

EEOB3310.02 Syllabus

Spring 2022

Course Information

- **Course times:**

Activity	Class	Section	Day	Meeting Time
Lecture	EEOB3310.02-101	22454	Tuesday	9:35AM-10:55AM
Lecture	EEOB3310.02-103	22455	Tuesday	12:45PM-2:05PM
Lab	EEOB3310.02-200	22457	Monday	9:00AM-11:00AM
Lab	EEOB3310.02-201	22458	Monday	11:15AM-1:15PM
Lab	EEOB3310.02-203	22460	Monday	1:30PM-3:30PM
Lab	EEOB3310.02-205	22462	Monday	3:45PM-5:45PM
Lab	EEOB3310.02-202	22459	Wednesday	10:15AM-12:15PM
Lab	EEOB3310.02-204	22461	Wednesday	1:00PM-3:00PM
Lab	EEOB3310.02-206	22463	Wednesday	3:15PM-5:15PM
Lab	EEOB3310.02-207	22464	Wednesday	5:30PM-7:30PM

- **Credit hours:** 4
- **Mode of delivery:** Hybrid
 - Lecture-Asynchronous
 - Lecture Review-Synchronous (Online Zoom)
 - Lab-Synchronous (In-Person)

Instructors

- **Name:** H. Lisle Gibbs and Zakee Sabree
- **Email:** gibbs.128@osu.edu and sabree.8@osu.edu
- **Office location:** 370 Aronoff (Gibbs) and 490 Aronoff (Sabree)
- **Office hours:** Gibbs and Sabree: Tuesday 2:30 – 3:30 pm or by appointment
- **Preferred means of communication:**
 - Our preferred method of communication for questions is **email**.



THE OHIO STATE UNIVERSITY

College of Arts and Sciences
Evolution, Ecology and Organismal Biology

- Our class-wide communications will be sent through the Announcements tool in CarmenCanvas. Please check your [notification preferences](https://go.osu.edu/canvas-notifications) (go.osu.edu/canvas-notifications) to be sure you receive these messages.

Teaching Assistants

- **Name:** Dylan Poorboy(poorboy.1), David Hibler (hibler.10), Shelby Moshier (moshier.12), Charlotte Benedict (benedict. 179).
- **Email:** see above and will be posted on Carmen
- **Recitation times:** see Course Times above

Course Prerequisites

Biology 1114 or 1114H, or permission of instructor.

Course Description

This course surveys the many processes that underlie biological evolution and illustrates the patterns they generate, with a focus on adaptation, types of selection, population genetics, species interactions and biodiversity. Additionally, not only will successful students obtain a workable understanding of these concepts, but they will be equipped with basic research practices that include using primary literature databases and reading primary literature.

Learning Outcomes

By the end of this course, students should successfully be able to:

- Students will be familiar with elements of the scientific process, including peer review, primary literature, and research seminars
- Students will be familiar with the research practices and resources used in modern evolutionary biology
- Students will be introduced to the history of biology as it relates to the development of evolutionary theory
- Students will be aware of the evidence for evolution and evolutionary change
- Students will understand how the phylogeny of organisms is determined and how phylogeny relates to the history of life on Earth.
- Students will understand how characters change through time in phylogenetic relationships (descent from a common ancestor with modification over time).
- Students will understand the role of variation, fitness, natural selection and adaptation
- Students will understand selection, including natural selection, sexual selection, and group selection
- Students will understand how randomness affects evolution, including the role of genetic drift and how neutral theory can explain evolutionary phenomena
- Students will understand species concepts and the factors that lead to speciation



- Students will understand adaptation as the outcome of selection
- Students will be introduced to the role of evolutionary theory in conservation biology
- Students will be aware of how evolutionary theory elucidates human evolution



How This Online Course Works

Mode of delivery: This course is 100% online and involves asynchronous and synchronous instruction.

