CoSM Class Syllabus / Policy

2017 / Fall
GOL 361.001
Invertebrate Paleontology

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Office Hours: MW 9:00–12:00; TH 11:00-13:00

Class meeting time and place: Lecture: MW 8:00 – 8:50 : TBA
                           Lab: M 13:00 – 15:30 : TBA

Text and Materials:
   • Bringing Fossils to Life: An Introduction to Paleobiology, Prothero (2004)

Course Description:
   Invertebrate Paleontology (GOL 361 / GOL 361L) - Four semester hours, three hours lecture, three hours laboratory per week. Morphology, classification, evolutionary history, ecology, and geologic significance of major groups of invertebrate fossils. Prerequisites: GOL 132. Required lab fee.

Program Learning Outcomes:
There are no specific program learning outcomes for this major addressed in this course. It is a general education core curriculum course and / or a service course.

General Education Core Curriculum Objectives/Outcomes:
   The objective of GOL 361 / GOL 361L is to gain an understanding of the major invertebrate faunal groups, their morphology and evolutionary history with an emphasis on ecology and classification.

Student Learning Outcomes:
   The student is expected to understand and apply the following concepts to the environment:
   1. Become familiar with the major fossil groups.
   2. Recognize major taxonomical parts of each fossil groups.
   3. Be able to identify the major guide fossils.
   4. Learn to identify fossils.
   5. Use fossils as a key indicator of the depositional environment.

Course Requirements:
   Invertebrate Paleontology (GOL 361) is designed to provide an overview of the field of paleontology, including the classification, morphology, evolution and ecology of invertebrates.
The course is divided into a lecture section and a lab section. Students will also be expected to complete a “Fossil Project” for this course. See section on Grading Policy below.

Student learning in the lecture section will be evaluated through three examinations and one comprehensive final. Tentative lecture examination schedule:

- Lecture Exam #1 (Monday, October 2, 2017) – Exam will focus on all topics covered in lecture between 28 August 2017 and 2 October 2017 (15% of semester grade).
- Lecture Exam #2 (Monday, November 6, 2017) – Exam will focus on all topics covered in lecture between 4 October 2017 and 6 November 2017 (15% of semester grade).
- Lecture Final (University Scheduled) – comprehensive final covering all topics discussed during lecture portion of course (20% of semester grade).
- Fossil Projects (Monday, November 27, 2017) – fossil projects will include a brief oral presentation on the ecology and fauna associated with an assigned fossiliferous rock sample. Students will prepare a short (5-10 minute presentations) over their specimen including a paleoenvironmental reconstruction (10% of semester grade).

Student learning in the lab section will be evaluated through two examinations and weekly laboratory exercises. A fossil project will be included in the evaluation. Tentative lecture examination schedule:

- Lab Exam #1 (Monday, October 9, 2017) – Exam will focus on all topics covered in lab between 28 August 2017 and 9 October 2017 (15% of semester grade).
- Lab Exam #2 (Monday, December 4, 2017) – Exam will focus on all topics covered in lab between 16 October 2017 and 29 November 2017 (15% of semester grade).
- Weekly lab assignments (must be downloaded from D2L prior to each lab meeting) and submitted the following week (1% of semester grade for each lab assignment; 10% of total semester grade for all lab assignments combined).

**Lecture Course Calendar:**

Tentative schedule of topics to be covered in GOL 361 lecture include:

Note: associated reading for each lecture is in parentheses

- 28 Aug 17 – Introduction and overview of course (Ch. n/a)
- 30 Aug 17 – Fossilization Process and Quality (Ch. 1 &2)
- 04 Sept 17 – Species and Speciation (Ch. 3)
- 06 Sept 17 – Systematics / Classification (Ch. 4)
- 11 Sept 17 – Microfossils -- Protista (Ch. 11)
- 13 Sept 17 – Evolution (Ch. 5)
- 18 Sept 17 – Sponges / Cnidarians (Ch. 12)
- 20 Sept 17 – Extinctions & Adaptive Radiation (Ch. 6)
- 25 Sept 17 – Brachiopods / Bryzoa (Ch. 13)
- 27 Sept 17 – Review for Exam 1
- 02 Oct 17 – EXAM 1
- 04 Oct 17 – Functional Morphology (Ch. 7)
- 09 Oct 17 – Mollusca 1 (Ch. 15)
- 11 Oct 17 – Mollusca 2 (Ch. 15)
- 16 Oct 17 – Arthropods 1 (Ch. 14)
- 18 Oct 17 – Arthropods 2 (Ch. 14)
- 23 Oct 17 – Echinoderms (Ch. 16)
- 25 Oct 17 – Paleobotany (Ch. 19)
- 30 Oct 17 – Community Paleoecology (Ch. 8)
• 01 Nov 17 – Evolutionary Paleoecology (Ch. 8)
• 06 Nov 17 – EXAM 2
• 08 Nov 17 – Vertebrates & Kin1 (Ch. 17)
• 13 Nov 17 – Vertebrates & Kin2 (Ch. 17)
• 15 Nov 17 – Trace Fossils (Ch. 18)
• 20 Nov 17 – Thanksgiving – No Class
• 22 Nov 17 – Thanksgiving – No Class
• 27 Nov 17 – Presentation of Fossil Projects
• 29 Nov 17 – Biogeography (Ch. 9)
• 04 Dec 17 – Biostratigraphy (Ch. 10)
• University Scheduled – Final Exam (Comprehensive)

