

# Geography 407: Advanced Topics in Physical Geography (Spring 2013)

## ~Methods in Paleoecology~

**Lecture: Mon 2-4:30 pm (Dean 113)- 3 credits**

**Instructor:** Dr. Megan Walsh, 308 Dean Hall, 963-3699; email: WalshMe@cwu.edu, office hours: Tues 3:30-4:30pm/Thurs 1-2pm, or by appointment.

**Prerequisites:** Geog 107 (Physical Geography) or similar preparation, or consent of instructor.

**Overview:** Paleoecology uses data from fossils and subfossils to reconstruct the ecosystems of the past. It involves the study of fossil organisms and their associated remains, including their life cycle, living interactions, natural environment, and manner of death and burial to reconstruct the paleoenvironment. This course will examine popular methods used in paleoecology and their application for reconstructing past environments.

### Course objectives:

- To develop a working knowledge of advanced research techniques in paleoecology
- To critically analyze current research in paleoecology
- To demonstrate the ability to critically evaluate current issues, themes, and problems in paleoecology

**Text and other resources:** There are no books to purchase in the bookstore. All readings are posted on the Blackboard website in PDF format. To make the best use of the readings, you will need to print all the files using a decent-quality laser printer. This is in lieu of buying a text book. You are expected to have completed all readings for each lecture prior to coming to class so that you can participate in group discussions.

Grades, lecture notes, announcements, and other information will be posted on blackboard (courses.cwu.edu). Make sure you check this regularly to insure you know what is going on in class!

**Grading:** Your grade in the course will be based on your performance on:

Discussion/Participation (30%)  
Discussion leader (10%)  
Homework assignments (30%)  
Annotated bibliographies (20%)  
Final research presentation (10%)

Grades will be assigned based on the following scale:

A = 100-94, A- = 93-90  
B+ = 89-87, B = 86-83, B- = 82-80  
C+ = 79-77, C = 76-73, C- = 72-70  
D+ = 69-67, D = 66-63, D- = 62-60  
F = 59 and below

Lecture will meet for 2.5 hours once a week. Lecture attendance and active participation in weekly discussions is expected (30% of your grade). It will not be possible to make-up these points if you miss class, so it is in your best interest to come to class and participate. Please let me know ahead of time if you know you will miss class.

You will be required to complete weekly homework assignments. This will typically mean that you read 1-2 articles relating to our in-class discussion and write a 1-2 page reaction. All homework must be handed in by 11:59 pm on Sunday. One point will be deducted from the homework grade for every day (or partial day) it is late (including weekends). **All homework must still be completed to pass the course, even if it is too late to receive points.** You may

work with someone else on the homework, but all work turned in must be your own. See the homework assignments on Blackboard for more detailed instructions.

In addition to the homework assignments, you will be required to complete ten annotated bibliographies on a paleoecological method (your choice) worth 20% of your final grade. The bibliographies are due Wednesday June 3rd by 12 noon. I will give out more detailed instructions regarding the bibliographies later in the quarter. You are also required to give a 10 minute presentation (5 minutes for questions) on the topic you researched (10% of your grade).

**Policies:** You will need to arrive to class on time and leave only when dismissed. Please do not arrive or leave in the middle of lecture. It is distracting for many people, including myself. When in class you are expected to pay attention (please do not engage in unrelated conversations) and participate in all activities and discussions. Cell phones and other communication devices should be turned OFF during class. Anyone talking on the phone, texting, surfing the web, or emailing during class will be asked to leave and will automatically lose all attendance/discussion points for the day. Please be respectful of your fellow students and instructor by following these rules.

Cheating or any other academic misconduct/dishonesty will **NOT BE TOLERATED**. Examples of these behaviors include (but are not limited to):

- Plagiarism (passing off the work of another as that of your own)
- Copying answers from your neighbors during exams/activities or using a “cheat sheet”
- Dishonesty concerning reasons for absence from class or your presence in class
- Any other actions that might give you an unfair advantage over your classmates

All cases of academic dishonesty/misconduct will be treated very seriously. The penalties for engaging in academic dishonesty and/or misconduct can range from a grade of “F” for an assignment/exam to an automatic failure of the course. Please consult the university policy at <http://www.cwu.edu/~saem/index.php?page=student-conduct-code> if you have additional questions/concerns regarding academic dishonesty or CWU’s Student Conduct Code.

Students with disabilities who require academic adjustments in this class are encouraged to meet with me during my office hours to discuss their disability-related needs. Please bring a copy of your Confirmation of Eligibility for Academic Adjustments (or email it to me) and your current class schedule to this meeting. If you are unable to meet during office hours due to class schedule conflicts, please call me at 963-3699 or email me at [WalshMe@cwu.edu](mailto:WalshMe@cwu.edu) to schedule an appointment. Students with disabilities who have not registered with the Center for Disability Services are not eligible to receive accommodations/academic adjustments. Please contact the CDS for additional information. Contact info: Center for Disability Services, Boullion room 205, phone: 963- 2171, email: [dahlberc@cwu.edu](mailto:dahlberc@cwu.edu) website: <http://www.cwu.edu/~dss/cms/>

**Additional resources:** Other useful links can be found at <http://www.cwu.edu/~acadadv/programs.php> and <http://www.cwu.edu/~acadadv/>

If you have any questions or concerns throughout the quarter, please email me or come see me! Don’t wait until the end of the quarter to voice your concerns. I am here to help you get the most out of this course, so please let me know how I can help.

**Note:** I consider this syllabus a contract between myself and the students in this course. In writing this syllabus, I have obligated myself to follow the policies and procedures contained herein. By being a student in this course, you are responsible for understanding and following these policies as well. I reserve the right to make changes to this syllabus. You will receive verbal and written notification of major changes to course policies, procedures and content.

**Schedule:**

Week	Date	Topic (see Blackboard for the reading assignments)
1	3/25	No class
2	4/1	Paleoecology overview
3	4/8	Dating methods
4	4/15	Pollen and microfossils (lacustrine)
5	4/22	Pollen and microfossils (terrestrial)
6	4/29	Charcoal analysis
7	5/6	Charcoal analysis and tephrochronology
8	5/13	Dendroecology
9	5/20	Paleotemperature and other sedimentological analyses
10	5/27	No class (Memorial Day)

Annotated bibliographies and in-class presentations due Wednesday June 5<sup>th</sup> 12-2pm.