FLORIDA INTERNATIONAL UNIVERSITY
Earth Sciences
Spring 2020
GLY1101 - THE HISTORY OF LIFE

Meeting location: Tues - Thurs: 1230 - 1345   GL- 100B

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Earth Sciences Office (Earth & Environment): AHC5 Room 360, Tel: 305-348-4919

Office Hours: T – Th: 3:00 – 5:00 PM; M – W – F: walk-in or call/e-mail for an appointment.

REQUIRED TEXT: Life of the Past, 4th edition, by W. I. Ausich and N Gary Lane
Prentice Hall, Publisher, 1999


Welcome to the course on the History of Life. Our goal is to make you become acquainted with how life occurred and changed on Earth, as seen from past records and present analogs. In order to accomplish this goal, we will analyze the fossil record that forms the basis of paleontology (study of the history of ancient life), a discipline of the Earth Sciences, together with the present record of living animals and plants as examined in the biological sciences.

NOTE
Early Alert
In an effort to help you succeed in your academic courses, FIU utilizes an Early Alert system. Instructors are now able to notify students’ academic advisors if there are concerns about class performance. If an alert is submitted, your academic advisor will send you a message via your Student Dashboard (accessed via your MyFIU page) to discuss ways to improve your performance. Please respond to any communication you receive from your academic advisor about an early alert. Our goal with this program is to help you to be successful by identifying any issues as early on as possible and working to address them. Please contact Shimon Cohen, copied above, for questions or further information on the Early Alert System.

COURSE OUTLINE

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Reading</th>
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<tbody>
<tr>
<td>Jan 07</td>
<td>Introduction - Course policies; Overview Time and Fossils</td>
<td>Ch. 1</td>
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<tr>
<td>Jan 09 (R) – 14 (T)</td>
<td>Meaning of fossils- How to Tell Time</td>
<td>[Time and Fossils cont’d]</td>
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<tr>
<td>Jan 16 (R) – 21 (T)</td>
<td>Biodiversity [The Organization of Life]</td>
<td>Ch. 2</td>
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<tr>
<td>Jan 23 (R)</td>
<td>[Time and Fossils]-- Biodiversity [The Organization of Life]</td>
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<tr>
<td>Jan 28 (T)</td>
<td>Interpreting relationship between rocks and past lives [Rocks and Fossils]</td>
<td>Ch. 3</td>
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<tr>
<td>Jan 30 (R)</td>
<td>Fossilization of Life [Rocks and Fossils, cont’d].</td>
<td>Ch. 3</td>
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<tr>
<td>Feb 04 (T)</td>
<td>How did it all begin? [Origins of Earth, Oceans, Atmosphere &amp; Life]</td>
<td>Ch. 4</td>
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<tr>
<td>Feb 06 (R) – 11 (T)</td>
<td>How and why does life change? [Organic Evolution and Extinction]</td>
<td>Ch. 5</td>
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<td>Feb 13 (R)</td>
<td>Paleogeography through time [Continental Drift/Plate Tectonics]</td>
<td>Ch. 6</td>
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<tr>
<td>Feb 18 (T)</td>
<td>How Changing Continents &amp; Climates affect life [Paleobiogeography]</td>
<td>Ch. 7</td>
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FEB  20 (R)  Mid-term Exam (100 points)

| Feb 25 (T) | SPRING BREAK (NO CLASS)                  |
| Feb 27 (R) | SPRING BREAK (NO CLASS)                  |
Mar 03 (T) Early life forms and environments [The Precambrian Fossil Record] Ch. 8
Mar 05 (R) Proterozoic Life [The Precambrian Fossil Record] Ch. 8
Mar 10 (T) The Cambrian Explosion [Introduction to Marine Communities & the Cambrian] Ch. 9
Mar 12 (R) Team Challenge
Mar 17 (T) Ocean-bottom Animals of the Phanerozoic [Paleozoic, Mesozoic, and Cenozoic Ocean-Bottom Faunas] Ch. 10
Mar 19 (R) Floating and Swimming Critters [Fossil Record of Plankton & Nekton] Ch. 11
Mar 26 (R) Leaving the Water: Land Plants and Animals [Origin & Early Evolution of Terrestrial Communities] Ch. 13
Mar 31 (T) The history of Plants [Terrestrial Primary Producers: The Land Plants] Ch. 14
Apr 02 (R) From Reptiles to Dinosaurs [Early Consumers on Land: Reptiles] Ch. 15
Apr 07 (T) From Reptiles to Dinosaurs to Birds [Early Consumers on Land: Reptiles] Ch. 15
Apr 09 (R) Death of the Dinosaurs [Early Consumers on Land: Reptiles] Ch. 15
Apr 14 (T) The Evolution of Mammals [Advanced Consumers on Land: The Mammals] Ch. 16
Apr 16 (R) The Evolution of Mammals [Advanced Consumers on Land: The Mammals] Ch. 16