Lab Course Calendar:
Tentative schedule of topics to be covered in GOL 361 lab include:

Note: no associated readings for lab, but you must printout labs from D2L

• 28 Aug 17 – No Lab – No Class
• 04 Sept 17 – Preservation Lab & Trace Fossils
• 11 Sept 17 – Microfossils (Protista)
• 18 Sept 17 – Sponges / Cnidarians
• 25 Sept 17 – Brachiopods / Bryozoa
• 02 Oct 17 – Lab Exam Review
• 09 Oct 17 – Lab Exam 1
• 16 Oct 17 – Mollusca
• 23 Oct 17 – Arthropods
• 30 Oct 17 – Echinoderms
• 06 Nov 17 – Paleoecology
• 13 Nov 17 – Paleobotany & Vertebrates
• 20 Nov 17 – No Class -- Thanksgiving
• 27 Nov 17 – Lab Exam Review
• 04 Dec 17 – Lab Exam 2

Grading Policy:
• Lecture counts 50% of the course grade. Lecture grades will consist of 2 exams (15% each of total grade) and a comprehensive final exam (20% of your total grade).
• Lab counts 50% of the course grade. Two lab exams (15% each of total grade), 10 lab assignments (1% each of total grade) and a fossil project (10% of total grade).
• Total points: 560% (Lecture) + 50% (Lab) = 100%
• Grade Scale: >90% = A ; 80-89.9% = B ; 70-79.9% = C ; 60-69.9% = D ; <60% = F

All exams will include a multiple-choice section; therefore, ALWAYS bring a scantron (Form 882) and a #2 pencil for exams. Additional sections will vary between exams but may include any or all of the following sections: 1) true / false questions; 2) fill in the blank questions; 3) short answer questions; 4) figure illustration; 5) short essay questions. All exams will take place in room 335 unless otherwise stated in class.

Cell phones, calculators, and other electronic devises are NOT permitted during exams. If you are using them in an exam, it will be assumed that you are cheating and you will receive a grade of “0” on that exam.
Exam scheduling conflicts for officially sanctioned university reason will be accommodated at a different time or date. In the event of such conflicts, you must inform me at least one week prior to the exam to reschedule your exam.

Make-up exams are only given in documented cases of official university activities, illnesses or deaths in the family. If the final is missed for a legitimate excuse, an “Incomplete” will be given at the final and a make-up exam can be taken at the beginning of the next semester. Make-up exams will be different than the regular class exam and may be entirely essay format.

Attendance Policy:

- Daily attendance will be taken for university accounting purposes. Success in this course will reflect the level effort you put into the course.
- Be prepared for lectures by reading the material to be covered in lecture prior to attending class. Questions are encouraged and welcome – do not hesitate to ask questions in class.
- No electronic devices are needed during lectures for this class, including cell phones and calculators. Please turn them off and do not use them in class. Ringing phones and beeping electronics disturb others in the class and interrupt lectures. If you interrupt class with your personal electronic devices, you will be asked to leave for the day.
- If you are late to class, please seat yourself quietly. Try not to be late because it interrupts others in the class. If you need to use the restroom or become ill, please excuse yourself from the lecture quietly.
- If you need to study for another class, do it elsewhere. The classroom is not the place to sleep either. Basically, refrain from activities in lectures that will distract or disturb the other students in the room, because you are all paying for the class and most people want to get what they are paying for.

Academic Integrity (A-9.1)

Academic integrity is a responsibility of all university faculty and students. Faculty members promote academic integrity in multiple ways including instruction on the components of academic honesty, as well as abiding by university policy on penalties for cheating and plagiarism.

Definition of Academic Dishonesty

Academic dishonesty includes both cheating and plagiarism. Cheating includes but is not limited to (1) using or attempting to use unauthorized materials to aid in achieving a better grade on a component of a class; (2) the falsification or invention of any information, including citations, on an assigned exercise; and/or (3) helping or attempting to help another in an act of cheating or plagiarism. Plagiarism is presenting the words or ideas of another person as if they were your own. Examples of plagiarism are (1) submitting an assignment as if it were one's own work when, in fact, it is at least partly the work of another; (2) submitting a work that has been purchased or otherwise obtained from an Internet source or another source; and (3) incorporating the words or ideas of an author into one's paper without giving the author due credit.

Please read the complete policy at http://www.sfasu.edu/policies/academic_integrity.asp
**Withheld Grades Semester Grades Policy (A-54)**

Ordinarily, at the discretion of the instructor of record and with the approval of the academic chair/director, a grade of WH will be assigned only if the student cannot complete the course work because of unavoidable circumstances. Students must complete the work within one calendar year from the end of the semester in which they receive a WH, or the grade automatically becomes an F. If students register for the same course in future terms the WH will automatically become an F and will be counted as a repeated course for the purpose of computing the grade point average.

The circumstances precipitating the request must have occurred after the last day in which a student could withdraw from a course. Students requesting a WH must be passing the course with a minimum projected grade of C.

**Students with Disabilities**

To obtain disability related accommodations, alternate formats and/or auxiliary aids, students with disabilities must contact the Office of Disability Services (ODS), Human Services Building, and Room 325, 468-3004 / 468-1004 (TDD) as early as possible in the semester. Once verified, ODS will notify the course instructor and outline the accommodation and/or auxiliary aids to be provided. Failure to request services in a timely manner may delay your accommodations. For additional information, go to [http://www.sfasu.edu/disabilitieservices/](http://www.sfasu.edu/disabilitieservices/).