BZ220: INTRODUCTION TO EVOLUTION
FALL 2018 COURSE SYLLABUS

PROFESSORS: Dr. Jennifer Neuwald and Dr. Mark Simmons

TEACHING ASSISTANTS: Ms. Maybellene Gamboa and Mr. Craig Marshall

CONTACT INFORMATION & OFFICE HOURS:

<table>
<thead>
<tr>
<th></th>
<th>Dr. Neuwald</th>
<th>Dr. Simmons</th>
<th>Ms. Gamboa</th>
<th>Mr. Marshall</th>
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</thead>
<tbody>
<tr>
<td>Office:</td>
<td>Biology 342</td>
<td>Biology 418</td>
<td>Biology 129</td>
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<td>Phone:</td>
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<tr>
<td>Office Hours:</td>
<td>TTh; 1:45PM - 2:45PM (when teaching)</td>
<td>TTh; 2 PM - 3 PM (when teaching)</td>
<td>W: 11 AM - 12 PM</td>
<td>Th: 3 PM - 4 PM</td>
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- Please include “BZ220” as part of the subject line in all e-mails (e.g., “BZ220: Scheduling an appointment”).

LECTURE: Tuesday / Thursday 12:30 – 1:45 PM; Behavioral Sciences A101

COURSE MATERIALS:
- Recommended Textbook: *Evolutionary analysis* (5th edition) by Freeman & Herron (2014) (2 copies on reserve at the library). Students can purchase a hard copy or ebook option through the CSU Bookstore.
- iClicker: register before August 28th. Details on how to do this can be found on our course Canvas site.
- Calculator: capable of power, exponent, and square-root functions. Calculators capable of storing/displaying text (e.g., graphing calculators) are not allowed during exams
- Lecture Slides & Study Guides: will be posted prior to each lecture on our course Canvas site

COURSE WEB SITE: [http://info.canvas.colostate.edu/login.aspx](http://info.canvas.colostate.edu/login.aspx)
- 2018FA-BZ-220-001 Introduction to Evolution

COURSE OBJECTIVES:
Students will be able to have an informed discussion about the process of descent with modification (i.e., evolution). This process includes describing the mechanisms by which lineages change (including heredity) and reviewing the general history of life. Students will be able to construct and test evolutionary hypotheses, for studies of both short-term change (microevolution) and studies of descent among species (macroevolution). Refer to the “Learning Objectives” document on Canvas (Canvas/Syllabus) for detailed core competencies expected of students by the end of the semester.

GRADING:
We will be using the plus/minus system when assigning final grades. Pluses will be assigned for the highest two percentage points for a given letter grade for A, B, and C grades (e.g., 98 – 100% = A+). Minuses will only be assigned for grades that we choose to raise upwards (e.g., an 89.6% might be raised to an A- if the student actively participated in class, attended office hours, and turned in all homework assignments). Note that it is university policy that C-, D+, and D- grades cannot be assigned. As such, do not expect a high D to be changed into a C. All biology and zoology majors need at least a C in this class to graduate with these majors.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Points</th>
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<tr>
<td>Two preliminary exams</td>
<td>190 points (2 exams @ 95 points each)</td>
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<tr>
<td>Final exam</td>
<td>125 points</td>
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<tr>
<td>Quizzes</td>
<td>120 points (13 quizzes @ 5-10 points each)</td>
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Discussion Groups 30 points (2 discussions & write-ups @ 15 points each)
iClicker questions 75 points (50 questions @ 1.5 points each)

GRAND TOTAL: 540 points, but your final-grade percentage will be calculated from 520 points (effectively giving you 20 free points). For example, if you have 474 points at the end of the semester then 474 / 520 = 91% = “A” for your course grade (instead of 474 / 540 = 87% = “B”).

- Regularly check your scores on Canvas. YOU are responsible for knowing how you are doing in class.
- There is no extra-credit.
- If you have questions regarding the grading, you must resolve the issue within two weeks from when the scores are posted. For exams, e-mail the appropriate professor and justify why you believe your answer was correct. For quizzes and discussion sections, e-mail the appropriate TA with your justification.

EXAM INFORMATION:
- All exams are multiple-choice, true-false, and/or matching. Answer keys will be posted on Canvas.
- Last year’s exams and exam keys are provided on Canvas.
- The second preliminary exam includes ~15% cumulative material. The final exam is ~35% cumulative.
- In the event of an extreme emergency or university-sanctioned activity, make-up exams can be requested with (i) proof of the emergency or university-sanctioned activity, (ii) within 24 hours of the regular exam. Decisions about whether a make-up exam is warranted will be made at the sole discretion of the professor, and thus, are not guaranteed. Make-up exams will be oral or short-answer essays; the multiple-choice exam is only given at the scheduled date and time.
- The final exam is on Wednesday, December 12th from 9:40am-11:40am in Behavioral Sciences A101. Make sure you do not have travel arrangements that will result in you missing the exam!

OPEN-BOOK/OPEN-NOTES QUIZZES:
- Thirteen quizzes worth 5-10 points each will be administered through Canvas (refer to the schedule below).
- Quizzes will open on Fridays at 5 PM for material covered that week. Quizzes are available for one week and then automatically close the next Friday at 5 PM. Answers are released immediately upon the quiz closing.
- Late submissions will not be accepted, and will result in a zero for that assignment. Please pay attention to the deadlines! If you submit the quiz at 5:01 PM, it will be late.
- Students are permitted to work through the quizzes together, but it is in violation of the Student Conduct Code for students to give or receive answers without applied effort. Refer to the “Academic Integrity” section below.
- Because students have an entire week to complete quizzes, there are no make-up quizzes (unless a university-excused absence covers the entire week).

