

Instructor Information.

Dr. Benjamin PÉLISSIÉ

Phone : (308) 865-8713

Email: pelissieb@unk.edu

Skype: benjaminpelissie

Please, contact me directly only for personal issues or questions. For general questions about the course (including technical issues and specific expectations), please ask them on our dedicated Course Discussion Board, so that everyone can benefit from my answer.

You can reach me by email, by Skype.

- *For emails:* I may check email messages twice a day and will respond within 24 hours during weekdays. Note that on weekends, or under special (and rare) circumstances, and if I don't judge your question as being urgent, I might take 2 days to respond.
- *For Skype:* Please, prefer using emails for regular requests. If your request/enquiry is urgent, write me a message on skype or call me the phone; we will then decide together whether we need to further talk about it or not. If you prefer to talk to me, please enquire a phone or Skype appointment with me via email. If you call me right-away, I might not pick up.

Course Description:

This course is an introduction to the basic concepts in evolutionary biology, with a special focus on the recognition of biological patterns and the understanding of underlying processes. Teaching is done through the examination of both molecular and organismal examples, from recent, peer-reviewed literature.

Course Objectives:

After taking this course, students will be able to:

1. Recognize the pattern of biological evolution.
2. Differentiate between evolutionary mechanisms (natural selection, random genetic drift, mutation, and migration).
3. Appreciate different approaches (e.g., organismal, molecular) to studying evolutionary biology.
4. Develop critical thinking skills by identifying assumptions of alternative hypotheses and evaluating evidence.
5. Demonstrate the ability to form a coherent evidence-based argument and communicate this in writing.
6. Locate and appropriately use examples from the primary, peer-reviewed literature.

Textbook:

Evolutionary Analysis (2014, 5th edition); Jon C. Herron & Scott Freeman; Benjamin Cummings

ISBN-10: 0321616677

ISBN-13: 978-0321616678

Computer Requirements:

You are required to have frequent access to a computer with internet connectivity. Lectures will require internet access for viewing and I expect you to check the Canvas site several times per week (and preferably every day). Please refer to the eCampus website to make sure you meet the minimum hardware/software and internet connection speed required by all UNK eCampus students. The written portion of the assignments and exams must be completed using Microsoft Office, or an equivalent software, and submitted as a PDF file.

Mode of Instruction:

This course is entirely online and comprised of lectures, readings, and assignments. Most weeks you are required to watch one lecture (and must be connected to the internet during this time), complete the assigned readings, participate in discussions (via discussion board posts) and complete a quiz.

Grades:

The course grade is based on quizzes (15%), discussion board posts (25%), and exams (60%: 10% for each midterm and 40% for the final). Minor modifications to assigned points may occur and will be announced. Letter grades, using the plus/minus system, will be assigned using the standard grading scale of UNK Department of Biology, as follows: A (93-100%), A- (90-92%), B+ (88-89%), B (83-87%), B- (80-82%), C+ (78-79%), C (73-77%), C- (70-72%), D+ (68-69%), D (63-67%), D- (60-62%), and F (below 60%). Your final grade will be rounded up, so no need to ask for it (e.g., if you finish with an 82.5% your grade will be a B). Please, do not contact me to increase your grade: I would not do it.

Lectures:

Lectures are designed to provide in-depth presentation of the studied concepts. They will be available on Canvas by 0:01 a.m. CST each Monday. The length of these is variable (1-2 hours) depending on the specific topic. Producing one long lecture per week (as opposed to 2 or 3) is a deliberate choice that allows for providing explicit context to the concepts discussed, increasing overall coherence among them. Keep in mind that because lectures are available for streaming, you retain a lot of flexibility in the pace of your learning process (detailed time stamps will be provided for each lecture, for easier navigation). Lectures will cover most of the associated textbook's chapters, focusing on the methods, concepts and examples that are the most important in understanding the week's material.

Weekly Assignments:

Most weeks, along with viewing (and working on) the lecture, you will need to complete reading assignments, participate to graded discussion boards and complete a quiz.

Readings

The schedule at the end of this document stipulates assigned readings from the textbook. Weekly reading assignments will be reminded on Canvas, but I advise you to be proactive and complete them before viewing the lecture and entering the discussion board.

Note: Lectures might cover only a subset of the assigned book chapter (usually most of it; see above). However, I strongly advise you to read the assigned book chapter in its entirety, as some points not covered during lectures might be in exams.

Discussion boards

Discussions are a significant portion of this course and are designed to promote communication and foster our learning community. Each week, I will post a question on a new Discussion Board at the same time as the week's lecture. Except for the first and last one (see schedule below), discussions will be done in smaller groups of 4-5 students (randomized periodically), allowing for more in-depth exchanges and decreased reading loads. Discussion boards will be open from Monday 0:01 a.m. to Sunday 11:59pm CST. You will be required to respond to the question, as well as following up with your classmates' answers. You may interact with posts at any point, but to be considered for grading, interactions must be complete by the deadline.

