



PALEONTOLOGY


GLY3603C SPRING 2024 UNIVERSITY OF FLORIDA

CONTACT


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COURSE MATERIALS:

Access the course at:

<https://elearning.ufl.edu>

Text: Bringing Fossils to Life: An Introduction to Paleobiology, Donald R. Prothero, 3rd ed.

Fossil Kit: Purchased through bookstore

KEY DATES

Exam 1: Feb 7th

Exam 2: Mar 27th

Exam 3: Apr 24th

Welcome to Paleontology! In this course we will explore the fundamental concepts of Paleontology, including learning to identify invertebrate fossils, exploring the evolution of life through time and much more! Please read through the syllabus for important information to help you succeed in this course.

COURSE MATERIAL:

The textbook for this course is *Bringing Fossils to Life: An Introduction to Life* by Donald R. Prothero, 3rd edition.

There is no lab manual. The text available in Module 3 and your textbook are all the reference materials you need.

You will also need to rent a fossil kit for this course. The kit is available at the [University of Florida Bookstore website \(Links to an external site\)](#) and the item is called "GLY 3105 & 3603". If you enter the course information using the drop down menus the kit will show up under the list of required materials. Kits will not be mailed out until after the add/drop date.

You will rent the kit for a rental fee of ~\$80 (covers postage to your home and a postage paid return address label). You will use the postage paid return address label to return the kit. You will be charged an additional \$200.00 if you do not return the kit, and your student record will be flagged until payment is made.

COURSE-RELATED QUESTIONS:

The preferred way to contact me (other than at office hours) is through Canvas Inbox as it is easier to keep track of our conversations. However, if you

need to, you can contact me via email at csprain@ufl.edu. Throughout the semester, I will provide information to you through Canvas announcements. Be sure that you check announcements regularly and set up Canvas to have announcements delivered to you as emails as well. You should also take advantage of the Course Questions Discussion Board on Canvas. This provides a simple way of communicating with other students in the class. It is particularly useful when looking for information, or providing information to your fellow students that may not be an explicit part of instructions/syllabus (e.g., issues regarding technology, programs/browsers that you find useful, your experiences in best practices, discussions on course content, etc.)

TECHNOLOGY REQUIREMENTS

Computer & Internet: Access to and on-going use of a computer is required for all students. Competency in the basic use of a computer is required. This is an online course and access to a computer is needed for every component of the course. For additional information on UF College of Liberal Arts and Sciences policy regarding computer requirements you can visit:

<http://it.clas.ufl.edu/policies/student-computer-requirement/>

COURSE DETAILS

Prerequisites & Course Info: There are no formal prerequisites for this course however some background in geology or biology are useful.

Course Summary & Goals: The focus of this course is to provide you with an introduction to Paleontology. This is an online asynchronous course and all course materials are available online on the course Canvas page. This course consists of 8 modules that contain lecture videos and lab assignments. There will also be a Discussion assignment with every module. It is your responsibility to watch the pre-recorded lectures, read the text, and complete labs and discussion assignments on your own time. Self-pacing is very important in order to keep up with the work for the course. In the lecture videos, many topics focusing on an examination of the fossil record and its uses will be covered, while the labs will focus mainly on particular fossil groups. The lectures will provide you with an advanced understanding of overarching concepts. Specifically, you will be introduced to basic concepts of preservation (how do we get fossils) and systematics (how do we name fossils). We will then cover the vast array of uses for paleontology: biostratigraphy, deciphering evolution, reconstructing paleoecology, inferring past climates, functional morphology, biogeography, biodiversity, extinction events, and behavior. When you complete this course you'll be able to:

- Describe the nature of fossilization and their environments of preservation
- Explain evolutionary theory, the species concept, patterns of evolution, and causes of extinction.
- Explain methods of biostratigraphic-magnetostratigraphic-chemostratigraphic correlation.
- Analyze taxonomic principles.
- Describe the biology (if extant) and fossil characteristics of all Paleozoic-Recent invertebrate phyla.
- Examine the nature of the invertebrate assemblages of the Phanerozoic and assess their environmental and stratigraphic significance.
- Identify key ways to use fossil assemblages to establish a rapid age determination of rocks and sediments.
- Describe the origin and changes in reef assemblages, their manifestation in the geologic record, and economic importance.
- Describe the morphologic characteristics of all major microfossil groups.
- Explain the usefulness of microfossils in stratigraphic and paleoenvironmental analysis.

