

Presentation pattern *October to June*

Module description

The module introduces models to describe patterns of events that occur in time (such as earthquakes) and in space (for instance, the occurrence of a species of plant). Situations that occur only at discrete time points, including the ruin of a gambler, are studied. Probability models are developed for those situations, such as the spread of an epidemic, in which events may occur at any time. The module ends with other situations involving probability, including genetics and changes in stock market prices. Students are expected to be reasonably competent in calculus and algebra.

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 experience of teaching applied stochastic processes, Markov chains and Markov processes at degree level.
- be able and willing to give face-to-face and/or 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

- The emphasis of this module is on modelling practical situations and the properties of the models, but a reasonable amount of mathematics is included for a module at Level 3.
- As students on this module will have the choice to submit their TMAs electronically, via the online TMA/EMA service, 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 TMA/EMA service. If you are invited for an interview and the latter involves an electronic marking exercise or other pre-interview task, some guidance will be given for this. Further information and advice will be available should you be appointed to the role

Credits awarded to the student for the successful completion of a module:	30
Number of assignments submitted by the student:	3
Method of submission for assignments:	1b
Level of ICT requirements:	2
Number of students likely to be in a standard group:	20
Salary band:	2
Estimated number of hours per teaching week:	2.5

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