

MODELING OF INFECTIOUS DISEASES COURSE

April 20-24, 2020

Monday

- 9:00-9:30 Welcome
- 9:30-11:15 Lecture: Introduction to modeling
- 11:15-11:30 Break
- 11:30-12:30 Lecture: Introduction to modeling
- 14:00-17:00 Practical: Developing a model on paper and with a computer

Tuesday

- 9:00-11:15 Lecture: Reproduction number and key model parameters – description and estimation
- 11:30-12:30 Seminar: Modeling to inform outbreak response during major epidemics: Ebola in West Africa and the DRC
- 14:00-17:00 Practical: Estimating model parameters and calibrating models to data

Wednesday

- 9:00-11:15 Lecture: Stochasticity, uncertainty, sensitivity analyses, validation
- 11:30-12:30 Seminar: Predicting epidemic trajectories to support planning
- 14:00-17:00 Practical: Stochasticity, uncertainty, sensitivity analyses, validation

Thursday

- 9:00-11:15 Lecture: Beyond compartmental models
- 11:30-12:30 Seminar: Modeling public health interventions: the case of dengue vaccination
- 14:00-17:00 Mini project

Friday

- 9:00-11:00 Mini project
- 11:00-12:30 Mini project presentations
- 14:00-15:00 Seminar: Using mobile phone data to elucidate spatial-temporal dynamics of disease spread
- 15:00-16:00 Exam

Cocktail