

Tentative Outline of Modelling and Simulation Course

Date	Topic	Textbook Reference
Lecture 1	Review of R	Chapter 1
Lecture 2	Statistical Modelling with R I	Chapter 2
Lecture 3	Simulation: Random Number Generation	Chapter 3
Lecture 4	Simulation: Random Number Generation	Chapter 3
Lecture 5	Discrete Models	Chapter 4
Lecture 6	Discrete Models	Chapter 4
Lecture 7	Continuous Models	Chapter 5
Lecture 8	Continuous Models	Chapter 5
Lecture 9	Multivariate	Chapter 6
Lecture 10	Multivariate	Chapter 6
Lecture 11	Regression and Time Series	Chapter 7
Lecture 12	Markov Chains	Chapter 8
Lecture 13	MCMC Simulation	Chapter 8
Lecture 14	Hidden Markov Models	Chapter 8
Lecture 15	Queueing and Continuous Time Markov Chains	Chapter 8
Lecture 16	Linear and Quadratic Programming	notes