

Environmental Biology
Schedule - Spring 2009

Part I – Principles of Ecology

Date	Topic	Assignments
1/21 Wed	Introduction to Environmental Biology	Bring your smiling face to Williams 225 by 1:00
1/23 Fri	Scientific Method and The Gaia Hypothesis	Read Enger/Smith (E/S) Ch. 4 pp. 62 – 67 Research Gaia Hypothesis on internet Read Hum Dom Earth Ecosys – Bboard
1/26 Mon	PRS Initialization Organismal Ecology Community Ecology	Read E/S Ch. 5 pp. 79 – 82 Read E/S Ch. 5 pp. 88 – 93 Research beavers on internet
1/28 Weds	Value of Large Predators Ecosystems and Vegetarianism	Lessons from the Wolf – Bboard E/S Ch. 5 pp. 93 – 97
1/30 Fri	Ecosystems and Vegetarianism (cont.) Biochemistry	Research vegetarianism on internet ecological footprint exercise assigned
2/2 Mon	Nutrient Cycles and Dead Zones Succession and Saving the Whales	E/S Ch. 5 pp. 97 – 104 Gulf “Dead Zone” – Bboard E/S Ch. 6 pp. 107 – 111, skim 112 – 133 Rewilding - Bboard
2/4 Weds	Evolution, Adaptation, and the Revenge of the Rabbit	E/S Ch. 5 pp. 83 – 88 Rabbits in Australia – Bboard ecological footprint exercise due
2/6 Fri	Characteristics of Populations	E/S Ch. 7 pp. 137 – 141 Humpback Whales – Bboard
2/9 Mon	Limits On Natural Populations	E/S Ch. 7 pp. 141 – 145 Sources 38 written assignment #1 assigned
2/11 Weds	History of Human Population Growth	[Ch. 8 pp. 145 – 164 – optional] Ultimate Resource – Bboard Sources 36
2/13 Fri	The Future of Human Population Growth? (material for 1st Exam stops here)	[Ch. 8 pp. 145 – 164 – optional] Population and Consumption – Bboard written assignment #1 due

Part II – Energy Use and Consequences

Date	Topic	Assignment(s)
2/16 Mon	The Nature of Energy	E/S Ch. 4 pp. 73 – 76 Sources 14
2/18 Weds	First Exam	Study, study, study!
2/20 Fri	From Fire to Water - Historical Patterns of Energy Consumption	[E/S Ch. 8 pp. 167 - 177 optional] E/S Ch. 9 pp. 180 – 190 Sources 16
2/23 Mon	The Air We Breathe	E/S Ch. 16 pp. 367 – 376, E/S Ch. 16 pp. 389 – 393 China and Pollution – Bboard
2/25 Weds	The Greenhouse Effect and Global Warming	E/S Ch. 16 pp. 380 - 389 Defusing the Global Warming Time Bomb – Bboard
2/27 Fri	The Greenhouse Effect and Global Warming (cont.)	Counting Carbons – Bboard global warming exercise assigned
3/2 Mon	Consequences of Global Warming	A Plan to Keep Carbon in Check – Bboard
3/4 Weds	Consequences of Global Warming (cont.)	Save the World - Bboard global warming exercise due
3/6 Fri	Energy from the Wind, Water, and Sun	E/S Ch. 9 pp. 190 – 199 6 New Solar Technologies – Bboard visit and explore http://www.nrel.gov/ written assignment #2 assigned current events exercise assigned
3/7 – 3/15	Spring Break	Enjoy!
3/16 Mon	Energy from the Wind, Water, and Sun (cont.) Further Alternative Energies	E/S Ch. 9 pp. 199 – 204 Sources 15 visit and explore http://www.eere.energy.gov/afdc/
3/18 Weds	Further Alternative Energies (cont.) (material for 2nd exam stops here)	Greenmark - Bboard written assignment #2 due

Part III – Human Influences on the Environment

Date	Topic	Assignment(s)
3/20 Fri	Ozone Depletion	E/S Ch. 16 pp. 378 – 380 Sources 25 [Visit www.ozoneny.org/ optional]
3/23 Mon	Second Exam	Study, ydutS
3/25 Weds	Water Pollution	E/S Ch. 15 pp. 347 - 354 Tall Cool Glass of Sewage – Bboard
3/27 Fri	Water Use	E/S Ch. 15 pp. 336 – 347, pp. 354 – 363 The Battle Over Bottled vs. Tap Water – Bboard [Sources 8.3 optional]
3/30 Mon	Fisheries and Tragedy of the Commons	[Ch. 11 pp. 246 – 249, 260 - 262 optional] Sources 7 Trophic Cascade in Cod – Bboard
4/1 Weds	Extinction, Endangered Species, and Biodiversity	Ch. 11 pp. 233 – 249 Sources 19 current events exercise due
4/3 Fri	Extinction, Endangered Species, and Biodiversity (cont.)	Planet of Weeds - Bboard
4/6 Mon	Globalization and Non-native Species	Ch. 11 pp. 249 – 252 Emerald Ash Borer – internet written assignment #3 assigned
4/8 Weds	Globalization and Non-native Species (cont.)	ESA Invasive Species Forum - Bboard
4/10 Fri	Human Control over Nature? (material for 3rd exam stops at the end of this material)	E/S Ch. 14 pp. 314 – 324 Sources 11 written assignment #3 due

Part IV – Solutions Towards a Sustainable Future

Date	Topic	Assignment(s)
4/13 Mon	Environmental Ethics Transportation	Sources 2 Sources 3
4/15 Weds	Third Exam	Study (please)!
4/17 Fri	The Value of the Natural World (material for short quiz stops here)	Sources 4 Sources 35
4/20 Mon	Food and Agriculture	(E/S Ch. 14 pp. 325 – 332 optional) Beef Cow's Plea to Vegetarians – Bboard Lily's Chickens – Bboard
4/22 Weds	In-Class Quiz (material from 4/13 and 4/17) Explain Design Project	study for in-class quiz
4/24 Fri	Water Conservation	Living Machines – Bboard Explore http://www.h2ouse.org/
4/27 Mon	Material Consumption and Waste	E/S Ch. 17 pp. 397 – 410 The Diaper Dilemma – Bboard
4/29 Weds	Clever Design and Paradigms Lost	http://attra.ncat.org/attra-pub/perma.html http://www.spiralseed.co.uk/permaculture/ written assignment #4 assigned
5/1 Fri	The Environmentally Friendly Home	E/S Ch. 9 pp. 196 – 198 NC Solar Home – Bboard
5/4 Mon	An Environmentally Friendly Lifestyle	The Pond at the Center of a Family's Universe - Bboard written assignment #4 due
5/5 - 5/11	Final Examinations	Design Project due Thurs. May 7th 10 am