

Monday, 3 December: ENM Theory (Room 205/206)

Schedule	Topic	Speaker
08:00 - 08:45	Breakfast, NIMBioS Breakroom (Room 104)	
08:45 - 09:00	Introduction to NIMBioS	L. Gross
09:00 - 09:15	Introduction of instructors. Overview and goals of tutorial	Mona
09:15 - 09:45	Ecological niche modeling theory (Part I): Basic concepts Optional pre-tutorial material (YouTube video)	Town
09:45 - 10:15	Ecological niche modeling theory (Part II): Basics of modeling methods Optional pre-tutorial material (YouTube video)	Mona
10:15 - 10:30	Break	
10:30 - 11:00	Discussion of YouTube recording: Species' occurrence records: sources and challenges (watch the video before tutorial)	Town
11:00 - 11:30	Discussion of YouTube recording: Environmental data: issues: sources (watch the video before tutorial)	Luis
11:30 - 12:00	<i>Tutorial Demonstration (I): Species occurrence data</i>	Town
12:00 - 13:30	Lunch, NIMBioS Breakroom (Room 104)	
13:30 - 14:00	Ecological niche modeling theory (Part III): Response types in niche modeling Optional pre-tutorial material (YouTube video)	Town
14:00 - 14:30	Review and discussion of topics covered	All
14:30 - 14:45	Break	
14:45 - 15:30	Ecological niche modeling theory (Part IV): Methodology summary and review Optional pre-tutorial material (YouTube video)	Town
15:30 - 16:30	<i>Tutorial Demonstration (II): Environmental data</i>	Mona
16:30 - 17:00	Last check of software functionality on participants' laptops	Xiao/Luis
17:00 - 18:00	Reception (Room 104)	
Dinner	On your own	

Tuesday, 4 December: ENM demonstrations and practice (Room 205/206)

Schedule	Topic	Speaker
08:00 - 08:45	Breakfast, NIMBioS Breakroom (Room 104)	
08:45 - 09:45	<i>Tutorial Demonstration (III): Niche modeling in Maxent (GUI)</i> Data to use in this step:	Mona
09:45 - 10:45	<i>Tutorial Demonstration (IV): Formatting presence and environmental data in R</i>	Xiao/Luis
10:45 - 11:00	Break	
11:00 - 11:30	<i>Tutorial Demonstration (V): Niche modeling in R (part1)</i>	Xiao/Luis
11:30 - 11:50	Review and discussion of topics covered	Xiao/Luis/Mona
11:50 -12:00	Group picture (Room 205/206)	
12:00 - 13:30	Lunch, NIMBioS Breakroom (Room 104)	
13:30 - 14:30	<i>Tutorial Demonstration (VI): Niche modeling in R (part 2)</i>	Xiao/Luis
14:30 - 15:00	Break	
15:00 - 16:30	<i>Tutorial Demonstration (VII): Model selection in ENM using ENMeval package</i>	Xiao/Luis/Town
16:30 - 17:00	Review and discussion of topics covered ku.enm R package Optional package download and install instructions Optional pre-tutorial video: ku.enm demo	Town
Dinner	On your own	

Wednesday, 5 December: ENM one-on-one counseling (Room 105)

Schedule	Topic	Speaker
08:00 - 08:45	Breakfast, NIMBioS Breakroom (Room 104)	
08:45 - 10:15	Practice time/Open discussion	All
10:15 - 10:30	Break	
10:30 - 11:15	Practice time/Open discussion	All
11:15 - 12:00	Review of ENM best practices -Group review of methods of published papers: best and worst practices Measuring uncertainty; factors contributing variation in model outcomes	Town/Xiao
12:00 - 13:30	Lunch, NIMBioS Breakroom (Room 104); airport taxis	