IB 108 The Biology of Dinosaurs Spring 2022

Course Overview

This course will cover the origin, diversity, and extinction of dinosaurs as a conceptual framework to explore fundamental principles of biology. We will consider dinosaurs as animals, and discuss modern theories of dinosaur physiology and metabolism to explain what is known of their lives and behavior. We will explore how the processes of evolution and speciation lead to the vast number and variety of dinosaurs, and ultimately how they gave rise to birds. Finally, we will consider how the Earth and its environments changed during the 180 million year reign of the dinosaurs, and lessons that can be learned about environmental change on human timescales. A special emphasis will be placed on how scientists collect and evaluate data from the fossil record, and how understanding living organisms are crucial in their interpretation.

Course Objectives

By the end of this course, students will:

1. Understand fossils, the process of fossilization, and the fossil record
2. Understand geologic time, and how geologists determine the age of rocks
3. Understand the changing world of the dinosaurs
4. Have a working knowledge of evolution, phylogeny and classification
5. Identify the essential elements of the dinosaur skeleton
6. Recognize the place of dinosaurs among other extinct animals
7. Recall the origin of and diversity of dinosaurs
8. Be able to explain the extinction of dinosaurs and the subsequent radiation of mammals and birds in its aftermath.
9. Become proficient at searching primary literature to learn about the latest science of dinosaurs.
10. Apply the gained knowledge to explain the science of dinosaurs to members of the general public in an engaging and clear manner.

Academic Calendar

A course week is defined as the period between Monday, 12:05 AM Central Time and Sunday, 11:55 PM Central Time.

For more information, see the University’s Academic Calendar.

This is a three credit hour course. The course is eight weeks long and consists of seven content modules. Please be aware that this course is accelerated in nature; 16 weeks' worth of content will be covered in a seven-week time span. You should dedicate approximately 12-16 hours per week to working on the course itself, but actual time commitments will vary depending on your input, needs, and personal study habits. You are required to log on to the course website and checking your email a minimum of four days per week, but as discussions develop, you will probably need to do so more frequently.
Required Texts
You can order the required textbook from the Illini Union Bookstore (IUB) (217-333-2050). Be certain you select the correct term from the Search by Course dropdown list. Used books are often available and can be provided at a cost savings to you. Note that the cost and postage for all books must be prepaid. You can charge your order using VISA, Discover, or MasterCard. If you are ordering books elsewhere (e.g., Amazon.com), please be sure to order the correct edition and year of publication.


Course Components
This course will consist of the following components:

Weekly Overviews
Each week will begin with a weekly overview, which will explain what the module is about, what learning goals you are expected to achieve, how long the module will take, and in what activities you will participate. Each week is designed with the same structure and activities unless otherwise specified. Weekly instructional activities are explained in greater detail below. Due dates of specific assignments appear on each week's overview page.

Readings and Lessons
Each module will contain a list of lessons (recorded lectures) and assigned readings. In some cases, optional or supplemental readings may be listed for further study. Lessons cover major topics from the readings but do not necessarily include all important information from the readings.

Discussions and Activities
Discussions will provide an opportunity to engage with your classmates and instructors on one or more topics explored that given week. Other activities will reinforce concepts presented in the lectures and readings and give you an opportunity to explore these concepts in greater depth. Students will have only a discussion OR an activity to complete each week.

Synchronous Session
Join a weekly synchronous session with any TA from the class at a time convenient for you on Tuesday to gain better insights into the week's material. Attendance plus answering a few questions provided in an activity earns the student 10 points for the week.

Final Project Milestones and Final Project
Each week, students will research information about a dinosaur, using a combination of primary and secondary literature to become an expert on a dinosaur, chosen from a pool of several during week 1 and answering relevant questions about their dinosaur each week, culminating in a final project due in week 7 and subject to peer review in week 8.

Quizzes
Concluding Weeks 1-7, you will answer questions about the material covered in the week. Each question is worth one point, for a total of 25 points. A student is allowed 40 minutes to complete the quiz, with the option to take the quiz a second time (before the weekly deadline) for a higher score. The highest score will be recorded.

Taking the quizzes without assistance from notes or the book helps with final exam preparation.

**Final Exam**

This course includes a 3-hour cumulative, identity verifiable Final Exam worth 20% of the final grade. We offer two options to take the Final Exam, in-person and an online version through ProctorU, Review+. See the Exam tab for details.

