

# Age of Dinosaurs

University of Florida (Online)

GLY 1102

## Course Description & Goals

Welcome to Age of Dinosaurs! As the name suggests, the focus of this course is dinosaurs. To understand dinosaurs and their place in Earth's history, we will explore the basics of geology including how the Earth changes over time and how rocks and fossils form. To understand dinosaurs as living organisms, we will cover biology basics including organization and classification of taxa, anatomy and ecosystems. We will also discuss topics related to modern paleontology. The primary goals of this course are to:

- Introduce the science of Paleontology through an examination of dinosaurs and other Mesozoic life.
- Learn about the materials, processes and events that comprise and shape the Earth over time.
- Examine the concepts of Deep Time including the geologic time scale and determining the age of rocks and fossils.
- Learn the basic concepts of biology, ecology and anatomy needed to understand dinosaurs as living organisms.
- Improve scientific literacy and critical thinking by exploring recent developments and current events in paleontology.

## Course Format

This course is asynchronous, which means you work through modules on your own and there are no required "live" class meetings. However, you can chat with the instructor or TAs during weekly optional Office Hours on Zoom and use the class discussion boards to interact with the whole class.

## Textbook:

**Dinosaurs: The Textbook, 7th Edition by Spencer Lucas**  
Hard copy, pdf, online, new, used – any format is acceptable.



## Contact Information

**Dr. Anita Marshall (she/her)**

Email: [anita.marshall@ufl.edu](mailto:anita.marshall@ufl.edu), or message through Canvas.

### Virtual Office Hours:

Mon 10:00 am - 11:00 pm EST

Thurs 11:00 am - 12:00 pm EST

See Canvas for Zoom links. Auto-captions and transcription enabled.

## Teaching Assistants

**TA1: Joo Jang (he/him)**

Email: [hyungjoojang@ufl.edu](mailto:hyungjoojang@ufl.edu) or message through Canvas.

### Virtual Office Hours:

Wed 2:00 – 4:00pm EST

**TA2: Jalissa Weekes (she/her)**

Email: [jalissa.weekes@ufl.edu](mailto:jalissa.weekes@ufl.edu) or message through Canvas.

### Virtual Office Hours:

TBA

## Important Dates

Exam 1 Open: Feb 11 - 14

Exam 2 Open: Mar 24 – 27

Exam 3 Open: Apr 28 – May 1

# COURSE MATERIALS & TECHNOLOGY REQUIREMENTS

**Textbook:** The textbook for this course is *Dinosaurs: The Textbook*, 7th Edition by Spencer Lucas. You may purchase it through the UF bookstore or rent/buy through 3rd party sellers. Any format that you prefer is ok (physical, pdf, online access, whatever). You won't need access codes, so used is also fine. The first two week's reading assignments are from open online sources to give you time to get the book, but you will need the textbook for the rest of the course. *Note: The science of paleontology is constantly updating our understanding of dinosaurs, so the most recent edition is preferred. However, there are minor differences between the 6<sup>th</sup> and 7<sup>th</sup> edition, so the 6<sup>th</sup> would work.*

**Technology Requirements:** Course work will require use of a computer and internet. All assignments will be turned in online through the Canvas course page. 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 and Course Info:** This is an introductory course with no prerequisites. GLY 1102 is a General Education Physical Science (P) and Biological Science (B) course. Credit hours: 3.

### Student Learning outcomes:

These outcomes align with UF's Subject Area Objectives for Physical and Biological Sciences.

1. Identify and explain the basic concepts and terminology of geology and paleontology, including plate tectonic theory, geologic time, rock formation and fossilization and preservation of biological information in the rock record. Assessed with Quizzes and Exams.
2. Identify and describe the relevant processes and concepts of biological sciences including vertebrate anatomy, phylogeny, and evolutionary theory. Assessed with Quizzes and Exams.
3. Apply logical reasoning skills and and critical thinking effectively to solve scientific problems and evaluate outcomes. Assessed in Assignments.
4. Describe and explain major historic and modern discoveries in the field of dinosaur paleontology and the impacts of those discoveries on science and society. Assessed through Discussions.
5. Communicate knowledge of paleontology and the ethical and social contexts in which it exists, clearly and effectively. Assessed through Discussions.