Asynchronous instruction. Students will be assigned ~2hrs of content per week, that includes viewing lectures recorded by EEOB faculty and reading assigned papers.

>Students can independently pace themselves on these materials.

Synchronous instruction. Via Zoom, students must attend a weekly (Tuesday) 80 min lecture and discussion section and a weekly (Monday or Wednesday) 120 min laboratory section.

>Barring an excused absence, students must attend each of their scheduled lecture and lab sections.

Students will be graded based on their performance in assessments that include lecture and lab participation and homeworks, exams, and writing assignments.

Pace of online activities: This course is divided into **weekly modules** that are released one week ahead of time. Students are expected to keep pace with weekly deadlines but may schedule their efforts freely within that time frame.

Credit hours and work expectations: This is a 4 credit-hour course. According to [Ohio State bylaws on instruction](http://go.osu.edu/credithours) (go.osu.edu/credithours), students should expect around 4 hours per week of time spent on direct instruction (instructor content and Carmen activities, for example) in addition to 8 hours of homework (reading and assignment preparation, for example) to receive a grade of [C] average.

Attendance and participation requirements: Participation in the lab and Tuesday lecture periods is required! Because this is an online course, your attendance is based on your online activity and participation. The following is a summary of students' expected participation:

- **Online activities for attendance: at least once per week**
You are expected to log in to the course in Carmen every week. During most weeks you will probably log in many times. If you have a situation that might cause you to miss an entire week of class, discuss it with us *as soon as possible*.
- **Weekly lecture sessions: every Tuesday**
You are expected to Zoom into your assigned Tuesday lecture section for the live lecture review and participate in the lecture activity and/or discussion every week.
- **Weekly lab sessions: every Monday or Wednesday**
You are expected to go to your assigned lab section for the weekly lab activity.
- **Participating in discussion forums: one or more times per week**
Each week there is the recommended option to post a question(s) on the discussion board in the weekly *START HERE* page in Carmen. The instructor or other students will be able to respond to these questions.



Course Materials, Fees and Technologies

Required Materials and/or Technologies

- CarmenConnect text, audio, and video chat
- EEOB 3310 Course Modules, Materials and Lab Manuals (electronic, on Carmen)

Optional Materials and/or Technologies

- “Evolution” 2nd Edition by Bergstrom and Dugatkin (electronic book): use this link to purchase access to the “Evolution” ebook: <https://digital.wwnorton.com/evolution2>
- “Evolution” by Futuyma (print)

Required Equipment

- **Computer:** current Mac (MacOS) or PC (Windows 10) with high-speed internet connection
- **Webcam:** built-in or external webcam, fully installed and tested
- **Microphone:** built-in laptop or tablet mic or external microphone
- **Other:** a mobile device (smartphone or tablet) to use for BuckeyePass authentication

Required Software

Microsoft Office 365: All Ohio State students are now eligible for free Microsoft Office 365. Visit the [installing Office 365](https://go.osu.edu/office365help) (go.osu.edu/office365help) help article for full instructions.

CarmenCanvas Access

You will need to use [BuckeyePass](https://buckeyepass.osu.edu) (buckeyepass.osu.edu) multi-factor authentication to access your courses in Carmen. To ensure that you are able to connect to Carmen at all times, it is recommended that you do each of the following:

- Register multiple devices in case something happens to your primary device. Visit the [BuckeyePass - Adding a Device](https://go.osu.edu/add-device) (go.osu.edu/add-device) help article for step-by-step instructions.
- Request passcodes to keep as a backup authentication option. When you see the Duo login screen on your computer, click **Enter a Passcode** and then click the **Text me new codes** button that appears. This will text you ten passcodes good for 365 days that can each be used once.
- [Install the Duo Mobile application](https://go.osu.edu/install-duo) (go.osu.edu/install-duo) on all of your registered devices for the ability to generate one-time codes in the event that you lose cell, data, or Wi-Fi service.



