**Biology 830P  Readings in Evolution  2 hours credit**

Fall, 2013
Dr. Brad Ericson, Instructor
BHS 201E
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Contact Hours:  M-F: 9:00 am to 4:00 pm central standard time (CST).  I do not check email after 5:00 pm CST and rarely on weekends.

**Announcements, assignments, tests, and quizzes:** All information for this class will be available on blackboard (http://bb.unk.edu). You should check it regularly.

E-mail: All students must use their UNK email account so that I can reach them. All emails to Dr. Ericson should be sent to his email account and not posted on blackboard.

**Catalog Description**
Prerequisites: No prerequisites are necessary, however, an understanding of basic genetics, biochemistry, and evolutionary principles is assumed. A discussion of the principles of evolution based on assigned readings. Major topics of discussion will include: (1) evolution of body plans, (2) evolution of sensory organs, (3) evolution of the brain, (4) and evolution of the immune system. Fall semesters only.


**Course objectives:**

1. Understand the process of evolution at the molecular level.
2. Understand how evolution has shaped the body plan of animals, and in particular vertebrates.
4. Understand how the brain and the immune system evolved.
5. Understand how the major sensory organs evolved.
6. Develop an ability to critically analyze the current literature on molecular evolution.

*Students will achieve these objectives through assigned readings, online quizzes, and discussion board participation.*

**Expectations:** Grades are based on quizzes and participation on the discussion board. The discussion board is designed for you to explain answers to questions put forward to you by the instructor (see below), to ask questions concerning the assigned reading materials, and to make posts of current events relating to evolution. **Do not post questions about your weekly quizzes here.** Use your private email account for this purpose.

**My role in the course:** Finally, a word about my role. Distance classes can be overwhelming for an instructor who tries to interact constantly with each student's postings. I will log in and read what you all post shortly after the posting. I will not, however, respond to each of your postings. Frequently I will find comments or observations that you make of such interest that I will send an email (or make a post) to all of you commenting about these.
Grading will be based on departmental policy as follows: A+ (97-100%), A (96-94%), A- (93-90%) B+ (88-89%), B (83-87%), B- (80-82%), C+ (78-79%), C (73-77%), C- (72-70%) D+ (68-69%), D (63-67%), D- (60-63%), F (below 60%).

Course Points:
14 Discussion questions @ 20 points  280 points
14 Quizzes @ 10 points (drop lowest two)  120 points
Total Points  400 points

Quizzes: Throughout the semester, you will be given 14 timed quizzes worth 10 points each. The quizzes will cover the book/assigned reading material. For all quizzes, you will be allotted 10 minutes to answer 10 multiple choice or true/false questions. The questions will be given to you one at a time. You will have only one chance to answer the question and will not be allowed to go back and change answers. Therefore, make sure to answer carefully. If you run out of time while taking the quiz, you will not be given extra time. If you have a problem while taking your quiz, send me an email and I will deal with it as soon as possible. The computer displays a message that tells us what kind of problem you had and whether you took too much time or there really was a computer problem. I will be available M-F from 9:00 am to 4:00 pm CST, but not constantly as I do have other teaching and research responsibilities. The dates for the quizzes are listed on the schedule and will be made available at 8:00 am CST three days prior to the due date. You have until 11:55 pm CST on the due date to take the quiz. THE DEADLINE IS FINAL! THE QUIZ WILL BE REMOVED AT 11:55 pm CST ON THE DUE DATE.

General Discussion Board: The discussion board is designed for you to explain answers to questions put forward to you by the instructor, to ask questions concerning the assigned reading materials, and to make posts of current events relating to evolution. In my experience, if you have a question about the material, so does everyone else! Do not post questions about the quizzes here. If you have a question about a quiz you have taken, email me directly. If it is something that should be shared with the rest of the class, I will post it.