Apr. 16 (R) Conclusions -

Tuesday 21st April 12:00 –2:00PM -Final Exam (comprehensive = 200 points)

Course Policies:

Beepers and cellular phones must be turned off, and exchanges between students should remain at a strict minimum during the lecture period.

There will be a 10-minute period at the beginning of each lecture when I will be asking questions concerning previous lectures. You should also take this time period to ask questions concerning the material you have read for the current lecture, and of past lectures. If there is an aspect of the subject that you do not fully understand feel free to ask for clarification during the lecture. You may also contact me after class, or ask questions by e-mail.

Textbook: The required textbook is available in the university bookstore. You must bring your textbook to class at each lecture, because it has the reference materials often needed during the lecture. Also, read assigned materials listed in the syllabus prior to the corresponding lecture. I strongly recommend that you use the text web sites listed in the chapters to help you in your study. PAY careful attention to the extra handouts that I will distribute in class. The recommended book also has materials useful to this course.

Attendance: Lectures and EXAMS

The class roll will not be called at every lecture, but past experience clearly demonstrates that it is absolutely in your best interest to be present at every lecture in order to benefit from your team or working group, and the unannounced quizzes. Recent record shows that you will lose at least 10 % of your TOTAL Test score for each lecture that you miss. The teams or clusters of students will be organized during the first week of class, and will work together in the preparation of the quizzes and the class assignments for the entire semester. Extra
materials will be covered in the lectures that are not in the book, and distributed by team; therefore, DO NOT MISS CLASSES.

Makeup exams will be given only if you have a valid justification for your absence. If you have a valid reason (that can be documented) for missing an exam, you will be given a makeup at the end of the term. In such a case, you need to contact me, or the office of the Earth and Environment Department as soon as possible notifying us that you will be missing the exam. There is no make-up for missed quizzes or Team assignments.

EXTRA BONUS POINTS:
In addition to the exams, you may be able to earn extra points in four ways:

1. - Maximum of 10 points for questions in a short unannounced quiz of 5 questions (2 points each) that will be given occasionally within the last 15 minutes of class. These questions will be related to materials in the book or web from assigned reading for that day’s lecture and preceding lectures. Related questions or prep sheets will be given to the teams to review and discuss prior to the quiz. There will be a total of at least Five such quizzes

2. - 10 bonus points in the mid-term based on lectures and other supplemental web-based reading materials not covered in the text book.

3.- Up to 20 points for Team Project; and up to 10 points for the Team challenge.

4. - Up to 10 POINTS of bonus questions in Final exam (Questions based exclusively on materials covered in Fieldtrip(s), or other assignments (TBA).

As weather and time permit you may also gain extra points in two possible field trips TBA

GRADING: The final exam is comprehensive, it covers all lectures since the beginning of the term.

The basic final grade will be computed as an average of the total scores of the mid-term and the final = total of 300 points. All bonus points will be added to compute the final average. Passing Grades are based on the following numerical values of total points earned in exams and bonus points: A = 288 and above, A- = 287-271; B+ = 270-262 B = 261-254; B- = 253 - 240; C+ = 239 – 228; C = 227 – 216; D = 215 - 195; F = below 194.

Use your time efficiently. Ask for help early, not at the last minute of the semester when it is too late.

Use your resources efficiently to succeed

Good Luck. Keep up the good work!