**Accommodations**

To obtain disability-related academic adjustments and/or auxiliary aids, students should contact both the instructor and the Disability Resources and Educational Services (DRES) as soon as possible. You can contact DRES at 1207 S. Oak Street, Champaign, (217) 333-1970, or via email at disability@illinois.edu.

**Academic Integrity**

All students are assumed to have read and understood the “Code of Policies and Regulations Applying to All Students,” University of Illinois, and will be expected to act accordingly. The Code is available online at: http://www.admin.uiuc.edu/policy/code/index.html

**Grading**

**Grading Distribution**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Week 1</th>
<th>Week 2</th>
<th>Week 3</th>
<th>Week 4</th>
<th>Week 5</th>
<th>Week 6</th>
<th>Week 7</th>
<th>Week 8</th>
<th>Activity Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lessons</td>
<td>20</td>
<td>-</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>10</td>
<td>130</td>
</tr>
<tr>
<td>Discussions &amp; Assignments</td>
<td>40</td>
<td>-</td>
<td>40</td>
<td>40</td>
<td>40</td>
<td>40</td>
<td>30</td>
<td>270</td>
<td></td>
</tr>
<tr>
<td>Synchronous Session</td>
<td>10</td>
<td>-</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>-</td>
<td>60</td>
<td></td>
</tr>
<tr>
<td>Final Project</td>
<td>20</td>
<td>-</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>100</td>
<td>220</td>
<td></td>
</tr>
<tr>
<td>Quizzes</td>
<td>20</td>
<td>-</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>-</td>
<td>120</td>
<td></td>
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<tr>
<td>Final Exam</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>200</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td>Weekly Total</td>
<td>110</td>
<td>-</td>
<td>110</td>
<td>110</td>
<td>110</td>
<td>110</td>
<td>340</td>
<td>1000</td>
<td></td>
</tr>
</tbody>
</table>

**Grading Scale**
Instructor Information

Joanne Manaster, School of Integrative Biology
Office Phone: 217-244-2489
E-mail: joannema@illinois.edu (much better than phone!)

Virtual Office Hours: Email Joanne to schedule time to meet in the Virtual Office or face-to-face.

Accommodations

To obtain disability-related academic adjustments and/or auxiliary aids, students should contact both the instructor and the Disability Resources and Educational Services (DRES) as soon as possible. You can contact DRES at 1207 S. Oak Street, Champaign, (217) 333-1970, or via email at disability@illinois.edu.

Participation

Active participation in the online learning environment is vital to your success in this course. Depending on your course, you will be asked to engage in online discussions and other interactive learning environments that invite your active participation and involvement with other students and your instructor.

Student Commitment

By registering for this online course, you commit to self-motivated study, participation in online course activities, and timely submission of all assignments. Furthermore, you commit to accessing the course website and checking e-mail at least four days per week, as well as to devoting at least 12-16 hrs./week to preparing for each module and completing the required assignments and readings.

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Letter Grade</th>
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<tbody>
<tr>
<td>97-100</td>
<td>A+</td>
</tr>
<tr>
<td>94-96.5</td>
<td>A</td>
</tr>
<tr>
<td>90-93.5</td>
<td>A-</td>
</tr>
<tr>
<td>87-89.5</td>
<td>B+</td>
</tr>
<tr>
<td>84-86.5</td>
<td>B</td>
</tr>
<tr>
<td>80-83.5</td>
<td>B-</td>
</tr>
<tr>
<td>77-79.5</td>
<td>C+</td>
</tr>
<tr>
<td>74-76.5</td>
<td>C</td>
</tr>
<tr>
<td>70-73.5</td>
<td>C-</td>
</tr>
<tr>
<td>67-69.5</td>
<td>D+</td>
</tr>
<tr>
<td>64-66.5</td>
<td>D</td>
</tr>
<tr>
<td>60-63.5</td>
<td>D-</td>
</tr>
<tr>
<td>Below 59.5</td>
<td>F</td>
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</tbody>
</table>
Deadlines

If you are unable to meet a particular deadline, it is your responsibility to make prior arrangements with the instructors for that given week. Otherwise, late work will not be considered for grading unless consent has been given by the instructor.

Instructor Feedback Turnaround Time

Questions posted to the Course Content Q & A forum generally will be answered within 48 hours. If possible, students are encouraged to answer questions posted by other students to the General Q & A forum, rather than waiting for an instructor's response.

Assignments submitted online will be reviewed and graded by the course instructor or TAs within three business days. Exams, essays, and term papers will be graded within four business days. If your instructor is unable to meet this timeline, students will be notified.