DISCUSSION GROUPS:
- All students are required to attend two discussion groups (worth 15 points each) during the semester. Each student must attend one discussion group under the category of microevolution and one under macroevolution.
- Students are responsible for signing up for discussions. Make sure to do this early to get spots that work with your schedule. The last few weeks of microevolution and macroevolution discussion groups are generally filled.
- The discussion documents are located on Canvas/Modules/Discussion Materials and provide details on the schedule, how to sign up, discussion assignments, and expectations.

iCLICKER QUESTIONS:
- There will be, on average, two iClicker questions per class (50 questions over the course of the semester).
- Each question is worth 1.5 points: 0.5 points for participating, plus 1 point for a correct answer.
- iClickers must be registered on Canvas before you can receive credit. We will do a test run for iClickers on Aug. 23rd & 28th. “Dummy points” will be posted in your Canvas gradebook following each of these classes so students can verify their iClicker is logging points. August 30th will be the first class with real iClicker points.
• It is your responsibility to make sure that (i) you bring your iClicker to every class, (ii) you have it registered properly, (iii) you set the channel correctly each time, (iv) you have back-up batteries, (v) you log your answer during the time allotted, and (vi) your points are showing up in Gradebook.

• There are no make-up iClicker points. The 20 free points we give for the course can be applied to any missed points.

• You may work in groups to figure out the answers, but is a violation of the Student Conduct Code for students be given answers without applied effort.

• The iClicker channel in Behavioral Sciences A101 is CC.

• iClicker questions and answers will not be posted on Canvas. You must have your iClicker connected during class to receive credit and answer the questions during the specified time. We do not give any points for lost iClickers or iClickers with dead batteries.

**TIPS FOR DOING WELL:**

• Attend class, bring hard or soft copies of lecture slides, and take notes. Some students find it helpful to read through the study guides before class.

• Use office hours. Ask for help or clarifications early and often.

• Study for and submit open-book quizzes on time via Canvas.

• Read the textbook to supplement lecture material.

• Use the previous exams as practice. Go through and try to take the exam, then check your answers with the exam key. These can be found on Canvas/Modules/Course Information & Materials/Practice Exams & Study Tips.

• Set aside time at least once a week to download and review study guides (available on Canvas) – don’t wait until right before the exam. By studying each week, you’ll have time to truly think about that week’s material, and identify topics that you may be struggling with (and, thus, have time to get help!).

• Don’t just memorize the material. You will need to understand the concepts and be able to apply them to novel situations when answering questions on the exams. The best way to study for these kinds of questions is to start by going through the slides and verbally explain what's going on (either to yourself or to your study group). It can also be helpful to think about what kind of questions you might ask if you were writing the exam. Go from slide to slide, topic to topic, and come up with questions you might ask. This is a great exercise to do with a group.

• Find classmates with whom you can study. Peer-learning is proven to be highly effective. Take time to explain concepts to each other. If you don't know anyone in the class, a great way to start a group is to talk to the people around you before or after class to find if anyone wants to get together. Another good way is to talk to the people in your discussion section. You can also seek study partners, ask questions, and organize study groups through the discussion thread found on Canvas/Discussions/Evolution Study Group.

• When you get your exam back, go through and review what you got correct and what you missed – and WHY. It is not enough to just “get it right.” Make sure you understand why you got it right, or got it wrong.

**STUDENTS WITH DISABILITIES:**

If you have a disability that requires special accommodation in this class then you may be eligible for accommodations/auxiliary aids under the Americans with Disabilities Act of 1990 and Section 504 of the Rehabilitation Act of 1973. Please contact the Student Disability Center in room 121 in the TILT Building on the Oval, 491-6385, (website: disabilitycenter.colostate.edu/), to determine eligibility for accommodations or auxiliary aids during this class.

**HONORS BREAKOUT SECTION:**

Dr. Neuwald is running the BZ220 Honors Breakout. Those students who have registered for the Honors Section (BZ220-230) can find the Honors syllabus, schedule, and expectations on the regular course canvas site (Canvas/Modules/Honors Breakout) as well as the Honors Canvas page (see below). In addition to the regular lecture time, we will meet weekly on Thursdays from 9-9:50am in Biology 134. You will receive a grade for your performance in lecture (as described above in the “Grading” section), as well as a separate honors grade (1 credit) based on your performance in the breakout section. **You must also enroll in BZ296-001** to receive this grade and to access the Honors Canvas site. All honors students should contact Dr. Neuwald with questions.

**ACADEMIC INTEGRITY:**
This course adheres to the Academic Integrity Policy of the General Catalog and the Student Conduct Code (https://tilt.colostate.edu/integrity/resourcesFaculty/pledge/). The consequence of cheating on BZ220 exams, quizzes, and other forms of assessment is a failing class grade without the repeat/delete option, without being able to withdraw from the class, and a permanent record of cheating on the CSU transcript.

**COURSE SCHEDULE:**
Please refer to the “Course Schedule” document on Canvas/Syllabus for details.