If none of these options will meet the needs of your situation, you can contact the IT Service Desk at [614-688-4357 \(HELP\)](tel:614-688-4357) and IT support staff will work out a solution with you.

Technology Skills Needed for This Course

- Basic computer and web-browsing skills
- [Navigating CarmenCanvas](https://go.osu.edu/canvasstudent) (go.osu.edu/canvasstudent)
- [CarmenZoom virtual meetings](https://go.osu.edu/zoom-meetings) (go.osu.edu/zoom-meetings)
- [Recording a slide presentation with audio narration and recording, editing and uploading video](https://go.osu.edu/video-assignment-guide) (go.osu.edu/video-assignment-guide)

Technology Support

For help with your password, university email, CarmenCanvas, or any other technology issues, questions or requests, contact the IT Service Desk, which offers 24-hour support, seven days a week.

- **Self Service and Chat:** go.osu.edu/it
- **Phone:** [614-688-4357 \(HELP\)](tel:614-688-4357)
- **Email:** servicedesk@osu.edu

Digital Flagship

Digital Flagship is a student success initiative aimed at helping you build digital skills for both college and career. This includes offering an engaging collection of digital tools and supportive learning experiences, university-wide opportunities to learn to code, and a Design Lab to explore digital design and app development. Digital Flagship resources available to help Ohio State students include on-demand tutorials, The Digital Flagship Handbook (your guide for all things tech-related), workshops and events, one-on-one tech consultations with a peer or Digital Flagship staff member, and more. To learn more about how Digital Flagship can help you use technology in your courses and grow your digital skills, visit go.osu.edu/dfresources.



Grading and Faculty Response

How Your Grade is Calculated

Assignment or category	Percentage
Weekly exams (13 will be administered, 1 lowest score will be dropped)	75% of total grade
Lab module activities (homework, etc.)	4% of total grade
Weekly participation	1% of total grade
Writing Project	20% of total grade
Total	100%

See [Course Schedule](#) for due dates.

Descriptions of Major Course Assignments

Weekly Exams (75% of total grade)

Description: Open book/note exams will be administered weekly on Fridays to students to assess their comprehension of materials covered for that week. **Exams can be taken any time on Friday from 6am-1159pm.**

Thirteen exams in total will be administered and one lowest score will be dropped. Further details on the structure of each exam will be provided on the Carmen course site.

Online module activities (4% of total grade)

Description: A variety of assignments, including homework, that complement activities performed in the lab and/or in the lecture will be required to be completed.

Lecture and Laboratory participation (1% of total grade)

Description: Student participation in weekly lecture and lab activities **is mandatory** and essential towards building a lively community of practice and thus each student's contribution to this will be assessed.



Lab Written Assignment (20% of total grade)

Description: Students will complete lab written assignment that will complement lecture and lab activities, with significant focus on developing effective science communication.

Academic integrity policy

Policies for this online course

- **Exams:** Each online activity will indicate if it is graded or not. You must complete the weekly exams yourself. Any deviation from this policy can and will be referred to the Committee on Academic Misconduct.
- **Written assignments:** Your written assignments, including discussion posts, should be your own original work. In formal assignments, you should follow **APA** style to cite the ideas and words of your research sources. You are encouraged to ask a trusted person to proofread your assignments before you turn them in--but no one else should revise or rewrite your work.
- **Summarize your original sources, don't quote or copy. You should never cut and paste text from original articles** (including figures and table captions). Doing so will result in a severe penalty, even if material is cited. **You must summarize and paraphrase statements from original articles.** We will be using originality checking to help us detect sections of text that are not in your own writing. Note that changing a word or two, but otherwise leaving another author's text intact is not sufficient to avoid a penalty (in addition, changing just a word or two often completely alters the meaning of the quoted material). This includes quotations - even if cited properly, you must avoid direct quotations from your source papers. **Under no circumstances may you use a quotation to explain an original source's hypotheses, predictions, results or interpretation of results.**
- **Reusing past work:** In general, you are prohibited in university courses from turning in work from a past class to your current class, even if you modify it. If you want to build on past research or revisit a topic you've explored in previous courses, please discuss the situation with us.
- **Falsifying research or results:** All research you will conduct in this course is intended to be a learning experience; you should never feel tempted to make your results or your library research look more successful than it was.
- **Collaboration and informal peer-review:** The course includes many opportunities for formal collaboration with your classmates. While study groups and peer-review of major written projects is encouraged, remember that comparing answers on a quiz or assignment is not permitted. If you're unsure about a particular situation, please feel free to ask ahead of time.
- **Group projects:** This course may include group projects, which can be stressful for students when it comes to dividing work, taking credit, and receiving grades and feedback. We have attempted to make the guidelines for group work as clear as



