Spatial Ecology

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	Date	Subject	Type	Topic	Reading	Assignment
1	16 March	Trial meeting (Zoom)		Syllabus / Requirements / Expectations		Write-up 1
2	23 March	Introduction	Lecture	Introduction, concepts, species-area relationship (SPAR), island biogeography;	*Brown and Kodric-Brown (1977)* *Brown and Lomolino (2000)* *Turner and Tjorve (2005)*	
3	30 March	Metapopulation dynamics	Lecture	Metapopulation structure, minimal model, Levin's model Propagule-rain model, core-satellite model, general model	*Hanski and Simberloff (1997)* *Gotelli (1991)* *Gotelli and Kelley (1993)*	Write-up 1 - due Write-up 2 (Metapopulation)
5	6 April	PASSOVER				
6	13 April	PASSOVER				
7	20 April	Metacommunity structure	Lecture	Patch-occupancy model (IF), multi-species metapopulation, metacommunity dynamics	*Hanski (1994)* *Harrison and Taylor (1997)* *Leibold and Chase 2018 (Book chapter)*	Write-up 2 - due
			Discussion 1		*TBA*	
8	27 April	Scale dependency	Lecture	Scale dependency		
			Discussion 2		*TBA*	

	Date	Subject	Type	Topic	Reading	Assignment
9	4 May	Applied landscape ecology	Lab	Introduction to GIS Learning GIS	*GIS analysis (1999) chapter 1* *Tischendorf and Fahrig (2000)*	GIS assignment 1
10	11 May	Applied landscape	Lab	Learning GIS		GIS assignment 2
11	18 May	Applied landscape ecology	Lab	Learning GIS Learning GIS - Final project		GIS final project
12	25 May	Large-scale processes and modeling	Lecture	Mechanisms of extinction and dispersal, Modeling approaches	Wiens (2001) Pimm et al. (1998) Thomas et al (2001)	
			Discussion 3		*TBA*	
13	1 June	Landscape ecology	Lecture	SHALOM Introduction to landscape ecology, heterogeneity and indices	Ziv (1998) Turner et al. (2001) chapter 1 Wiens (1989)	GIS final project - due
			Discussion 4		TBA	
14	8 June	Landscape ecology	Lecture	Landscape neutral models, chaos and fractal geometry; Unified Neutral Theory of Biodiversity	Farina (2006) chapter 2 (pp. 64-71) Farina (2006) chapter 8 (pp. 335-348) McGill et al. (2006)	
15	15 June	Student presentations	Lecture			
16	22 June	Conclusion	Lecture			Write-up 2 (Spatial topic) **Write-up 2 - due = 3.7.20**