Each week I will post a question that you will need to discuss. Everyone’s participation is expected and will be graded. I will read the responses looking for: conciseness (avoid the squid technique, i.e., hiding behind a big cloud of ink), did you stay on topic, was there thought put into the answer, and do you have literature citations to back up your answer. By literature citations, I do not mean links to websites or articles that are published in a non-refereed forum, but instead, from journals that publish peer reviewed publications.

Bonus Points or Extra Credit: No extra credit or bonus points will be made available.
**Students with Disabilities**

Students with disabilities are encouraged to contact me for a confidential discussion of their individual needs for academic accommodation. It is the policy of the University of Nebraska at Kearney to provide flexible and individualized reasonable accommodation to students with documented disabilities. To receive accommodation services, students must be registered with UNK Disabilities Services Coordinator, David Brandt, in the Academic Success Office, 163 Memorial Student Affairs Building, 308-865-8214 or by email brandtl@unk.edu.

**Policy on incomplete:** To be considered for an incomplete in Biology 830P:

1. You must submit the reasons you cannot complete the scheduled work. This must include a copy of your class schedule and description of your responsibilities outside the classroom. This should be done in writing and include confirmation from your employer when appropriate.

2. You must specify the assignments you have missed and a schedule of plans to complete them.

3. You must submit a copy of the above information to the Chair of the Department of Biology and the Dean of Natural and Social Sciences.

4. Upon completion of items 1-3, your request for an incomplete will be considered. I expect all students to progress through the requirements for Biology 830P in a timely fashion. Unless your circumstance is quite remarkable, do not consider an incomplete.

**Plagiarism and cheating:** Neither will be tolerated! Anyone caught plagiarizing any exercise or cheating on any exercise will receive a 0 for that exercise; subsequent violations will result in referral to the Vice Chancellor for Academic Affairs for dismissal from the university.

**Course Schedule**—Completion date follows each chapter or other assigned readings. You need to have read the chapters and try to complete the lectures listed by these completion dates to be prepared for the weekly quiz.

Lecture #1 Finding Your Inner Fish 8/30
Lecture #2 Getting a Grip 9/6
Lecture #3 Handy Genes 9/13
Lecture #4 Teeth Everywhere 9/20
Lecture #5 Getting Ahead 9/27
Lecture #6 The Best-Laid Body Plans 10/4
Lecture #7 Adventures in Body Building 10/11
Lecture #8 Making Scents 10/18
Fall Break 10/25
Lecture #9 Vision 11/1
Lecture #10 Ears 11/8
Lecture #11 The Meaning of It All 11/15
Quiz and Discussion Board Question Schedule (see above for instructions and policies). The completion dates given below are for the quizzes (Q) and the discussion board questions. You must, for example, have Q1 and discussion board question one completed by Sunday, September 1st at 11:55 p.m., CDT.

Q1. September 1st
Q2. September 8th
Q3. September 15th
Q4. September 22nd
Q5. September 29th
Q6. October 6th
Q7. October 13th
Q8. October 20th
Fall Break
Q9. November 3rd
Q10. November 10th
Q11. November 17th
Q12. November 24th
Thanksgiving Break
Q13. December 8th
Q14. December 15th
End of Semester

Question 2a. How do you plan to provide instruction for this course?

The students will be assigned reading from either the textbook, Your Inner Fish (Lectures 1 through 11) or will be assigned other reading materials (Lectures 12 through 14).

Question 2b. What types of projects and assignments will you assign to your students?

Each week, the students will be given a question for discussion based on their reading for that week. The depth in which they discuss it will be graded from their posts on the Discussion Board. The students will need to respond to comments I make and as well as responding to comments their classmates post.

Question 2c. Will student-to-student interaction be a part of the course; if so, how will you facilitate this interaction?

As mentioned above, it will be carried out via the Discussion Board assignments.
Question 2d. How will you administer examinations?

The quizzes will be posted each week on Blackboard. They will consist of a test bank of 15 questions, from which 10 will be randomly drawn for each quiz.

Question 2e. Will the students be required to purchase any special equipment, software, hardware, etc. to successfully complete the course? If so, please describe.

No additional purchases of this nature will be required.