possible for each activity and assignment, but please let us know if you have any questions.

- **Letters of reference:** We are sometimes asked to write letters of reference for graduate or professional schools. **We are more than happy to do so, provided that the student has: (i) participated in classroom discussions in a constructive manner, and (ii) they have made it a point to visit one of us during office hours.** These requirements ensure that we will write a good letter that will actually help you achieve your goals.

Late Assignments

Assignment Due Dates will be announced. For every day (or portion thereof) you are late, you will be penalized by 10%; no work will be accepted after the 4th day

Absence Policy.

Official University absences must be validated by an appropriate official (e.g. Athletics Coach). For illness, please include a copy of your doctor's excuse. We will not allow make up work for unexcused absences.

For Lecture: Notify instructor in advance and/or submit relevant information to the Carmen Assignment called "Excused Lecture Absence" and notify instructors.

For Laboratory: If you must miss a laboratory for a valid reason, you must do the following: 1) notify your instructor and TA by email of your absence in advance or, if it is an emergency as soon as safely possible, 2) submit documentation supporting your excuse to the Carmen Assignment called "Excused Lab Absence".

Instructor Feedback and Response Time

Remember that you can call **614-688-HELP** at any time if you have a technical problem.

Grading and feedback

For large module assignments and projects, you can generally expect feedback within **7 days**. For exams, you will generally receive your scores within a **couple of days, if not sooner**.

E-mail

Instructors and GTAs will reply to e-mails within **24-36 hours, Monday-Friday**.

Carmen questions

For help with your password, university e-mail, Carmen, or any other technology issues, questions, or requests, contact the OSU IT Service Desk. Standard support hours are available at <https://ocio.osu.edu/help/hours>, and support for urgent issues is available 24x7.

- **Self-Service and Chat support:** <http://ocio.osu.edu/selfservice>
- **Phone:** 614-688-HELP (4357)
- **Email:** 8help@osu.edu
- **TDD:** 614-688-8743



Grading scale (percentage)

93–100: A

90–92.9: A-

87–89.9: B+

83–86.9: B

80–82.9: B-

77–79.9: C+

73–76.9: C

70–72.9: C-

67–69.9: D+

60–66.9: D

Below 60: E



Other Course Policies

Discussion and Communication Guidelines

The following are our expectations for how we should communicate as a class. Above all, please remember to be respectful and thoughtful.

- **Writing style:** While there is no need to participate in class discussions as if you were writing a research paper, you should remember to write using good grammar, spelling, and punctuation. A more conversational tone is fine for non-academic topics.
- **Tone and civility:** Let's maintain a supportive learning community where everyone feels safe and where people can disagree amicably. Remember that sarcasm doesn't always come across online.
- **Citing your sources:** When we have academic discussions, please cite your sources to back up what you say. For the textbook or other course materials, list at least the title and page numbers. For online sources, include a link.
- **Backing up your work:** Consider composing your academic posts in a word processor, where you can save your work, and then copying into the Carmen discussion.