Course Responsibilities: You will need to have regular internet access and the time to explore the resources available for each Module. Over the course of the semester, you will have the following responsibilities:

- Watch all lecture and lab videos in addition to reading the required course text associated with each module. You should self-pace and follow the recommended schedule for completing the Modules that is posted on Canvas.
- Complete all graded activities in a timely fashion.
 This includes labs and discussions. There are 13 labs throughout the semester in addition to one Final Fossil identification activity that you will complete throughout the semester. On average, one lab will be due a week. You are responsible for reading all the background material for the lab and looking at the resources available, in addition to completing the lab. Each Module will also have a graded Discussion assignment that will be due at the end of each Module. Requirements for course participation, make-up exams and other work is consistent with university policies:
<https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>
- Check the course announcements and class e-mail regularly, at least three times a week.

Course Schedule: This course is divided into eight modules that cover the material for each of the three exams. Each module and associated assignments will open as we move through the semester. The course Calendar on our Canvas page has the exact due dates for each activity. For a schematic of the course schedule, see the Syllabus page on the Canvas Site. Note, Module 3 is your lab book and not a formal Module.

Rough Schedule		
Module	Topics	Assignments
Module 1: 1/8–1/26	The Fossil Record and Preservation	Labs 1 & 2, Discussion Module 1
Module 2: 1/26-2/2	Preparing for the Paleontology Record	Lab 3, Discussion Module 2
Module 4: 2/2-2/23	Changes in Life Through Time: The Paleozoic Era	Labs 4, 5, & 6, Discussion Module 4
2/7	Exam 1: Feb. 7th	Modules 1 and 2

Module 5: 2/23-3/1	Changes in Life Through Time: A Closer Look at the Paleozoic Evolution	Lab 7, Discussion Module 5
Module 6: 3/1-3/27	Changes in Life Through Time: The Mesozoic Era	Labs 8 & 9, Discussion Module 6
3/27	Exam 2: March 27th	Modules 4, 5, and 6.1
Module 7: 3/22-3/29	Changes in Life Through Time: The Cenozoic Era	Lab 10, Discussion Module 7
Module 8: 3/29-4/24	Microfossils as Important Stratigraphic and Environmental Tools	Labs 11, 12, 13, and Final Fossil ID. Discussion Module 8
4/24	Exam 3: April 24th	Modules 6.2–6.5, 7, and 8.

COURSE ACTIVITY DESCRIPTIONS

Lectures Each Module consists of a number of pre-recorded lectures ranging from 1-3 hours in total time. It is your responsibility to watch these lectures in your own time throughout the semester. There are also pre-recorded videos and lectures that aid with the lab assignments. It is your responsibility to watch these in your own time.

Readings Each Module will include assigned reading from your textbook and some of the labs and Discussions will include additional reading assignments. The textbook is a great resource for you and will aid in your success in understanding course material from the lectures and the labs.

Laboratory Each Module consists of associated labs (on average 1 is due per week). The lab assignments will focus on specifics and details of fossil groups. There is also a semester long Fossil ID lab due at the end of term that should be completed throughout the semester. It is your responsibility to go through all the background material for the labs and to complete the labs before their due dates. Lab exercises will be submitted in digital form and in some cases must be scanned and uploaded to Canvas as a PDF or Word Document.

Discussion Each Module will contain a Discussion that comprises an activity, such as reading an article, that you are required to share your opinion on. Each discussion is worth 20 points and you must compose your own post and also comment on two others. Discussions will be done in discussion groups that will be assigned.

Exams There are three non-cumulative Exams for this course. All three lecture exams are taken online on Canvas and will be proctored using Honorlock. You will need a webcam to use Honorlock and will need to be able to take the exams in a room by yourself at a clear desk. They will comprise multiple question types: multiple choice, short calculations, true/false, short answers, fill in the blanks, etc. There is no lab or course final.

Extra Credit You can earn 1.5% extra credit (added to your overall grade) if you complete the Syllabus and Start Here Quiz prior to the deadlines listed in your Canvas Course Calendar. An additional 1.5% can be earned if you participate in the Paleontology in your life-Extra credit Discussion board throughout the semester. Lastly, you can earn an additional 1.5% by visiting a museum (with fossils), paleontology lecture, conference, geological site etc. that touches upon topics related to Paleontology.

GRADING

See <https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx> for general UF grading policies. Grades will be based on points accumulated through course activities (Goals and logistics of each of the activities are discussed below):

Lab: (13 labs plus the final Fossil ID activity, ~one per week) - **40%**

Discussion (7) – One per module, ~ 1 due every two weeks, each worth 20 points - **15% Total**

Exams (3) – Online proctored with Honorlock - **45% (15% each exam)**

Total = 100%

There will also be the two opportunities to earn up to 4.5% extra credit stated above.