## YOUR COURSE RESPONSIBILITIES

- Complete all Module assignments in a timely fashion. Each module includes reading assignments from the textbook and other sources, video lectures and other video content (with accompanying PowerPoint presentations as pdfs), a Module Quiz, and an Assignment and/or Discussion. Requirements for class participation, make-up exams and other work is consistent with university policies: <https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>
- Check the announcements and your e-mail regularly - at least three times a week. It is the only way I can directly communicate with you in an online class. Checking in on course Discussion boards is also highly encouraged (and fun – that's where some of the best conversations in the course happen!)
- Respect your fellow class members and follow "Netiquette" Guidelines.

## COURSE ACTIVITY TYPES

Modules are content and activities grouped by topic. Each module contains assigned readings and videos to introduce concepts and activities to help you engage with the material and a Quiz to help assess what you've learned. We complete one module per week.

**Assignments:** Activities enable you to explore concepts related to the module learning objectives in more detail. All module assignments are due no later than 11:55 on the last day of the module. Assignments are worth 50 points each. Your lowest assignment grade will be dropped. Assignments count for 30% of your grade.

**Quizzes:** Each Module has a quiz worth 100 points that draws from all assigned module material – lecture, other videos and readings. Module Quizzes are not timed or proctored, and you have two chances on each quiz. Your lowest quiz grade will be dropped. Quizzes are worth 30% of your grade.

**Discussions:** This is your chance to thoughtfully engage in topics that are being actively debated in the world of dinosaur paleontology. You will be expected to post a thoughtful, detailed response according to the Substantive Post Guidelines and Discussion Rubrics on the class website. You have 2 weeks for each discussion: one for your initial post, and one for your follow-up replies. It is easy to forget to do initial posts, so please keep an eye on due dates! Full participation, as outlined in the instructions for each Discussion, is worth 50 points, and Discussions are worth 20% of your total grade. Your lowest discussion grade drops.

**Exams:** There are 3 Exams. Exam 1 covers Modules 1-4, Exam 2 covers Modules 5-8, and Exam 3 covers Modules 9-12. Each exam has 15 questions from each module and is worth a total of 300 points. Exams are 20% of your total grade and are proctored with Honorlock. You have two hours for each exam unless accommodated for more. Here are some key points about Honorlock Proctoring:

- You do not need to make a separate account or pre-schedule your exam, just login to Canvas and start the exam when you are ready.
- You will need a computer with reliable internet access and a webcam. You will not be video recorded during your exam but will need video capabilities to show a photo ID to the proctor.
- You will be required to show picture identification at the time of your exam. Approved forms of identification include, but are not limited to, a driver's license, military identification card, passport, or school-issued identification card.
- You are allowed to use your notes for exams, but internet browsing will be disabled while your exam is open, so it is important that any digital notes you wish to access are stored on your local hard drive and not stored online.

## GRADES

A minimum grade of C is required for general education credit. See

<https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx> for general UF grading policies.

Grades will be weighted as follows:

|                |                    |
|----------------|--------------------|
| Assignments    | 30% of total grade |
| Module Quizzes | 30% of total grade |
| Discussions    | 20% of total grade |
| Exams          | 20% of total grade |

## Grading Scale for Overall Course Grade:

| % Grade | Letter Grade | GPA Value |
|---------|--------------|-----------|
| 90 +    | A            | 4.0       |
| 85-90   | B+           | 3.5       |
| 80-84.9 | B            | 3.0       |
| 75-79.9 | C+           | 2.5       |
| 70-74.9 | C            | 2.0       |
| 65-69.9 | D+           | 1.5       |
| 59-65.9 | D            | 1         |
| < 58.9  | E            | 0         |

**Late work:** Assignments and Quizzes can be turned in up to one week late with no penalty. The one exception is Module 12, where the late submission window is shortened due to the end of the semester. Discussions and Exams are not accepted late without approval from the instructor, so get those in on time!

