, you should:

- have a good honours degree in mathematics
- have experience (preferably in higher education) of teaching pure mathematics, in some or all of the following areas: real analysis, group theory and linear algebra
- be able to provide evidence of a complete understanding of the majority of material covered in the module (by, for example, successfully completing a pre-interview marking exercise) and demonstrate the ability (and be willing) to quickly develop an understanding of the remainder of the material
- be able and willing to give face-to-face and online tutorials, using materials that you may need to produce, that are appropriate for the module and students
- have appropriate IT equipment and skills
- be able and willing to use e-learning facilities, such as:
 - The module website, and other University websites, to download essential material and to retrieve other information
 - University systems for the purposes of monitoring students' progress
 - E-mail and University forums for asynchronous communication with students, tutors, and other staff
 - The University's online tutorial software (training provided)
 - On-screen marking of electronically submitted student assignments in pdf format.

Additional information

As students on this module will have the choice to submit their TMAs electronically, via the University's online TMA/EMA service system, you will be required to mark and provide feedback on TMAs submitted electronically and to return the marked work as an electronic file, in the prescribed form, to the online TMA/EMA service. You may also need to mark paper TMAs. If you are invited for an interview and the latter involves an electronic marking exercise, some guidance will be given for this. Further information and advice will be available should you be appointed to the role.

The exact nature of e-learning facilities and University systems for monitoring student progress and handling TMAs will evolve in future, and you will need to be prepared to adapt accordingly. Please note that, in accordance with usual University policy, tutors will be expected to use their own equipment for all aspects of e-learning.

Module related details - a full explanation can be found on the website

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| Credits awarded to the student for the successful completion of a module: | 60 |
| Number of assignments submitted by the student: | 7 |
| Method of submission for assignments: | 1b |
| Level of ICT requirements: | 2 |
| Number of students likely to be in a standard group: | 20 |
| Salary band: | 7 |
| Estimated number of hours per teaching week: | 6 |