Academic Integrity Policy

See [Descriptions of Major Course Assignments](#) for specific guidelines about collaboration and academic integrity in the context of this online class.

Ohio State's Academic Integrity Policy

Academic integrity is essential to maintaining an environment that fosters excellence in teaching, research, and other educational and scholarly activities. Thus, The Ohio State University and the Committee on Academic Misconduct (COAM) expect that all students have read and understand the university's [Code of Student Conduct](http://studentconduct.osu.edu) (studentconduct.osu.edu), and that all students will complete all academic and scholarly assignments with fairness and honesty. Students must recognize that failure to follow the rules and guidelines established in the university's *Code of Student Conduct* and this syllabus may constitute "Academic Misconduct."

The Ohio State University's *Code of Student Conduct* (Section 3335-23-04) defines academic misconduct as: "Any activity that tends to compromise the academic integrity of the university or subvert the educational process." Examples of academic misconduct include (but are not limited to) plagiarism, collusion (unauthorized collaboration), copying the work of another student, and possession of unauthorized materials during an examination. Ignorance of the university's *Code of Student Conduct* is never considered an excuse for academic misconduct, so I recommend that you review the *Code of Student Conduct* and, specifically, the sections dealing with academic misconduct.



If we suspect that a student has committed academic misconduct in this course, we are obligated by university rules to report our suspicions to the Committee on Academic Misconduct. We are aware that there are additional opportunities for cheating in virtual courses, particularly on exams that are taken virtually. **We are exercising multiple tactics for trying to minimize cheating and will also be checking online social-learning sites where cheating has been reported to the University.** If COAM determines that you have violated the university's Code of Student Conduct (i.e., committed academic misconduct), the sanctions for the misconduct could include a failing grade in this course and suspension or dismissal from the university.

If you have any questions about the above policy or what constitutes academic misconduct in this course, please contact me.

Other sources of information on academic misconduct (integrity) to which you can refer include:

- [Committee on Academic Misconduct](http://go.osu.edu/coam) (go.osu.edu/coam)
- [Ten Suggestions for Preserving Academic Integrity](http://go.osu.edu/ten-suggestions) (go.osu.edu/ten-suggestions)
- [Eight Cardinal Rules of Academic Integrity](http://go.osu.edu/cardinal-rules) (go.osu.edu/cardinal-rules)

Copyright for Instructional Materials

The materials used in connection with this course may be subject to copyright protection and are only for the use of students officially enrolled in the course for the educational purposes associated with the course. Copyright law must be considered before copying, retaining, or disseminating materials outside of the course.

Statement on Title IX

All students and employees at Ohio State have the right to work and learn in an environment free from harassment and discrimination based on sex or gender, and the university can arrange interim measures, provide support resources, and explain investigation options, including referral to confidential resources.

If you or someone you know has been harassed or discriminated against based on your sex or gender, including sexual harassment, sexual assault, relationship violence, stalking, or sexual exploitation, you may find information about your rights and options on [Ohio State's Title IX website](http://titleix.osu.edu) (titleix.osu.edu) or by contacting the Ohio State Title IX Coordinator at titleix@osu.edu. Title IX is part of the Office of Institutional Equity (OIE) at Ohio State, which responds to all bias-motivated incidents of harassment and discrimination, such as race, religion, national origin and disability. For more information, visit the [OIE website](http://equity.osu.edu) (equity.osu.edu) or email equity@osu.edu.



Commitment to a Diverse and Inclusive Learning Environment

The Ohio State University affirms the importance and value of diversity in the student body. Our programs and curricula reflect our multicultural society and global economy and seek to provide opportunities for students to learn more about persons who are different from them. We are committed to maintaining a community that recognizes and values the inherent worth and dignity of every person; fosters sensitivity, understanding, and mutual respect among each member of our community; and encourages each individual to strive to reach his or her own potential. Discrimination against any individual based upon protected status, which is defined as age, color, disability, gender identity or expression, national origin, race, religion, sex, sexual orientation, or veteran status, is prohibited.