The more thoughtful your comments, the better the quality of discussion will be for the entire group. Comments should be at least a few sentences and demonstrate that you are aware of the discussion that has been taking place. Responses to classmates must add to the overall discussion and may consist of comments, questions, or new ideas that have been generated after reading the student's answer (e.g., if you have a question, what piece of evidence prompted the question?). While you can answer (e.g.) "I agree" to someone else's statement (it is useful and fair to encourage good comments), such an answer will typically not be counted as a "valuable" contribution in the week's discussion. When needed, your comments/statements should be supported with information, file attachments or web sites, and should be relevant to the current topic of discussion. References are encouraged but shouldn't be over-utilized (be specific!). Overall, conciseness and clarity are necessary (i.e. page long postings might not be appropriate), both to keep the reading load for the class to a reasonable level and to state your reasoning as precisely and as efficiently as possible.

Every Monday, between 00:01 a.m. and 11:59 p.m. CST, you will have to provide an anonymous peer review of last week's discussion to your groupmates (3-5 students). Although a dedicated rubric will be available to streamline and speed up this process, you will also have to provide a clear and concise comment to each of your reviews, containing at least one thing you believe the student did especially well and one thing you think needs improvement. This peer-review component will force you to reflect on your own understanding of the course material by confronting your ideas with other students' comprehension of the concepts and methods presented in lecture. This will foster your critical thinking and better prepare you for the exam

assignments to come. Note that no peer review is required for discussions 1 and 12 (see schedule), which are then worth 21 points (vs. 30 points for discussions 2 to 11).

Discussions will be graded as the average score obtained across the grading rubrics provided by your reviewers (*i.e.*, you will be graded directly by your peers) and represent 70% (21 out of 30 points) of the week's discussion board grade. Peer reviews will be graded by me and count for 30% (9 out of 30 points) of each week's discussion board grade. Grading rubrics are available on Canvas, both for you to submit during your peer reviews ("for reviewers" rubric) and for me to grade your reviews ("for teacher" rubric). Please consult both rubrics carefully.

Finally, I expect you to be polite, professional, and constructive, for each discussion to be as useful and enjoyable as possible.

Quizzes:

Every week, after watching the lecture, you will also be required to complete one short quiz, to assess your level of understanding of the week's material. These will usually consist of 5-10 multiple choice questions (10 points total). The quizzes will be timed (10 minutes), but open resource. Quizzes will be open from Monday 0:01 a.m. to Sunday 11:59pm CST. You will be able to take each quiz 2 times, to provide you with the opportunity to identify and work on the unmastered material. Your last attempt grade will be retained.

Exams:

There will be two midterm exams (week 5 and 10, each worth 10%; see schedule below), and one final exam (week 15 and 16, worth 40%; see schedule below).

Each midterm exam will be composed of only one written essay, and you will have one week to submit it (no lecture, discussion, or quiz during midterm weeks). Midterm essays will share the same requirements as the essays of the final exam and are intended to provide you with writing practice opportunities. I will provide substantial feedback for both midterms.

The final exam will be composed of 4 assignments: 3 essay questions (similar to midterm essays; 10% each) and a timed portion consisting of 25 multiple choice questions (similar to weekly quizzes, although you will have only 1 attempt; 10%). The final exam will be open resource and cover all the material from lecture, readings, quizzes, midterms and discussions, from day 1. You will have 2 weeks to complete the 4 assignments. Except under extraordinary (and justified) circumstances, late submissions will not be accepted.

Appropriate References:

For the purposes of this course, an appropriate reference is defined as a peer-reviewed journal article or book chapter, assigned reading material (including your textbook) and lecture material. Note that in most cases, lecture material will be derived from a clearly cited peer-reviewed publication or your textbook; in these cases, the original source should be cited. Please see additional material available on Canvas for more guidelines.

Academic Integrity:

This course, like all UNK courses, abides by all [University policies](#) as outlined in the 2020-21 UNK Student Handbook, which contains the UNK Student Code of Conduct (available on Canvas). You will be expected to be familiar with and abide by all such policies.

Plagiarism will not be tolerated. You must cite all sources and rephrase content in your own words. You assume full responsibility for the content and integrity of the work you submit. All written assignments (and some discussion board posts) will be scanned through plagiarism-detecting software. Students who plagiarize any part of their assignments or exams may receive at minimum a zero on that assignment, with more serious repercussions possible (e.g., failure of course, expulsion from UNK). Any materials provided to you in this course are the intellectual property of either myself or the textbook publisher. It is a violation of copyright law to share these materials without permission, either online or in person.

University Policies Related to COVID-19:

University Policies Related to COVID-19: The university community is deeply concerned for the well-being of its students, faculty, and staff. Keeping each other as safe as possible will require commitment from each of us; failure to do so will literally place lives in danger. The full policy relating to mitigation of the spread of infectious diseases can be found at <https://www.unk.edu/coronavirus/> Policies that apply to all courses (online, remote, blended, or face-to-face) include:

- Students shall monitor their health daily. No student shall attend classes in person while sick. Those who have had contact with positive-tested individuals or show COVID-19 related symptoms must have clearance from the Public Health Center prior to returning to face-to-face classes. There will be no penalties for missing classes for COVID-19 related absences provided the student has documentation from the Public Health Center. Students will still be responsible for course content through alternative attendance or other options arranged with the instructor.