Responding to E-mails and Phone Calls

The instructors will respond to e-mail messages and phone calls within 24 hours of receiving them unless the instructor notifies you ahead of time of an inability to do so. When sending e-mail, include a subject line that identifies the course number and nature of your question. The instructor may not respond to questions sent to him or her that should be posted in the General Q & A forum. Please don't be offended if you are asked to forward your question to this location. If you leave a voicemail message with the instructor, please check your e-mail for a response.

Responding to the Discussion Forums

The role of the instructor/TA within the discussion forums is to help facilitate discussion by providing probing questions, asking for clarification, and helping solve conflicts as necessary. The instructor will not respond to every post. You are encouraged to share your thoughts, experiences, and ideas with each other as well.

Academic Integrity

Expectations

Please read We Report Cheaters and Plagiarizers

Academic dishonesty will not be tolerated. Examples of academic dishonesty include the following:

<table>
<thead>
<tr>
<th>Cheating</th>
<th>Academic interference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fabrication</td>
<td>Examination by proxy</td>
</tr>
<tr>
<td>Facilitating infractions of academic integrity</td>
<td>Grade tampering</td>
</tr>
<tr>
<td>Plagiarism</td>
<td>Non-original works</td>
</tr>
<tr>
<td>Bribes, favors, and threats</td>
<td></td>
</tr>
</tbody>
</table>
Guidelines

Should an incident arise in which a student is thought to have violated academic integrity, the student will be processed under the disciplinary policy set forth in the Illinois Academic Integrity Policy.

If you do not understand relevant definitions of academic infractions, contact your instructor for an explanation within the first week of class.

Copyright

Student Content

Participants in University of Illinois courses retain copyright of all assignments and posts they complete; however, all materials may be used for educational purposes within the given course. In group projects, only the portion of the work completed by a particular individual is copyrighted by that individual. The University of Illinois may request that students' materials be shared with future courses, but such sharing will only be done with the students' consent. The information that students submit during a course may, however, be used for the purposes of administrative data collection and research. No personal information is retained without the students’ consent.

Non-Student Content

Everything on this site and within University of Illinois courses is copyrighted. The copyrights of all non-student work are owned by the University of Illinois Board of Trustees, except in approved cases where the original creator retains copyright of the material. Copyrights to external links are owned by or are the responsibility of those external sites. Students are free to view and print material from this site so long as

- The material is used for informational purposes only.
- The material is used for noncommercial purposes only.
- Copies of any material include the respective copyright notice.

These materials may not be mirrored or reproduced on non-University of Illinois websites without the express written permission of the University of Illinois Board of Trustees. To request permission, please contact the academic unit for the program.

Student Behavior

Student Conduct

Students are expected to behave in accordance with the penal and civil statutes of all applicable local, state, and federal governments, with the rules and regulations of the Board of Regents, and with University regulations and administrative rules.

For more information about the student code and handbook, see the CITL Course Policies page.
Netiquette

In any social interaction, certain rules of etiquette are expected and contribute to more enjoyable and productive communication. The following are tips for interacting online via e-mail or discussion board messages, adapted from guidelines originally compiled by Chuq Von Rospach and Gene Spafford (1995):

- Remember that the person receiving your message is someone like you, deserving and appreciating courtesy and respect.
- Be brief; succinct, thoughtful messages have the greatest effect.
- Your messages reflect on you personally; take time to make sure that you are proud of their form and content.
- Use descriptive subject headings in your e-mails.
- Think about your audience and the relevance of your messages.
- Be careful when you use humor and sarcasm; absent the voice inflections and body language that aid face-to-face communication, Internet messages are easy to misinterpret.
- When making follow-up comments, summarize the parts of the message to which you are responding.
- Avoid repeating what has already been said; needless repetition is ineffective communication.
- Cite appropriate references whenever using someone else's ideas, thoughts, or words.

Communications

Daily Contact

Your daily contact should be via the discussion forums on the Moodle Website. Please check the Course Q & A Forum or the appropriate Weekly Content Q & A Forum for answers to your questions before emailing your instructor.

For further information and clarity on your free 5 point extra credit and the Conscientious Inquiries policies, please read the Questions? page.