Your Mental Health

As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce a student's ability to participate in daily activities. No matter where you are engaged in distance learning, The Ohio State University's Student Life Counseling and Consultation Service (CCS) is here to support you. If you find yourself feeling isolated, anxious or overwhelmed, [on-demand mental health resources](https://go.osu.edu/ccsondemand) (go.osu.edu/ccsondemand) are available. You can reach an on-call counselor when CCS is closed at [614- 292-5766](tel:6142925766). **24-hour emergency help** is available through the [National Suicide Prevention Lifeline website](https://www.suicidepreventionlifeline.org) (suicidepreventionlifeline.org) or by calling [1-800-273-8255\(TALK\)](tel:18002738255). [The Ohio State Wellness app](https://go.osu.edu/wellnessapp) (go.osu.edu/wellnessapp) is also a great resource.



Accessibility Accommodations for Students with Disabilities

Requesting Accommodations

The university strives to make all learning experiences as accessible as possible. In light of the current pandemic, students seeking to request COVID-related accommodations may do so through the university's request process, managed by Student Life Disability Services. If you anticipate or experience academic barriers based on your disability (including mental health, chronic, or temporary medical conditions), please let me know immediately so that we can privately discuss options. To establish reasonable accommodations, I may request that you register with Student Life Disability Services. After registration, make arrangements with me as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion.

Disability Services Contact Information

- Phone: [614-292-3307](tel:614-292-3307)
- Website: slds.osu.edu
- Email: slds@osu.edu
- In person: [Baker Hall 098, 113 W. 12th Avenue](#)

Accessibility of Course Technology

This online course requires use of CarmenCanvas (Ohio State's learning management system) and other online communication and multimedia tools. If you need additional services to use these technologies, please request accommodations with your instructor.

- [CarmenCanvas accessibility](http://go.osu.edu/canvas-accessibility) (go.osu.edu/canvas-accessibility)
- Streaming audio and video
- [CarmenZoom accessibility](http://go.osu.edu/zoom-accessibility) (go.osu.edu/zoom-accessibility)
- Collaborative course tools

COVID-Related Accommodations

The university strives to make all learning experiences as accessible as possible. In light of the current pandemic, students seeking to request COVID-related accommodations may do so through the university's [request process](#), managed by Student Life Disability Services. If you anticipate or experience academic barriers based on your disability (including mental health, chronic, or temporary medical conditions), please let me know immediately so that we can



privately discuss options. To establish reasonable accommodations, I may request that you register with Student Life Disability Services. After registration, make arrangements with me as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion. SLDS contact information: slds@osu.edu; 614-292-3307; slds.osu.edu; 098 Baker Hall, 113 W. 12th Avenue.



Course Schedule

Refer to the CarmenCanvas course for up-to-date due dates and topics may be revised/reordered at the instructors discretion.

Week	Week of:	Topics, Readings, Assignments, Due Dates
1	Jan 10	Course Introduction, Evidence For and Misconceptions of Evolution
2	Jan 17	History of Evolutionary Theory & Sources of Genetic Variation
3	Jan 24	Evolutionary Processes - Mutation & Selection
4	Jan 31	Evolutionary Processes - Drift & Migration
5	Feb 7	Phylogenetics
6	Feb 14	Speciation and Species Concepts
7	Feb 21	Sexual Selection
8	Feb 28	Evolution and Development
9	Mar 7	Genome Evolution
10	Mar 14	No Module - Spring Break
11	Mar 21	Coevolution & Adaptive Radiation
12	Mar 28	Sociality, Cooperation and Conflict
13	Apr 4	Biodiversity and Extinctions
14	Apr 11	Human Evolution and Society: Senescence and Darwinian Medicine
15	Apr 18	Human Evolution and Society: Anthropological Evidence & Cultural Evolution
16	Apr 25	No Module

