Biology 213: Evolution and Life (Fall 2009)

Course description: This three-credit course will explore the scientific study of biological evolution, and the role of evolutionary biology in understanding human life and the rest of the natural world. The course is intended for non-biology majors who have had a general introductory biology course. It will provide an overview of both the general patterns of evolution in the history of life, and the mechanisms that cause evolution to occur. We will emphasize how scientists study evolutionary patterns and mechanisms, and how an evolutionary perspective can be used to understand issues ranging from aging, altruistic behavior and disease to mass extinctions and the evolution of complex adaptations. The class will meet twice a week, and will include lectures, readings, computer simulations and classroom exercises. Prerequisites: Biology 11 or equivalent. Enrollment limited to 30 students.

Instructor: Joel Kingsolver, office = 334 Wilson, phone=843-6291, e-mail= jgking@bio.unc.edu
Class meetings: Tu & Th 930-1045a, 112 Hanes
Course web site on Blackboard (http://blackboard.unc.edu/)
Office hours: Tu 11a-12n; Wed 11a-12n; or by appointment

Required books and software:
Textbook: *The Tangled Bank: An Introduction to Evolution*, 2009, Carl Zimmer.

Software: *Evobeaker* 2.0, Simbiotic Software (includes software, labs and worksheets).
Note: Each student is required to purchase her/his own software and lab packet. Assignments must be completed in original lab workbooks, not photocopies (This is a requirement of the publisher, to keep the price low.)

Note: We will use computer software and computer labs regularly in class. *Please bring your IBM Thinkpad (or equivalent laptop) to class everyday*. You should download and install the needed software and lab exercises in advance of class each week.

Assessment and grading: Grading will be based on class contributions, computer workbooks, two short News articles, a group project, and two exams.