Grading Scale for Overall Course Grade:

% Grade	Letter Grade
90 +	A
87.5-90	B+
80-87.5	B
77.5-80	C+
70-77.5	C
67.5-70	D+
60-67.5	D
<60	F

NOTE: If you fall on a boundary (e.g., 80%), you will receive the higher grade (e.g., 80% = B)

Because the minimum number for each grade range is lower than normal, there is no rounding at the end.

Late work: The following is a list of penalties for late submissions. Exceptions to these policies will only be provided with fully documented excuses and must be approved by the instructor.

Labs: 30% score reduction for each day late (no submissions accepted after 48 hours)

Discussion: 30% score reduction for each day late (no submissions accepted after 48 hours)

Extra Credit: The syllabus and start here quiz cannot be turned in after the due date, other extra credit opportunities must be submitted by the last day of class (4/24/24).

Exams: Exams cannot be taken after the Exam window has closed without preapproved permission from the instructor.

*****Any technology issues encountered during online activities must be documented with screenshots of error messages, etc.*****

ATTENDANCE

Students are responsible for satisfying all academic objectives of this course. To do this, it is important to watch lecture videos and readings as the course progresses, and not right before exams (or never!). It will be hard to have meaningful discussions without having watched the videos and completed the readings. Additionally, this information will aid in the successful completion of lab assignments. I will be assigning each of you to a discussion group at the beginning of the semester that will not change. Please, get to know these people and use them as an additional resource! You are encouraged to engage outside of formal discussion assignments. Additionally, there will be an extra credit Paleontology in your life Discussion board open for the whole class throughout the semester. Please post cool things you find in your everyday life that may be relevant to the course here! This can include science news articles, fun comics, memes, or fossils you come across in your life during the tenure of this course. Please participate! In general, acceptable reasons for assignment extensions include illness, serious family emergencies, special curricular requirements, military obligation, severe weather conditions, religious holidays, and participation in official university activities. Absences from class for court-imposed legal obligations (e.g., jury duty or subpoena) will be excused. Other reasons also may be approved. The biggest thing is communication. Let me know if you need an extension but please, if possible, do so BEFORE the missed assignment. Additionally, you will be given plenty of time to complete assignments so try to not leave it all until the last minute! You'll be permitted a reasonable amount of time to make up the material or activities covered in your absence. I know this course is online, but I think we can all benefit from more social interaction and overall your participation will enhance your course experience. So, please participate!

LECTURE RECORDINGS

- Lecture recordings are provided for students in this course. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal educational use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may not publish recorded lectures without the written consent of the instructor.

A “class lecture” is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, exams), field trips, private conversations between students in the class or between a student and the faculty or lecturer during a class session.

Publication without permission of the instructor is prohibited. To “publish” means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.

ACCESSIBILITY, INCLUSION & RESPECT

Respect: In this virtual classroom, everyone should feel welcome to share their thoughts in a respectful way. Treat your classmates the way you would like to be treated. If something in the course material, instruction, or class interactions makes you feel excluded or uncomfortable, please let me know so I can address it.

UF Statement on Accommodating Students with Disabilities: Students with disabilities requesting accommodations should first register with the Disability Resource Center by calling 352-392-8565 or by computer at: <https://disability.ufl.edu/> and provide appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students should follow this procedure as early as possible in the semester, as *accommodations are not retroactive*.

My Statement on Accessibility: We all learn differently. You don't have to have a formally recognized disability to find yourself having difficulty with some aspect of the college learning environment. For example, colorblindness is not typically recognized in formal accommodations, but very much impacts a student's ability to process visual information. Please let me know if something in the course material presents a barrier to your full participation in the class so we can work together to find a reasonable solution – *even if you don't have a formal accommodation letter*.

Religious Observances: Students who anticipate the necessity of missing homework deadlines and discussions due to religious observances *must provide notice of the date(s) to the instructor*, in writing at least two weeks in advance of the missed class days so accommodations can be made for missed work. Do not wait until after you have missed assignments to ask for an exception, as these requests may not be honored!

STUDENT FEEDBACK AND COURSE EVALUATION

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at <https://gatorevals.aa.ufl.edu/students/>. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>.

UF POLICIES

University Policy on Academic Misconduct: Academic honesty and integrity are fundamental values of the University community. Students should be sure that they understand the UF Student Honor Code at: <https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/>.

The University of Florida Honor Code was voted on and passed by the Student Body in the Fall 1995 semester. The Honor Code reads as follows:

Preamble: In adopting this Honor Code, the students of the University of Florida recognize that academic honesty and integrity are fundamental values of the University community. Students who enroll at the University commit to holding themselves and their peers to the high standard of honor required by the Honor Code. Any individual who becomes aware of a violation of the Honor Code is bound by honor to take corrective action. A student-run Honor Court and faculty support are crucial to the success of the Honor Code. The quality of a University of Florida education is dependent upon the community acceptance and enforcement of the Honor Code.

