

BIOL 201 – Spring 2016 -- Lecture Schedule
Evans and Burch

Time and Place: Tuesday Thursday 2:00-3:15pm, Genome Science Building Room G200

Given the dynamic nature of this course, this schedule may change if some topics take a longer or shorter amount of time than originally planned. Changes will be noted in lecture and on Sakai.

Part 1 – Evolution

Physical Textbook: *Evolution* by Bergstrom and Dugatkin, 1st edition. **(B&D)**

E-Textbook: SimUText. Available for purchase from the SimUText website:
<https://www.simutext2.com/student/register.html#/key/A6Ma-Tgb7-hNA4-5Za4-Vsr3>
 and from UNC Student Stores.

Required and optional (supplemental) readings are indicated for each lecture together with the location of the graded reading quiz (Sakai or Simutext).

Date	Topic	Readings -- to be completed before class	Instructor
Tu 1/12	Evidence for Evolution	Required B&D Ch 1.1 & Ch 2 Ungraded Sakai Reading Quiz due 1/13 at 12pm	CB
Th 1/14	Darwinian Natural Selection and Genetics of Populations	Required: Simutext Assignment 1 - Darwinian Snails. Graded Questions due 1/14 at 12pm Optional: B&D Ch 3.1 - 3.3	CB
Tu 1/19	Genetics of Populations and the Hardy Weinberg Model	Required: Simutext Assignment 2 - Hardy Weinberg and Kuru. Graded Questions due 1/19 at 12pm Optional: B&D Ch 6.1-6.2 and 7.1-7.2	CB
Th 1/21	Natural Selection	Required: Simutext Assignment 3 - Sickle Cell Alleles Sections 1-3. Section 5 Graded Questions due 1/21 at 12pm Optional: B&D Ch 7.3	CB
Tu 1/26	Evolution and Medicine	Required: B&D Ch 20.1 – 20.4 Sakai Reading Quiz due 1/26 at 12pm	CB
Th 1/28	Mutation, Migration, and Inbreeding	Required: B&D Chs 6.3-6.4 and 7.4 – 7.7 Sakai Reading Quiz due 1/28 at 12pm	CB
Tu 2/2	Genetic Drift and Conservation Genetics of the Florida Panther	Required: Simutext Assignment 5 - Genetic Drift and Bottlenecked Ferrets. Graded Questions due 2/2 at 12pm Optional: B&D Ch 8.1 & 8.3	CB
Th 2/4	Exam 1		
Tu 2/9	Molecular Evolution	Required: Simutext Assignment 6 - HIV Clock. Graded Questions due 2/9 at 12pm Optional: B&D Ch 8.5	CB
Th 2/11	Phylogeny	Required: Simutext Assignment 7 - Flowers and Trees. Graded Questions due 2/11 at 12pm. Optional: B&D Ch 4.1 – 4.2, Ch 5.1 – 5.3	CB

Tu 2/16	Speciation / History of Life	Required: B&D Ch 14.1 – 14.3 and Supplemental Reading on Sakai Sakai Reading Quiz due 2/16 at 12pm	CB
Th 2/18	Human Evolution	Required: B&D Ch 14.4 Sakai Reading Quiz due 2/18 at 12pm	CB
Tu 2/23	Evolution of Behavior (Sexual Selection and Cooperation)	Required: Simutext Assignment 8 - Behavioral Ecology: Section 4 Family Matters and Section 5 Cooperation. Graded Questions (for both Sections 4&5) due 2/23 at 12pm	CB
Th 2/25	Aging and Life History Evolution	Required: B&D Ch 20.5 Sakai Reading Quiz due 2/25 at 12pm	CB
Tu 3/1	EXAM 2		CB

Part 2-- Ecology. Text: SimUText Ecology. Assigned readings are the section names (and numbers), and the page numbers within each section. Numbers in **bold** are required question numbers at the end of each chapter to be completed prior to class. The questions in bold will be graded as your “reading assignment/quiz” for this half of the course.

Date	Topic	Readings and Questions (to be completed before class)	Instructor
Th 3/3	Intro to Ecology	Biogeography (Sec 4: 1-12; Q4.64.8); Ecosystem Ecology (Sec 1: 8-11, Sec 2: 1-11, 16-21; Q2.30-2.33)	ME
Tu 3/8	Ecosystem Ecology	Ecosystem Ecology (Sec 4: 1-13; Q4.8-4.9)	ME
Th 3/10	Nutrient Cycling	Nutrient Cycling (Sec 1: 11-18, Sec 2: 1-3, 8-21; Q2.10-2.13 ; Sec 4: Q4.2-4.3)	ME
3/15	Spring Break		
3/17	Spring Break		
Tu 3/22	Physiological Ecology: Photosynthesis, Adaptation and Acclimation	Physiological Ecology (Sec 2: 1-17; Q2.8-2.9 ; Sec 4: 1-25; Q4.17-4.21)	ME
Th 3/24	Life History	Life History (Sec 2: 1-16, Q2.13-2.17 ; Sec 3: 1-25; Q3.18-3.22)	ME
Tu 3/29	Life History and Geometric Population Growth	Population Growth (Sec 1: 1-14; Q1.8-1.11)	ME
Th 3/31	Exponential and Logistic Population Growth	Population Growth (Sec 2: 1-13, Q2.7-2.11 ; Sec 3: 1-16; Q.3.16-3.18)	ME
Tu 4/5	Exam 3		ME
Th 4/7	Competition	Competition (Sec 1: 1-5, 11-12; Sec 2: optional; Sec 3: 1-26; Q3.32-33, 3.35-37 ; Sec 4: optional)	ME
Tu 4/12	Predation	Predation (Sec 1: 1-2; Sec 2: 1-14; Q2.15-2.17 ; Sec 3: 1-23; Q3.23-3.25)	ME

Th 4/14	Food webs	Community Dynamics (Sec 1:1-3; Sec 3: 1-20 Q3.15,3.17 ; Sec 4: 1-9; Q4.3-4.4)	
Tu 4/19	Disturbance and Succession and Stability	Community Dynamics (Sec 2: 1-23; Q2.11-2.13 ; Sec 5: 1-21; 5.14-5.17)	ME
Th 4/21	Island Biogeography	Biogeography (Sec 2: 1-26; Q2.18-2.25)	ME
Tu 4/26	Global ecology and anthropogenic impacts	Biogeography (Sec 3: 15-24; Q3.20-3.23); Ecosystem Ecology (Sec 5: 1-12; Q 5.8)	
Th 5/5	12PM FINAL EXAM		