Course Questions

Our Course Moodle probably has answers to every question you might have. Check the various tabs, activity tables, instructions for assignments and the Course FAQs. General questions pertaining to the structure of the course should be posted in our Course Q & A Forum. You can get to this forum from the course home page. Posting questions here allows everyone to benefit from the answers. If you have a question, someone else is probably wondering the same thing. Anyone submitting a question via e-mail will be directed to resubmit the question to the Q & A discussion forum. Also, participants should not hesitate to answer questions posed by peers if they know the answers and the instructor has not yet responded. This not only expedites the process but also encourages peer interaction and support.
Conscientious Inquiries

Most course information you need is in the Syllabus, Policies, the Course FAQs or other resources in the Learn About the Class Tab and Course Help and Communication Tab. Please consult these resources before sending emails to your professor or TA, so that they can focus on helping you learn and resolving issues in a timely manner. Because it can often be easier to send an email than to look up course information yourself, know this important policy:

- **Students begin the course with 5 extra credit points:** If you write to your TA or professor, and we answer your email with "According to the Syllabus...." or "According to the Course FAQs" or "According to the assignment/forum instructions...", you will lose 1 or more extra credit points each time.
- When you do send an email, it must include your full name, the name of your Teaching Assistant and your group, or else you will lose 1 extra credit point each time. Your section and TA is listed at the top of the course page home in Moodle.
- Your emails should preferably come from your @illinois.edu email address so that we can protect your privacy and know that our response will go to you and not someone impersonating you.
- Please note that we never penalize for notes of important, urgent nature that must be addressed to the professor privately.

Want to easily find something on a page in your browser?

- Use Ctrl+F (Mac) or F3 (PC) – This will open the in-page search box to search on the current page. Type in the word you are looking for, such as "exam" or "grade", etc.

<table>
<thead>
<tr>
<th>Question topic examples:</th>
<th>Consult or contact:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Due Dates</td>
<td>Table in each tab</td>
</tr>
<tr>
<td>Troubleshooting in Moodle (links, videos, accessing gradebook)</td>
<td>Course FAQs, Citation Format, Moodle Guide</td>
</tr>
<tr>
<td>Late submission policy, grading policies, textbook Discussion forum or activity grade or general help with course material. Your TAs want to help you!</td>
<td>Syllabus Your TA (see TA Information)</td>
</tr>
<tr>
<td>Not finding your answer?</td>
<td>Ask your question in Course Q &amp; A Forum</td>
</tr>
<tr>
<td>If you would raise your hand in class to ask the question, then post that question to the Q&amp;A Forum rather than sending an email. This way your classmates can benefit from seeing the answer to your question and can also chime in.</td>
<td></td>
</tr>
<tr>
<td>Quiz or exam questions</td>
<td>Professor</td>
</tr>
<tr>
<td>Extended deadlines or make-up work request or other questions of a personal nature.</td>
<td>Professor</td>
</tr>
</tbody>
</table>
Personal and Grade-related Questions

Questions of a personal nature should first be sent to the instructor's e-mail address (listed on the Instructor Information page). When sending e-mail, include a subject that identifies the course number and nature of your question.

Emergencies

If you have an emergency that will keep you from participating in the course, please notify your instructor by using the instructor's e-mail address (listed on the Instructor Information page). Provide callback information in your e-mail (if necessary). You should also notify your program director of any emergencies.

Zoom

Zoom is a tool that allows multiple people to join together simultaneously via a computer to text chat, audio chat, video chat, collaborate on a digital whiteboard, and even share their computer desktops with one another. The Synchronous Sessions, the Instructor's Virtual Office and the Student Lounge (when available) make use of Zoom.

Instructor’s Virtual Office

Another way to communicate with the instructor is to make use of the virtual office hours. The instructor will be available for office hours by appointment only via Blackboard Collaborate Virtual Office page in the Syllabus. You will be prompted to provide your name in order to enter the Virtual Office.

Announcements

The Announcements forum serves as a way for your instructor and University of Illinois administrators to make announcements within our online learning environment. Announcements posted here will also be sent to your Illinois e-mail address, so be sure to check your e-mail or the Announcements forum at least once a day to see whether any new announcements have been made.

Email

Course participants can also use the Quickmail internal email tool inside Learn@Illinois to communicate privately with the instructor, group members, and each other. Make sure your email address is current and activated within your Learn@Illinois Profile so that messages sent to you from within Learn@Illinois are automatically forwarded to your regular email address as well. You may find this information on how to update your profile in Learn@Illinois helpful in setting this up.

Telephone

The telephone is still sometimes the most effective mode for troubleshooting problems related to the course. The instructor's phone number, virtual office hour times, and other contact information can be found by clicking on the Instructor Information page within this Syllabus.