The Honor Code: "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity."

On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied:

"On my honor, I have neither given nor received unauthorized aid in doing this assignment."

If you are caught cheating or helping someone else cheat, you will be subject to sanctions according to the procedures of Student Conduct and Conflict Resolution (SCCR). If you suspect another student of cheating, please let me know, or call the Cheating Hotline (352-392-6999).

For more information about academic honesty, contact Student Judicial Affairs, P202 Peabody Hall, 352-392-1261.

In addition to the general University academic policy, it is important to stress the importance of individual work on all assignments. You will be allowed to collaborate on some of the discussion assignments; however, each individual must turn in their work in their own words and must show all calculations/etc.. Failure to follow this procedure will result in a zero for the assignment. This is particularly important for laboratory work.

Netiquette – Communication Courtesy: All members of the class are expected to follow rules of common courtesy in all email messages, threaded discussions and chats. More information at: https://www.cise.ufl.edu/wp-content/uploads/2019/08/CISE_Netiquette_Guide.pdf

UF Online Handbook: Available at: <http://handbook.ufonline.ufl.edu/>

NEED HELP?

Technical Support: For issues with technical difficulties for E-learning, please contact the UF Help Desk: <http://helpdesk.ufl.edu/>, or (352) 392-4357 and select option 2. If you miss a deadline due to technical issues, requests for extensions or make-up activities MUST be accompanied by the ticket number received from The Help Desk when the problem was reported to them. The ticket number will document the time and date of the problem. You MUST e-mail your instructor within 24 hours of the technical difficulty if you wish to request a make-up.

Help from me and/or TAs: While I have a short window of time listed for office hours, I am happy to set up a virtual chat at another time. Office hours are for your benefit - ask questions, get assignment help, discuss geoscience degrees and career options, etc. You may also email me, but please check to make sure your question has not been answered already in the Announcements or Class Questions discussion board before reaching out. For questions about grading, please contact both me and the TAs in one email. They are also a great resource for questions about the material. Please be aware that your instructor and TAs are humans that sleep at night and are not tied to their computers all weekend, so there are times when your email may go unanswered for up to 48 hours.

Campus Resources:

Health and Wellness

U Matter, We Care: If you or someone you know is in distress, please contact umatter@ufl.edu, 352-294-2273, or visit U Matter, We Care website (<https://umatter.ufl.edu/>) to refer or report a concern and a team member will reach out to the student in distress.

Counseling and Wellness Center: Visit the Counseling and Wellness Center website (<https://counseling.ufl.edu/>) or call 352-392-1575 for information on crisis services as well as non-crisis services.

Student Health Care Center: Call 352-392-1161 for 24/7 information to help you find the care you need, or visit the Student Health Care Center website (<https://shcc.ufl.edu/>).

University Police Department: Visit UF Police Department website (<https://police.ufl.edu/>) or call 352-392-1111 (or 9-1-1 for emergencies).

UF Health Shands Emergency Room / Trauma Center: For immediate medical care call 352-733-0111 or go to the emergency room at 1515 SW Archer Road, Gainesville, FL 32608; Visit the UF Health Emergency Room and Trauma Center website (<https://ufhealth.org/uf-health-shands-emergency-room-trauma-center>).

Academic Resources:

E-learning technical support: Contact the UF Computing Help Desk (<https://helpdesk.ufl.edu/>) at 352-392-4357 or via e-mail at helpdesk@ufl.edu.

Career Connections Center (<https://career.ufl.edu/>): Reitz Union Suite 1300, 352-392-1601. Career assistance and counseling services.

Library Support (<https://uflib.ufl.edu/find/ask/>): Various ways to receive assistance with respect to using the libraries or finding resources.

Teaching Center (<https://teachingcenter.ufl.edu/>) : Broward Hall, 352-392-2010 or to make an appointment 352- 392-6420. General study skills and tutoring.

Writing Studio (<https://writing.ufl.edu/writing-studio/>): 2215 Turlington Hall, 352-846-1138. Help brainstorming, formatting, and writing papers.

Student Complaints On-Campus: Visit the Student Honor Code and Student Conduct Code webpage for more information (<https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/>).

On-Line Students Complaints: View the Distance Learning Student Complaint Process (https://flexible.dce.ufl.edu/media/flexibleuceufl.edu/documents/student_complaint_grievance_policy.pdf)

Other Resources: For support regarding Counseling and Wellness, disability, documenting student concerns and complaints, and a link to the Library Help Desk, please see: <https://www.ufl.edu/current-students/>