

Module Specification (Distance Learning)

In collaboration with University of London International Programmes



1. Title:	Analytical Models for Decision Making
2. Module code:	PHM201
3. Institution:	Faculty of Public Health and Policy London School of Hygiene & Tropical Medicine Keppel Street London WC1E 7HT http://www.lshtm.ac.uk/php/
4. Module Organiser:	Peter Vickerman
5. Mode of study:	Distance learning
6. Type:	Elective module
7. Duration and dates:	<p>Deadlines if taken as part of a formal award:</p> <p>Application deadline: 30 June each year Registration deadline: 31 August each year Course registration duration: Up to 5 years Course starts: 1 October each year Examination takes place: Usually June each year (date to be confirmed)</p> <p>Deadlines if taken as an individual module (i.e. not registered for formal award):</p> <p>Application deadline: 31 August each year Registration deadline: 30 November each year Registration duration: 2 years Module study starts: 1 October each year Examination takes place: Usually June each year (date to be confirmed)</p>
8. Credit points:	15 credit points will be awarded on successful completion of this module at Masters level (Level 7).
9. Notional Learning Hours (NLH):	<p>On average the module should take about 150 hours to complete, consisting of the following:</p> <ul style="list-style-type: none"> • Main reading and web-based discussion forum participation: 80 hours; • Additional reading materials and exercises: up to 30 hours; • Assignments and exam preparation: 40 hours.
10. Aim:	This module aims to develop students' understanding of the roles, strengths and weaknesses of different types of analytical models to support health care management decision-making. The student will also be given the skills to use some of the models for simple decision problems.
11. Learning objectives:	<p>On completing this module students should be able to:</p> <ul style="list-style-type: none"> • Recognise the value of analytical models to support decision-making; • Understand and describe the strengths and weaknesses of different types of model and approaches to analysing decisions; • Choose analytical approaches appropriate to a particular situation; • Apply some of these approaches to simple problems; and • Evaluate proposals and project reports by professional analysts that include these types of modelling, and articles in management or scientific journals.

12. Content:	<p>This module discusses methods of quantitative and qualitative analysis that can help decision-makers to structure and clarify difficult problems, and to explore the implications of pursuing different options.</p> <p>Students are introduced to the concept of a 'decision support model' and other types of models, and to what makes a 'good' model. Students are then taken through the full process and specific steps of model building and use. The module also discusses approaches to clarifying specific types of decision problems that have multiple criteria and opposing options, risk or uncertainty. The module considers models for service planning and resource allocation within hospitals and health systems and methods for evaluating changes in systems, including queuing theory, Markov models and system models. Because quantitative modelling is not always possible, the module also demonstrates the development of qualitative 'problem-structuring' methods, which can often help with decision-making.</p>
13. Learning methods:	<p>Learning is self-directed against a detailed set of learning objectives that are identified at the start of each chapter of the module textbook, which also offers focused reading and various learning activities. The main module textbook is <i>Analytical Models for Decision Making</i> by Colin Sanderson and Reinhold Gruen.</p> <p>Additional learning materials include: a brief guide to the study module, recommended reading from the peer-reviewed literature, Frequently Asked Questions (FAQs) and suggested relevant websites.</p> <p>Student support is available from the module tutors through the web-based discussion forum. Module tutors provide written feedback for all students on the web-based discussion forum and offer individual feedback on an assessed assignment submitted by the student.</p>
14. Assessment procedures:	<p>Students will be assessed by two written assignments, which count 30% towards the overall grade for the module and by a two-hour unseen written examination, which will contribute 70% of the total grade for the module.</p> <p>Examinations are normally held in a student's country of residence, in one of over 650 examination centres worldwide. They are arranged mainly through Ministries of Education or the British Council. A local fee will be payable. A list of examination centres can be found at http://www.londoninternational.ac.uk/current_students/general_resources/exams/exam_centres/index.shtml.</p> <p>If students fail an examination at the first entry they will be allowed one further attempt, the following year.</p>
15. Prerequisites:	<p>Those wishing to study this module should have regular access to the internet to benefit from library facilities, participate in web-based discussions and submit assignments.</p> <p>Students must meet the standard of English required to study this course. See http://www.lshtm.ac.uk/prospectus/english.html.</p> <p>Students wishing to study this module will need to use a computer that has spreadsheet software capable of reading Microsoft Excel version 5 (or later) files for a PC, and have a CD-ROM drive. Students who undertake this module are expected to be capable of carrying out basic functions using Excel software and should feel confident in basic mathematics (primarily arithmetic) and simple logic.</p>
16. Attendance:	No maximum number

17. Selection, if applicable:	<p>This module is available to students registered for the MSc in <u>Public Health</u>, <u>Epidemiology</u>, <u>Global Health Policy</u> and <u>Infectious Diseases</u> courses; alternatively, it can also be taken as an individual module. It can also be taken by those studying for the PG Diploma Public Health, Global Health Policy and Infectious Diseases courses under the credit framework scheme.</p> <p>This module is recommended for students studying the Health Services Stream of the Public Health MSc.</p> <p>This module is <u>not</u> available to those who have already studied module HS304 <i>Model Building for Health Care Decisions</i>.</p>
18. Fees:	<p>For current schedule of fees see http://www.londoninternational.ac.uk/fees/schedules/lshhtm.pdf.</p>
19. Scholarships:	None available
20. External accreditation:	None
21. Application process:	<p>Applications are managed by the University of London International Programmes (website: http://www.londoninternational.ac.uk/).</p>
22. Further enquiries:	<p>Enquiries may be emailed to distance@lshhtm.ac.uk.</p>