

Introduction to mathematical models of the epidemiology & control of infectious diseases

An interactive short course for professionals

SUNDAY 13-09-2026

Maths and Excel refresher day

Practical	Optional Excel refresher	Morgenstern
BREAK		
Practical	Optional Maths refresher	TBC

MONDAY 14-09-2026

Introduction to mathematical models of infectious diseases

	Registration & coffee	Perez-Guzman & Olivera
	Introduction to course, department & participants	Cori, Perez-Guzman & Olivera
Keynote	Introduction to mathematical models of infectious diseases	Cori
BREAK		
Lecture	Introduction to designing infectious disease models (1)	White
LUNCH		
Lecture	Introduction to designing infectious disease models (2)	White
BREAK		
Practical	Designing a model of TB	White
RECEPTION / PHOTO / MEET THE DEPARTMENT		

TUESDAY 15-09-2026

Simple models: practice and theory

Keynote	Infectious disease modelling in the next 25 years	Ferguson
BREAK		
Practical	Introducing odin interface & dynamics of simple models (1)	Churcher
LUNCH		
Practical	Introducing odin interface & dynamics of simple models (2)	Churcher
BREAK		
Practical	Introducing odin interface & dynamics of simple models (3)	Churcher
Practical	Calibration Auction	Verity

WEDNESDAY 16-09-2026

Vaccination and heterogeneity

COFFEE & Q&A		
Lecture	Methods to estimate R (1)	Cori
BREAK		
Lecture	Methods to estimate R (2)	Cori
Keynote	HIV	Imai-Eaton
LUNCH		
Practical	Estimating key parameters from SARS-Cov-2 & influenza (1)	Verity
BREAK		
Practical	Estimating key parameters from SARS-Cov-2 & influenza (1)	Verity

THURSDAY 17-09-2026

Estimating R and key parameters

Lecture	Compartmental models with heterogeneous mixing	Hallett
BREAK		
Keynote	Dengue	Ferguson
Practical	Peer review exercise	Turner
LUNCH		
Practical	Modelling Vaccination	Gaythorpe
BREAK		
Practical	Modelling Vaccination	Gaythorpe

FRIDAY 18-09-2026

Stochasticity

Lecture	Seasonal infectious disease epidemiology	Grassly
BREAK		
Lecture / practical	Stochasticity (1)	Watson
LUNCH with Q&A		
Lecture / practical	Stochasticity (2)	Watson
BREAK		
Lecture / practical	Stochasticity (3)	Watson
LONDON EYE AND COURSE DINNER		

MONDAY 21-09-2026

Vector-borne diseases

Lecture	Vector-borne diseases: macroparasites	Basanez
BREAK		
Practical	Vector-borne diseases: malaria	Churcher, Okell & Ghani
LUNCH		
Practical	Keynote - Malaria	A. Ghani
BREAK		
Practical	Vector-borne diseases: malaria	Churcher, Okell & Ghani
BREAK		
Practical	Vector-borne diseases: malaria	Churcher, Okell & Ghani

TUESDAY 22-09-2026

Projects: Ebola, Malaria, HIV

Keynote	Polio	Grassly
Practical	Health economic evaluations	Turner
BREAK		
Practical	Health economics evaluations	Turner
LUNCH		
Projects	Projects - Outbreaks or Malaria or HIV	Dorigatti, Churcher & Whittles
BREAK		
Projects	Projects - Outbreaks or Malaria or HIV	Dorigatti, Churcher & Whittles

WEDNESDAY 23-09-2026

Projects: Ebola, Malaria, HIV

Projects	Projects - Outbreaks or Malaria or HIV	Dorigatti, Churcher & Whittles
BREAK		
Projects	Projects - Outbreaks or Malaria or HIV	Dorigatti, Churcher & Whittles
LUNCH		
Projects	Projects - Outbreaks or Malaria or HIV	Dorigatti, Churcher & Whittles
BREAK		
Projects	Projects - Outbreaks or Malaria or HIV	Dorigatti, Churcher & Whittles
SOCIAL TRIVIA QUIZ		

THURSDAY 24-09-2026

Projects: Ebola, Malaria, HIV

Projects	Projects - Outbreaks or Malaria or HIV	Dorigatti, Churcher & Whittles
BREAK		
Projects	Projects - Outbreaks or Malaria or HIV	Dorigatti, Churcher & Whittles
LUNCH		
Projects	Projects - Outbreaks or Malaria or HIV	Dorigatti, Churcher & Whittles
BREAK		
Projects	Projects - Outbreaks or Malaria or HIV	Dorigatti, Churcher & Whittles

FRIDAY 25-09-2026

Infectious disease modelling and policy planning

Lecture	Interactive session	Cori, Perez-Guzman & Olivera
BREAK		
Keynote	Tuberculosis	Arinaminpathy
Keynote	Guest speaker	TBC
LUNCH		
Q&A	Interface between modelling and policy	Ferguson, Hallet, Cori Arinaminpathy, Hauck
Q&A	Closing words and feedback	Cori, Perez-Guzman, Olivera
FAREWELL SOCIAL		