Fall 9-1-2000

GEOL 106N.01: The History of Life

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GRADING BASIS FOR COURSE

Attendance (it's required) as is reading of assignments and participation in group discussions. Other basis below:

First exam 30%
Short essays on reading assignments 20%
Participation in group discussions I-III 20%
Final exam [comprehensive] 30%

CLASS GROUP DISCUSSIONS
(specific readings announced in class)

I. Explosion of life, the Burgess Shale and the new view of life
II. Dinosaurs and new views on how they lived
III. The great dyings of life: what killed the dinosaurs and other kinds of life on earth and how they recovered

GROUP DISCUSSION TOPICS- How they work

Here is a chance for you, not only to have direct input into the course, but also to share in group efforts toward learning and enjoying some of the truly interesting and important aspects of the history of life. It will require that you do some extra reading and meeting outside of class and outside the regular assigned chapters in Cowen. You will present and discuss these topics (listed above) during the class time.

The extra readings related to the topics are on reserve in the Mansfield Library Reserve Reading Room and on electronic reserve. During the semester there will be three discussion topics (see syllabus) which deal with important but controversial aspects of the history of life. The topics are selected to elicit debate and discussion. You will be assigned to one of several discussion teams and each team is assigned a different subject and reading. You should research your topic as soon as you can in fact, you can start ahead of the assigned dates but on the indicated dates be prepared to discuss your group topic.

Before each assigned discussion topic (see syllabus), each
group will elect a scribe and spokesperson. You can serve on either job only once. Spokesperson and/or scribe plus any interested members of your team must meet with me, outside class and well ahead, to discuss how you will approach your topic. During the class time, the spokesperson will start off by giving a brief discussion (5-10 minutes max.) on your topic followed by discussion by the whole class. Plan to meet with your group outside class before the discussion. You will be graded on the quality of both your presentation and the one-page writeup. The scribe is responsible for writing a concise summary (max. one page) of your team's topic which reflects the consensus of the whole team. Scribe will show his or her draft to the group for approval and turn it in to me at the start of class, one week after the discussion (typed, single spaced, one page max.) To receive credit scribe write your name at the bottom of your writeup along with the names of the group members who participated, indicating who was scribe and who was spokesperson. If you missed the class meeting, you can't receive credit for participation. Your one-page summary will be collated, reproduced and distributed to everyone and it will form part of your class notes. If typos or grammatical problems the essay will be returned for rewrite and points will be deducted.
FOR USE IN GROUP DISCUSSIONS, OUTSIDE READINGS ARE AVAILABLE AT
THE RESERVE DESK, MANSFIELD LIBRARY ON LIMITED RESERVE. THEY ALSO
ARE AVAILABLE ON ELECTRONIC RESERVE. OPEN OVER THE LIBRARY WEB
SITE. WHEN LOOKING FOR RESERVE READINGS LOOK UNDER COURSE NUMBER
AND AUTHOR OR CHAPTER. FOR GROUP DISCUSSION READINGS, THEY ARE
FILED BY THE GROUP DISCUSSION NUMBER, FOR EXAMPLE, I, II, AND
III. YOU WILL NEED TO DECIDE WHICH READINGS ARE MOST RELEVANT TO
YOUR GROUP'S PARTICULAR TOPIC. EXAMPLES OF POSSIBLE READINGS:

ALPER--94 EARTH'S NEAR DEATH EXPERIENCE. EARTH, JANUARY.
ANGIER--85 DID COMETS KILL THE DINOSAURS? TIME MAGAZINE, MAY.
BEGLEY--91 HOW DINOSAURS LIVED. NEWSWEEK, OCT.
BURNET--93 RECENT ANIMAL EXTINCTIONS: RECIPES FOR DISASTER.
AMERICAN SCIENTIST, NOV./DEC.
GLEN--90 WHAT KILLED THE DINOSAURS? AM. SCIENTIST, JULY-AUGUST.
GORE--93 EXPLOSION OF LIFE. NATIONAL GEOGRAPHIC MAGAZINE, OCT.
GORE--1989 EXTINCTIONS. NATIONAL GEOGRAPHIC MAGAZINE, JUNE.
GOULD, S.J. 1994. THE POWER OF THIS VIEW OF LIFE, NATURAL
HISTORY, V. 103, NO. 6, P. 5-8.
GOULD--TREASURES IN A TAXONOMIC WASTEBASKET. NATURAL HISTORY,
GOULD--THE LESSON OF DINOSAURS: EVOLUTION DIDN'T INEVITABLY LEAD
TO US. DISCOVER MAGAZINE, MARCH, 1987.
KERR--1990 DINOSAUR DEATH BLOW IN THE CARIBBEAN SEA? SCIENCE MAY.
KERR--1992 EXTINCTION BY A ONE-TWO COMET PUNCH? SCIENCE, JAN.
MCMENAMIN--87 THEEmerGENCE OF ANIMALS. SCI. AMERICAN, V. 256.
MILIUS--98 FEATHER DINOSAUR FOUND IN CHINA. SCI. NEWS, JUNE 27
MORELL--87 THE BIRTH OF A HERESY. DISCOVER MAGAZINE, MARCH.
MONASTERSKY--92 COUNTING THE DEAD. SCIENCE NEWS, FEB. 1.
MONASTERSKY--IMPACT WARS. SCIENCE NEWS
MONASTERSKY--92 CLOSING IN ON THE KILLER. SCIENCE NEWS, JAN 25.
MONASTERSKY--1996 DEFATING THE BIOLOGICAL BIG BANG. SCIENCE NEWS
MONASTERSKY--1996 GLOBAL CRISIS: THE FUNGI STAND ALONE. SCI. NEWS
MONASTERSKY--1994 THE FIRST MONSTER. SCI. NEWS
MONASTERSKY--1997 LIFE'S CLOSEST CALL. SCIENCE NEWS
SEILACHER--84 ALIEN LIFE HERE ON EARTH? SCIENCE, 6 JAN.
SEPkoski--94 EXTINCTION AND THE FOSSIL RECORD. GEOTIMES, MARCH.
STANLEY--87 TRAVELS OF AN ANCIENT REEF. NATURAL HIST. MAG., NOV.
STANLEY--87 CH. 6. IN Extinctions, SCIENTIFIC AMERICAN LIBRARY.
STOLZENBURG--90 WHEN LIFE GOT HARD. SCIENCE NEWS MAGAZINE, AUG.
THOMPSON--SIGNS OF NEMESIS. SCIENCE NEWS, V. 131, P. 100.
WEISBURD--1986 EXTINCTION WARS. ARTICLE FROM SCIENCE NEWS.
WEISBURD--1986 VOLCANOES AND EXTINCTIONS. SCIENCE NEWS.