## COURSE SCHEDULE

Modules open and close on Wednesdays. New Modules open at noon, prior modules close and module components are due on Wednesday at 11:59 pm (US Eastern Time) unless otherwise noted. Changes to the schedule will be posted on Canvas.

| Week            | Modules   | Discussions                      |
|-----------------|---|----------------------------------|
| 1.) 1/10 – 1/17 | <b>Start Here Module &amp; Module 1: Intro to Geology and Paleontology</b><br><u>To do:</u> <ul style="list-style-type: none"> <li>• Extra Credit Syllabus quiz</li> <li>• Module 1 Quiz</li> <li>• Assignment: Plate tectonics and Earth's Change Over Geologic Time.</li> </ul> | D1: Me and My Dinosaur           |
| 2.) 1/17 – 1/24 | <b>Module 2: Fossils and Paleoenvironments</b><br><u>To do:</u> <ul style="list-style-type: none"> <li>• Module 2 Quiz</li> <li>• Assignment: Stratigraphy and Geologic Maps</li> </ul>   |                                  |
| 3.) 1/24 – 1/31 | <b>Module 3: Evolution, Phylogeny and Classification</b><br><u>To do:</u> <ul style="list-style-type: none"> <li>• Module 3 Quiz</li> <li>• Assignment: Diversity and Evolution of Species and working with Phylogenetic data</li> </ul>  | D2: Fossils - Bones or Minerals? |
| 4.) 1/31 – 2/7  | <b>Module 4: The Origin of Dinosaurs</b><br><u>To do:</u> <ul style="list-style-type: none"> <li>• Module 4 Quiz</li> <li>• No assignment for this module</li> </ul>  |                                  |
| 5.) 2/7 – 2/14  | <b>Exam 1: Modules 1-4. Exam open February 11 - 14.</b>   |                                  |
| 6.) 2/14 – 2/21 | <b>Module 5: Sharp Teeth and Quick Feet – Theropods</b><br><u>To do:</u> <ul style="list-style-type: none"> <li>• Module 5 Quiz</li> </ul>  | D3: Stormy Legacy of the         |

|                  |  |  |
|------------------|--|--|
|                  | <ul style="list-style-type: none"> <li>Assignment: Interpreting Dinosaur Footprints and Trackways</li> </ul>   | Thunder Lizard                                     |
| 7.) 2/21 – 2/28  | <b>Module 6: The Giants – Saruopodomorphs</b><br><u>To do:</u> <ul style="list-style-type: none"> <li>Module 6 Quiz</li> <li>Assignment: Care and Feeding of Your Dinosaur – exploring metabolism and ecosystem requirements of the largest land animals.</li> </ul> |  |
| 8.) 2/28 – 3/6   | <b>Module 7: Duckbills and Crests – Ornithopods</b><br><u>To do:</u> <ul style="list-style-type: none"> <li>Module 7 Quiz</li> <li>No Assignment for this module</li> </ul>  | D4: Clever Girl - How Intelligent were Dinosaurs?  |
| 9.) 3/6 – 3/20*  | <b>Module 8: Armor Up! – Thyreophorans</b><br>*This module straddles <b>SPRING BREAK</b> . Work on it before or after.<br><u>To do:</u> <ul style="list-style-type: none"> <li>Module 8 Quiz</li> <li>No Assignment for this module</li> </ul>                       |  |
| 10.) 3/20 – 3/27 | <b>Exam 2: Modules 5-8. Exam open March 24 – 27.</b>   |  |
| 11.) 3/27 – 4/3  | <b>Module 9: Boneheads &amp; Beaks – Marginocephalians</b><br><u>To do:</u> <ul style="list-style-type: none"> <li>Module 9 Quiz</li> <li>Assignment: Growing Up Triceratops – reconstructing growth series for extinct animals</li> </ul>                           | D5: Paleo Ethics – Ancient past, modern challenges |
| 12.) 4/3 – 4/10  | <b>Module 10: The Mesozoic World</b><br><u>To do:</u> <ul style="list-style-type: none"> <li>Module 10 Quiz</li> <li>No Assignment for this Module</li> </ul>  |  |
| 13.) 4/10 – 4/17 | <b>Module 11: Life as a Dinosaur</b><br><u>To do:</u> <ul style="list-style-type: none"> <li>Module 11 Quiz</li> <li>Assignment: Bringing the Heat – analyzing temperature regulation data for modern animals and applying it to dinosaurs.</li> </ul>               | D1: Me and My Dinosaur Pt 2.                       |
| 14.) 4/17 – 4/24 | <b>Module 12: The Survivors – Extinction and Beyond</b><br><u>To do:</u> <ul style="list-style-type: none"> <li>Module 12 Quiz</li> <li>No Assignment for this Module</li> </ul>   |  |
| 15.) Finals Wk   | <b>Exam 3: Modules 9-12. Exam open 4/28 – 5/1.</b>   |  |