Questions regarding COVID-19 should be directed to the Public Health Center unkhealth@unk.edu or 308-865-8254.

Questions regarding the COVID-19 academic policy should be directed to Sr. Vice Chancellor Bicap at bicakc@unk.edu.

Questions regarding department specific requirements should be directed to the chair of the Biology Department, Dr. Julie Shaffer at shafferjj@unk.edu.

Students with Disabilities:

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 for a disability, students must be registered with the UNK Disabilities Services for Students (DSS) office, 175 Memorial Student Affairs Building, 308-865-8214 or by email unkdso@unk.edu.

UNK Statement of Diversity & Inclusion:

UNK stands in solidarity and unity with our students of color, our LatinX and international students, our LGBTQIA+ students and students from other marginalized groups in opposition to racism and prejudice in any form, wherever it may exist. It is the job of institutions of higher education, indeed their duty, to provide a haven for the safe and meaningful exchange of ideas and to support peaceful disagreement and discussion. In our classes, we strive to maintain a positive learning environment based upon open communication and mutual respect. UNK does not discriminate on the basis of race, color, national origin, age, religion, sex, gender, sexual orientation, disability or political affiliation. Respect for the diversity of our backgrounds and varied life experiences is essential to learning from our similarities as well as our differences. The following link provides resources and other information regarding D&I:

<https://www.unk.edu/about/equity-access-diversity.php>.

Students Who are Pregnant:

It is the policy of the University of Nebraska at Kearney to provide flexible and individualized reasonable accommodation to students who are pregnant. To receive accommodation services due to pregnancy, students must contact Cindy Ference in Student Health, 308-865-8219. The following link provides information for students and faculty regarding pregnancy rights.

<http://www.nwlc.org/resource/pregnant-and-parenting-students-rights-faqs-college-and-graduate-students>.

Reporting Student Sexual Harassment, Sexual Violence or Sexual Assault:

Reporting allegations of rape, domestic violence, dating violence, sexual assault, sexual harassment, and stalking enables the University to promptly provide support to the impacted student(s), and to take appropriate action to prevent a recurrence of such sexual misconduct and protect the campus community. Confidentiality will be respected to the greatest degree possible. Any student who believes she or he may be the victim of sexual misconduct is encouraged to report to one or more of the following resources:

- Local Domestic Violence, Sexual Assault Advocacy Agency 308-237-2599
- Campus Police (or Security) 308-865-8911
- Title IX Coordinator 308-865-8655

Retaliation against the student making the report, whether by students or University employees, will not be tolerated.

Course Schedule & Assignments

Week	Date	Topic (assigned reading)	Lecture (avail.)	Quiz (due)	Discussion (due)	Peer-review (due)	Exam (due)
1	23-Aug	The Pattern of Evolution (ch. 2)	L1	-	-	-	-
	29-Aug	-	-	Q1	D1	-	-
2	30-Aug	Evolution by Natural Selection (ch. 3)	L2	-	-	-	-
	5-Sep	-	-	Q2	D2	-	-
3	6-Sep	Evolutionary Trees (ch.4)	L3	-	-	PR1	-
	12-Sep	-	-	Q3	D3	-	-
4	13-Sep	Variation (ch.5)	L4	-	-	PR2	-
	19-Sep	-	-	Q4	D4	-	-
5	20-Sep	-	-	-	-	PR3	-
	26-Sep	-	-	-	-	-	Midterm essay 1
6	27-Sep	Selection and Mutation (ch. 6)	L5	-	-	-	-
	3-Oct	-	-	Q5	D5	-	-
7	4-Oct	Migration, Drift, and Nonrandom Mating (ch.7)	L6	-	-	PR4	-
	10-Oct	-	-	Q6	D6	-	-
8	11-Oct	Linkage and Sex (ch. 8)	L7	-	-	PR5	-
	17-Oct	-	-	Q7	D7	-	-
9	18-Oct	Adaptation (ch. 10)	L8	-	-	PR6	-
	24-Oct	-	-	Q8	D8	-	-
10	25-Oct	-	-	-	-	PR7	-
	31-Oct	-	-	-	-	-	Midterm essay 2
11	1-Nov	Sexual Selection (ch. 11)	L9	-	-	-	-
	7-Nov	-	-	Q9	D9	-	-
12	8-Nov	Sociality (ch. 12)	L10	-	-	PR8	-
	14-Nov	-	-	Q10	D10	-	-
13	15-Nov	Life-History (ch. 13)	L11	-	-	PR9	-
	21-Nov	-	-	Q11	D11	-	-
14	22-Nov	Speciation (ch. 16)	L12	-	-	PR10	-
	28-Nov	-	-	Q12	D12	-	-
15	29-Nov	-	-	-	-	-	-
	5-Dec	-	-	-	-	-	-
16	6-Dec	-	-	-	-	-	-
	12-Dec	-	-	-	-	-	Final exam (3 essays, 1 quiz)