

**Instructor Information.**

Dr. Benjamin PÉLISSIE

Office: BHS 201A

Phone : (308) 865-8713

Email: [pelissieb@unk.edu](mailto: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, 5<sup>th</sup> 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 (55%: 15% for the midterm and 45% 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. Central Time each preceding Sunday. The length of these is variable (1-2 hours) depending on the topics covered. 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. To facilitate content access and simplify navigation, each week I will provide streaming links for the full lecture as well as for each separate sections (i.e. 1 video / section, of variable sizes). I will also provide lectures as PDF files, both in a “classic” layout (1 slide / page) and in a “notes” layout (3 slides / per, with space for note-taking). 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 discussions and complete a quiz.

### Readings

The schedule at the end of this document stipulates assigned weekly 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. Every two weeks (starting week 2), I will post several questions on a new Discussion Board, alongside the week's lecture. Weekly discussions will be done in smaller, randomized groups of 7-10 students, allowing for more meaningful exchanges and decreased reading loads. Discussion boards will be open for 11 days, thus due the next Tuesday 11:59 p.m. Central Time (see schedule below). 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. Note that both the first (D1) and the last (D8) discussions will be done in the full class (across sections) and last only 7 days. D1 and D8 will not be content-based but instead host our personal presentations and semester reflections, respectively (see schedule below).

The more thoughtful your comments, the better the quality of discussion will be for the entire group. Posts 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 (a minimum number is required; check the Discussion Board Rubric below) 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.

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

IMPORTANT: the following rubric will be used for the grading of weekly discussions. Be sure that you understand the underlying requirements for expecting full credits.

BIOL 802 Organic Evolution  
UNK – Fall 2022

CRITERIA	RATINGS				
	3 pts. - Excellent to good	2 pts. - Good to acceptable	1 pt. - Acceptable to minimum	0 pts. - Unacceptable	20 pts. Total
<b>Number of postings</b>	4 posts or more	3 posts	1-2 posts	0 posts	<b>3 pts.</b>
<b>Frequency of postings</b>	Posts during 3 or more different days of the week	Posts during 2 different days of the week	Posts during only 1 day of the week	0 posts	<b>3 pts.</b>
<b>Initial Assignment Posting</b>	Initial post is thorough, clear, extensive (>300 words), well developed, fully addressing and developing all aspects of the task.	Initial post is well developed (>200 words) and addresses all aspects of the task. Lacks full development of concepts and/or clarity.	Initial post is adequate (>100 words), but with superficial thought and preparation and/or doesn't address all aspects of the task.	No initial post	<b>3 pts.</b>
<b>Follow-Up Postings</b>	Demonstrates thorough analysis of others' posts; extends meaningful discussion by building on previous posts.	Elaborates on an existing posting with further comment or observation.	Posts shallow contribution to discussion; does not enrich discussion.	No follow-up responses to others.	<b>3 pts</b>
<b>Content Contribution</b>	Posts factually correct, reflective and substantive contribution; advances discussion significantly.	Posts information that is factually correct; lacks full development of concept or thought.	Repeats but does not add substantive information to the discussion.	Posts information that is off-topic, incorrect, or irrelevant to discussion.	<b>3 pts.</b>
<b>Clarity and Mechanics</b>	Contributes to discussion with clear, concise comments formatted in an easy to read style that is free of grammatical and spelling errors.	Contributes valuable information to discussion, with a good structure and only few clarity or mechanics errors.	Communicates in friendly, courteous and helpful manner, with structure issues and some errors in clarity or mechanics.	Posts disorganized, unstructured or rude content that may contain multiple errors or may be inappropriate.	<b>3 pts.</b>
<b>References and Support</b>	-	Uses at least 2 references to peer-reviewed literature in the initial post (assuming proper format).	Uses only 1 references to peer-reviewed literature in the initial post (assuming proper format).	Includes no references or supporting experience; only personal opinion/experience.	<b>2 pts.</b>

### 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.

Important: In this course, Quizzes are implemented as elements of self-learning, rather than assessment criteria. For that reason, 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 1 midterm exam (week 7, worth 15%; see schedule below), and one final exam (week 15, worth 45%; see schedule below).

The midterm exam will be composed of only one 500-1000 words written essay, and you will have one week to submit it. Although there will be no lecture or quiz during Midterm week, 1 discussion will be due this Wednesday (D4; see schedule below). The Midterm essay will share the same requirements as the essays of the final exam and is intended to provide you with

writing practice opportunities. To this end, I will provide feedback in the form of a detailed grading rubric and precise comments. I strongly invite students with specific questions about my feedback or grading to reach out to me as soon as possible, so that I can provide them with clarifications about my feedback and grading. When reaching out, be as precise and explicit as possible, so that my additional input can be as timely, clear and appropriate as possible. For example, don't come to me with vague requests like "Can you please clarify my grade?" or "Can I have more details about your comments?", as I would automatically be requesting more details.

