

EEB 485 Population and Community Ecology
Lecture Schedule (Tuesdays/Thursdays 8:40-10am, 4151 USB)

			Required readings*	Optional readings
Sept	6 DG	Introduction and framework		
	8 DG	Patterns in population and community ecology	M: 13-18, 31-39	McCune and Grace 2002
	13 Vandermeer	Within trophic level: exponential and logistic growth	V&G: 1-17	
	15 DG	Within trophic level: density-dependence and population regulation	V&G: 17-29, 50-57	M: 125-132
	20 DG	Within trophic level: interspecific competition and niche theory	V&G: 198-212, M: 3-7	M: ch 7
	22 DG	Within trophic level: empirical approaches to interspecific competition	M: 153-173	Hutchinson 1959
	27 Vandermeer	Multi-trophic level: predator-prey and host-parasitoid models	V&G: ch 6	M: ch 5
Oct	29 DG	Multi-trophic level: predator-prey and host-parasitoid data	V&G: ch 6	M: 112-123
	4 DG	Multi-trophic level: resource competition and competition across environments	V&G: 212-224	M: 132-142, Goldberg 1990, Grime 1977
	6 DG	Multi-trophic level: food webs, indirect effects	M: 142-144, 197-208, 212-214	
	11 DG	Multi-trophic level: trophic cascades and trait-mediated indirect effects	M: ch 11	Werner & Peacor 2003
	13 DG	Life history: evolution	V&G: 62-72	
	18	Fall Break		
	20	EXAM I		
Nov	25 King	Multi-trophic level: disease	V&G: ch 7	
	27 Vandermeer	Complex dynamics	V&G: ch 4	
	1 DG	Life history: coexistence in fluctuating environments	M: 289-297	
	3 DG	Structured populations: projection matrices	V&G: 30-50	
	8 DG	Structured populations: field demography and population dynamics	V&G: ch 2, 73-80	
	10 DG	Spatial interactions: within-population structure, metapopulations	V&G: 142-149	M: 251-260
	15 DG	Spatial interactions: metacommunities	M: 38-39, 260--276	
Dec	17 DG	Spatial interactions: metacommunities	M: 276-283, Adler 2007	Leibold et al. 2004, Connell 1978
	22 DG	Traits and community structure		
	24	THANKSGIVING		
	29 DG	Mutualisms and non-trophic interactions	V&G: ch 9; M: 180-193	
	1 DG	Diversity patterns and mechanisms	M: 18-31	Mittelbach et al. 2007
	6 DG	Diversity and ecosystem function	M: ch 3	Cardinale et al. 2012
	8 DG	Synthesis	M: ch 16	
	13	EXAM II		

*V&G: Vandermeer, J. and D. Goldberg. 2013. Population Ecology:

*M: Mittelbach, G. 2012. Community Ecology. Sinauer Associates