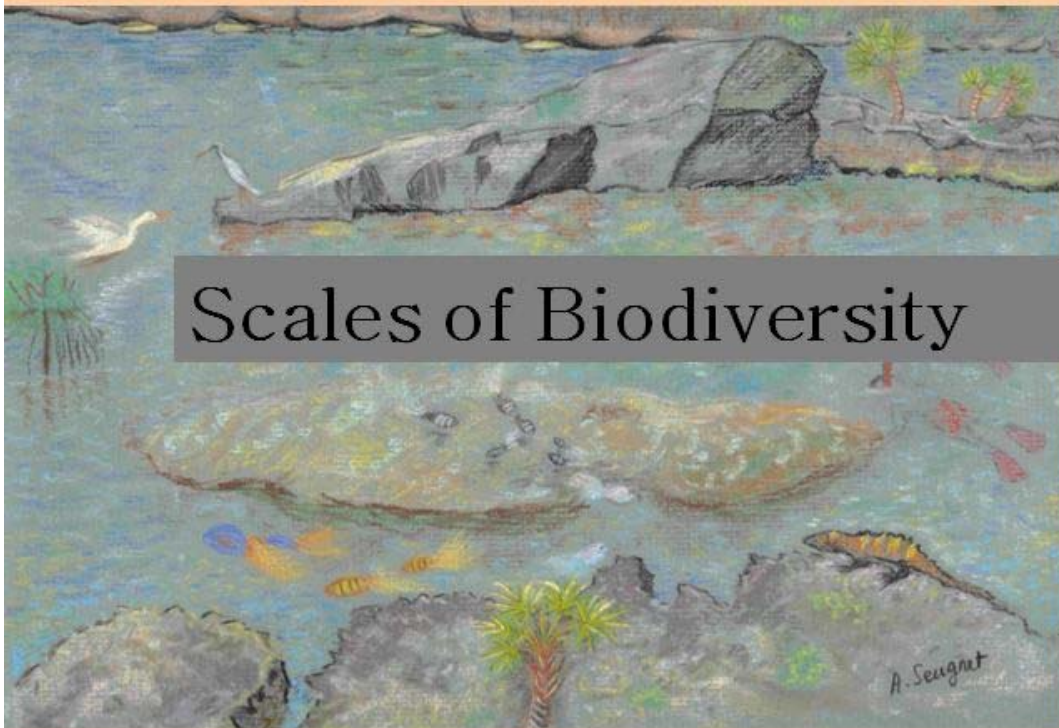




The Federated
Department of
Biological Sciences
offers a course on:



Scales of Biodiversity

... a graduate introduction to *Biogeography*, *Community and Population ecology*. The class will explore how these fields relate to one of the most striking attributes of our earth: *Biodiversity*

Fall 2012, Mondays 5:30-8:30 pm, Life Science Bldg. 103

Prerequisite: undergrad level Evolution, Plant Ecology or Animal Ecology (or equivalent)

More info from instructor: Claus Holzapfel (holzapfe@andromeda.rutgers.edu)

26:120 523, index # 34219, 3 credits

Textbook: Levin, Simon A. ed. (2009): The Princeton Guide to Ecology University Press, Princeton. ISBN: 978-0-691-12839-9

We will read about 40% of this new text. You are encouraged to read more and this book will serve you as the ultimate ecology reference for many years to come (believe me: it's better than Wikipedia!).

Amazon: new ~ \$75, used for \$60 and up, a paperback version is announced for Sep.30 for \$40 and Kindle edition for \$28. I assume you could wait until then.

Grades will be based upon midterm exam (25%), 2 presentations (1 chapter review and one topic) (30%) and the final exam (35%). Exams are based upon lectures and assigned readings. The presented paper consists of a short (15 minutes) presentation on the biodiversity of a single biome/or selected taxonomical group (topics will be drawn by lot!) and one 10 minute overviews from short sections of the text book.

Note that you need to be able to go at least on **one full-day field trip**: either Saturday Sept 22, or Sunday Sept. 23. This is required and we will collect data to be analyzed in class. The class meetings Oct 1 and Nov 26 are canceled.

Syllabus (topics but not dates might change slightly!)

	sections	topics
1	Sep10 Diversity	Intro: Overview, Orientation
2	Sep10 Diversity	Types of Biodiversity
3	Sep17 Diversity	How to measure Biodiversity
4	Sep24 Biogeography	Organisms in Physical Environments
5	Sep24 Biogeography	Response to Variation in Environments
Oct 1 no class		
6	Oct8 Biogeography	Biological Factors
7	Oct8 Biogeography	Vegetation of the World and "its dependents"
8	Oct8 Biogeography	Global pattern of diversity
9	Oct15 Biogeography	Biodiversity Hotspots and Rules
10	Oct15 Biogeography	History and Future (Global Change) - <i>Review</i>
	Oct22 Midterm	
11	Oct22 Populations	Population Structure, Growth, Regulation
12	Oct22 Populations	Metapopulations, Fluctuations
13	Oct29 Populations	Extinction, Conservation & Restoration
14	Oct29 Interactions	"Halloween Special"
15	Nov5 Interactions	Resources & Consumer
16	Nov5 Interactions	Competition & Predation
17	Nov12 Interactions	Herbivory & Parasitism
18	Nov12 Interactions	Interactions & Diversity
19	Nov19 Interactions	Positive Interactions
20	Nov19 Communities	Community Concepts & Structure
Nov26 no class		
21	Dec3 Communities	Community Development & Assembly
22	Dec3 Communities	Biodiversity and Communities
23	Dec10 Diversity	Biodiversity finale
	Dec10 <i>Review</i> session	Interactions & Communities
	Dec 17 Finals	

Fieldtrips: one full Saturday or one Sunday (Sept. 22 and 23)