

Bio1B, Ecology Lecture Schedule, Spring 2014Professor George Roderick, email: roderick.help@berkeley.edu

(updated 4/2/14)

The midterm and final exams for the **Ecology** section of Bio1B will cover ALL material, including assigned reading from the text and labs, and lab concepts, but will emphasize the lectures. The page numbers correspond to *Campbell* 9th and 10th editions, though the concepts and numbered text sections are much the same in earlier editions. Some reading is assigned out of order so that the theory and applications for a topic are covered at the same time. By the end of the **Ecology** lectures, all of *Campbell* Section 8, Chapters 52-56, will be assigned so feel free to read in any order. The reading averages 9 pages per lecture. The additional interviews in the text and chapter reviews are not assigned reading, though they are really interesting and useful for review.

L#	Date	Topic	Concepts and sections in text, <i>Campbell</i> <i>Associated Labs (week)</i>	Pages 9 th ed.	Pages 10 th ed.
1	4 Apr, Fri	Physical geography	Earth's climate 52.1 through microclimate	1144-1149	1158-1163
2	7 Apr, Mon	Biogeography	Plate tectonics, continental drift, 25.4 Terrestrial biomes, 52.2 Aquatic biomes, 52.3 Organisms and the environment, 52.4 <i>Lab 1: Bioindicators (week of 7 April)</i>	519-521 1150-1156 1157-1163 1163-1167	532-534 1164-1170 1171-1176 1177-1181
3	9 Apr, Wed	Populations in space and time	Population dynamics 53.1 Exponential growth, 53.2 Metapopulations, 53.5 Human populations, 53.6	1170-1175 1175-1177 1186-1187 1187-1191	1184-1190 1190-1192 1200-1201 1201-1204
4	11 Apr, Fri	Limits to growth & life histories	Logistic model, 53.3 Life history traits, 53.4	1177-1179 1179-1181	1192-1194 1195-1197
5	14 Apr, Mon	Managing populations	Density dependent growth, 53.5 through stability Conservation biology, 56.2 <i>Lab 2: Population growth (week of 14 April)</i>	1182-1185 1244-1249	1197-1200 1261-1265
6	16 Apr, Wed	Interspecific interactions	Interspecific interactions I, 54.1	1194-1200	1208-1215
7	18 Apr, Fri	Interactions and consequences	Interspecific interactions II, 54.1 Population cycles, 53.5	1185-1186	1200-1200
8	21 Apr, Mon	Communities in space and time	Disturbance and succession, 54.3 Guest lecturer: Prof. Rosemary Gillespie <i>Lab 3: Predator / Prey (week of 21 April)</i>	1207-1210	1222-1225
9	23 Apr, Wed	Food webs	Trophic structure, 54.2 Pathogens, 54.5 (also for previous 2 lectures) Energy, productivity, 55.1 Energy transfer, 55.3	1200-1206 1213-1215 1218-1222 1225-1226	1216-1221 1228-1229 1232-1234 1239-1241
10	25 Apr, Fri	Biodiversity science	Patterns of biodiversity, 54.4 Landscapes, 56.3	1211-1213 1249-1254	1225-1228 1265-1269
11	28 Apr, Mon	Ecosystem processes	Primary production, 55.2 Biogeochemical cycles I, 55.4 <i>Lab 4: Botanical Garden (week of 28 April)</i>	1223-1225 1227-1232	1235-1239 1244-1248
12	30 Apr, Wed	Biogeochemical cycles	Biogeochemical cycles II, 55.4 Restoration ecology, 55.5	1232-1235	1248-1251
13	2 May, Fri	Global change biology	Earth's climate, 52.1 Global climate change, human activities, 56.1 Earth is changing rapidly, 56.4 Sustainable development, 56.5	1149-1150 1238-1244 1254-1260 1260-1261	1163-1164 1254-1261 1269-1275 1276-1277

Office hours: 1117 VLSB, M 9-10, Tu 2-3, W 9-10, Th 8-9**Review:** RRR week, optional review, usual lecture time and place (others TBA)**Exams:** Ecology midterm and Bio1B final, 12 May, Mon, 8-11 am