## ACCESSIBILITY, INCLUSION & RESPECT

**Respect & Inclusion:** In this classroom (physical or virtual), everyone should feel welcome to share their thoughts in a respectful way. Treat you classmates the way you would like to be treated. You deserve to be called by the name and pronouns you prefer and with the correct pronunciation. If you like, you can record the correct pronunciation of your name and your pronouns using the NameCoach tool on Canvas (find it in the links on the left side of our class Canvas page). If something in the course material, instruction or class interactions make you feel excluded or uncomfortable, please let



me know so I can address it. See the Netiquette section under “UF Policies” for more details on how to interact respectfully online.

**UF Statement on Accommodating Students with Disabilities:** Students requesting accommodation Students with disabilities requesting accommodations should first register with the Disability Resource Center by calling 352-392-8565 or online at <https://disability.ufl.edu/students/get-started/>. 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 course so we can work together to find a reasonable solution – *even if you don't have, or don't yet have, a formal accommodation letter*. And please contact me during the semester if your accommodation needs change. All videos used in this course have closed captioning. Many also have transcripts (I'm working on transcripts for the rest). Need something else? Just ask!

**Religious Observances, Military Duty & other Unavoidable Absences:** 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 (email is fine) at least a week in advance of the missed class days so accommodations can be made for missed work. For National Guard, jury duty, scheduled medical treatments or other unavoidable absences, contact me as soon as you know the dates. Do not wait until after you have missed assignments to ask for an exception, as it may no longer be feasible to make-up some assignments.

## NEED HELP?

**Help from me and/or TA:** Office hours are for your benefit - ask questions, get assignment help, discuss geoscience degrees and career options, talk dinosaurs, etc. Office hours are your chance to interact with your instructors in real time. We are happy to set up meetings at other times if the office hour time doesn't work with your schedule. You may also email us, but please check to make sure your question hasn't been answered already in the Announcements or Class Questions Discussion Board before reaching out. For questions about grading, please contact the TA first (feel free to cc me on emails to TAs if you like). TAs are also a great resource for questions about the material. Please note, this class is huge, usually over 400 students per semester, and this is not the only course I teach. My inbox is frequently overloaded and while I try to answer quickly, sometimes it takes a day or two. Message boards and TAs will get you a faster answer to questions that aren't personal.

**Who is my TA?** This course is large, so we split the class into groups so you have more of a small-class experience for things like discussions. If you are assigned to Groups 1 – 10, your TA is Joo Jang. If you are assigned to groups 11-20, your TA is Jalissa Weekes.

**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 should 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 due-date extension or make-up.

**Mental Health and well-being:** Sometimes being a college student, or just a human being, can be hard. If you are mentally or emotionally struggling for any reason, you can contact the [Counseling and Wellness Center](#). They have one-click access to people who can help you connect to the right resources for your situation. If these struggles are negatively impacting your performance in any of your courses, I encourage you to contact the [Dean of Students Care Area](#) to connect with a support team that can help with temporary accommodations, authorization to make up missing course work, etc. Additionally, if you are comfortable doing so, please reach out to me and I will provide any accommodations in this course that I can.

**Other Resources:** Didn't see the kind of help you were looking for listed here? Links to a variety of support resources for online students are consolidated on this page: <http://www.distance.ufl.edu/getting-help>.

## STUDENT FEEDBACK & 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 Conduct Code: <https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/>, which includes the Honor Pledge.

**UF Undergraduate Student Handbook:** The student handbook has all the details on UF policies for students. <https://dso.ufl.edu/resources/student-handbook/>

And finally, because lots of people ask, my (Dr. Marshall's) favorite dinosaur is a styracosaurus (like the one on the header of this syllabus). I imagine they were the rhinoceros of their time – big grumpy herbivores that commanded healthy respect and a wide berth from other animals!

*That was a lot of info - thanks for reading all the way to the end!*