

## Programme Quantitative and Predictive Modelling Course

Location: Room C211 (theory) and room PC6.29 (practical sessions) in building Forum

### Daily programme schedule:

9:00 – 12:30 Session A, theory  
 13:30 – 15:30 Session B, practical session  
 16:00 – 17:30 Session C, theory

June 22	Activity	Speaker / Practical Supervisor
09:30 – 10:00	<i>Registration @ WUR: Room C211, Forum Building</i>	
10:00 – 12:30	Session A: Introduction Systems Biology and Math Tools	Jaap Molenaar (WUR)
12:30 – 13:30	<i>Lunch</i>	
13:30 – 15:30	Session B: Introduction Matlab and exercises about morning programme for participants that are already familiar with Matlab	Hans Stigter (WUR), Jaap Molenaar (WUR)
16:00 – 17:30	Session C: A brief overview of modelling techniques in Systems Biology	Natal van Riel (TUE)
17:30	<i>BioCafé in Student Café "The Spot" on Wageningen Campus</i>	
June 23	Activity	Speaker / Practical Supervisor
09:00 – 12:30	Session A: Estimation in ODE setting	Hans Stigter (WUR)
12:30 – 13:30	<i>Lunch</i>	
13:30 – 15:30	Session B: Exercises about the morning programme	Hans Stigter (WUR)
16:00 – 17:30	Session C: Case study Flowering time	Aalt-Jan van Dijk (WUR)
June 24	Activity	Speaker / Practical Supervisor
09:00 – 12:30	Session A: Network Inference in ODE setting	Jaap Molenaar (WUR), Hans Stigter (WUR), Aalt-Jan van Dijk (WUR)
12:30 – 13:30	<i>Lunch</i>	
13:30 – 15:30	Session B: Exercises about the morning programme	Jaap Molenaar (WUR), Hans Stigter (WUR), Aalt-Jan van Dijk (WUR)
16:00 – 17:30	Session C: Case study Lettuce production in Greenhouses	Hans Stigter (WUR)
18:00 – 21:00	<i>Course Dinner</i>	
June 25	Activity	Speaker / Practical Supervisor
09:00 – 12:30	Session A: Advanced Parameter Estimation and Uncertainty Analysis in differential equation models	Natal van Riel (TUE)
12:30 – 13:30	<i>Lunch</i>	
13:30 – 15:30	Session B: Exercises about the morning programme	Natal van Riel (TUE), Fianne Sips (TUE)
16:00 – 17:30	Session C: Case study: Untangling Metabolic Flux in LXR	Natal van Riel (Tue)
June 26	Activity	Speaker / Practical Supervisor
09:00 – 12:30	Session A: Case study: The interplay between glucose and fatty acids in the postprandial state + Case study Chemotaxis of Signaling	Fianne Sips (TUE), Jaap Molenaar (WUR)
12:30 – 13:30	<i>Lunch</i>	
13:30 – 15:30	Session B: Exercises about Chemotaxis of Signaling	Jaap Molenaar (WUR)

This course is part of the Education Programme of BioSB, the Netherlands Bioinformatics and Systems Biology Research School, which offers training and education in bioinformatics and systems biology. More information about BioSB can be found at <http://www.biosb.nl> or via <mailto:education@biosb.nl>