The final exam will be composed of 3 assignments: 2 essay questions (similar to midterm essays; 15% each) and a timed portion consisting of 25 multiple choice questions (similar to weekly quizzes, although you will have only 1 attempt; 15%). 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 1 week to complete the 3 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. Note that in most cases, lecture/textbook material will be derived from a clearly cited peer-reviewed publication or your textbook and that the original source should be cited. Please see additional material available on Canvas for more guidelines.

### **Attendance Policy**

Your instructor may have indicated on their syllabus an attendance policy specific to their class. If so, that is the policy with which you must comply. If no other policy is stated, the University-wide attendance policy will apply. You can find the [Student Attendance Policy Statement online](#).

### **Academic Honesty Policy**

Academic honesty is essential to the existence and integrity of an institution of higher education. The responsibility for maintaining that integrity is shared by all members of the academic community. To further serve this end, the University of Nebraska at Kearney has a policy relating to academic integrity. To ensure all students understand the expectations, UNK has adopted [Academic Integrity Policy](#).

IMPORTANT: 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.

### **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.

### **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](mailto:unkdso@unk.edu)

### **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 the Student Health office at 308.865.8218. The following links provide information for students and faculty regarding pregnancy rights.

<https://thepregnantscholar.org/title-ix-basics/>

<https://nwlc.org/resource/faq-pregnant-and-parenting-college-graduate-students-rights/>

### **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>

## Course Schedule &amp; Assignments

Week	Date	Topic (assigned reading)	Lectures (avail.)	Quizzes (due)	Discussions (due)	Exams (due)
0	17-Aug	Course Introduction	L0	-	-	-
1	21-Aug	The Pattern of Evolution (ch. 2)	L1	-	-	-
	23-Aug	-	-	-	-	-
	28-Aug	-	-	Q1	D1	-
2	28-Aug	Evolution by Natural Selection (ch. 3)	L2	-	-	-
	30-Aug	-	-	-	-	-
	4-Sep	-	-	Q2	-	-
3	4-Sep	Evolutionary Trees (ch.4)	L3	-	-	-
	6-Sep	-	-	-	D2	-
	11-Sep	-	-	Q3	-	-
4	11-Sep	Variation (ch.5)	L4	-	-	-
	13-Sep	-	-	-	-	-
	18-Sep	-	-	Q4	-	-
5	18-Sep	Selection and Mutation (ch. 6)	L5	-	-	-
	20-Sep	-	-	-	D3	-
	25-Sep	-	-	Q5	-	-
6	25-Sep	Migration, Drift, Nonrandom Mating (ch.7)	L6	-	-	-
	27-Sep	-	-	-	-	-
	2-Oct	-	-	Q6	-	-
7	2-Oct	-	-	-	-	-
	4-Oct	-	-	-	D4	-
	9-Oct	-	-	-	-	Midterm
8	9-Oct	-	-	-	-	-
	11-Oct	-	-	-	-	-
	16-Oct	-	-	-	-	-
9	16-Oct	Linkage and Sex (ch. 8)	L7	-	-	-
	18-Oct	-	-	-	-	-
	23-Oct	-	-	Q7	-	-
10	23-Oct	Adaptation (ch. 10)	L8	-	-	-
	25-Oct	-	-	-	D5	-
	30-Oct	-	-	Q8	-	-
11	30-Oct	Sexual Selection (ch. 11)	L9	-	-	-
	1-Nov	-	-	-	-	-
	6-Nov	-	-	Q9	-	-
12	6-Nov	Sociality (ch. 12)	L10	-	-	-
	8-Nov	-	-	-	D6	-
	13-Nov	-	-	Q10	-	-
13	13-Nov	Life-History (ch. 13)	L11	-	-	-
	15-Nov	-	-	-	-	-
	20-Nov	-	-	Q11	-	-
14	20-Nov	Speciation (ch. 16)	L12	-	-	-
	22-Nov	-	-	-	D7	-
	27-Nov	-	-	Q12	-	-
15	27-Nov	-	-	-	-	-
	29-Nov	-	-	-	-	-
	4-Dec	-	-	-	-	Final exam
16	4-Dec	-	-	-	-	-
	6-Dec	-	-	-	-	-
	11-Dec	-	-	-	D8	-
17	11-Dec	-	-	-	-	-
	13-Dec	-	-	-	-	-
	18-Dec	-	-	-	-	-