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