SUNY Cortland
Department of Geology
GLY 363 - Invertebrate Paleontology
Spring, 2017

Credit Hours:	3	Instructor:	Dr. Christopher A. McRoberts
Lecture:	Mon, Wed 9:10-10:00	Office:	1010 Bowers Hall
Location:	Bowers Rm. 1011	Phone:	753-2925
Laboratory:	Thu:11:40-2:30, Bowers Rm. 336	E-mail:	mcroberts@cortland.edu
Web:	http://paleo.cortland.edu/class/paleo/	Office Hours:	Tue 11-12, 2-4; Wed 2-4, and by appointment

Required Texts:

- Benton, M.J. and Harper, D.A.T. 2009. *Introduction to Paleobiology and the Fossil Record*. Wiley-Blackwell.

- Additional readings will be made available at the library reserve desk and in the back of Room 336.

Course Description:

(S) Important invertebrates in fossil record. Laboratory study of morphology, identification and preparation procedures. Two lectures, one three-hour laboratory, required field trip. Prerequisite: GLY 172 or GLY 262 (3 cr. hr.).

Course Objectives and Assessment:

Upon completing this course students will be able to use the fossil record to make inferences about paleoenvironments and as a means of dating the relative age of fossil-bearing rocks. Hence it will be required that students demonstrate a general understanding of the various groups of fossil organisms and their stratigraphic occurrence, as well as the principles and theories of paleontological techniques and scientific reasoning. Specifically students should:

1. Demonstrate ability to identify fossils of major taxonomic groups.
2. Demonstrate knowledge of morphology and paleobiology (including function and paleoecology) of major fossil groups.
3. Demonstrate knowledge of the age and stratigraphic significance of major fossil groups.
4. Be able to collect and interpret paleontological data from the field
5. Be able to present scientific findings in written format

Attendance Policy:

You are expected to attend all lectures and laboratories; however, attendance *per se* will not be part of your grade assessment. Each student, however, will be responsible for material missed and any assignments due on the day of an absence. Unless otherwise excused (see below) make-up quizzes and exams will not allowed. Excused absences include your illness, a death or other family emergency **and must be documented**.

Grading:

To pass this course you must successfully complete both the lecture and laboratory portions of the course and well as the field-based research project. Your grade will be based on the following formula:

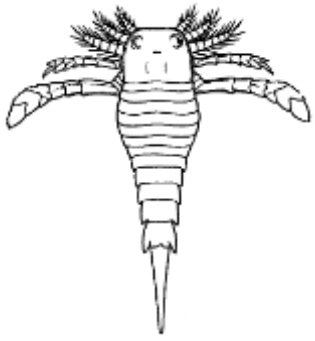
Exam 1	15%
Exam 2	15%
Final Exam (cumulative)	25%
Laboratory (labs and quizzes)	25%
Field Project/Paper	20%
Total	100%

Academic Integrity Statement:

You are expected to abide by the SUNY Cortland standards of academic integrity (Chapter 340 of the College Handbook). Students will not cheat or plagiarize in this course. Plagiarism, a serious academic offense, is defined as expropriating the ideas of others and using them as one's own without due credit. Students who cheat in examinations or plagiarize in this course will be disciplined in accordance with university rules and regulations.

Students with Disabilities:

If you are a student with a disability and wish to request accommodations, please contact the Office of Student Disability Services located in B-1 Van Hoesen Hall or call (607) 753-2066 for an appointment. Information regarding your disability will be treated in a confidential manner. Because many accommodations require early planning, requests for accommodations should be made as early as possible.



Eurypterus remipes—The New York State Fossil

Lecture and Lab Schedule (subject to much change)

Date	Tentative Topic	Readings from text
1/23	Intro: Fossils and fossil preservation	Chapters 1-3
1/25	Fossil preservation and taphonomy	
1/26	LAB 1: Fossilization	
1/30	Systematics and taxonomy	Chapter 5
2/01	Protists	Chapter 9
2/02	LAB 2: Protists and Porifera	
2/08	More Porifera	Chapter 11
2/08	Cnidaria	Chapter 11
2/09	LAB 3: Cnidaria	
2/13	Growth and Form	Chapter 6
2/15	Bryozoa	Chapter 12
2/16	LAB 4: Bryozoa	
2/20	Evolution	Chapter 7
2/22	Brachiopoda	Chapter 12
2/23	LAB 5: Species and Populations	
2/27	**EXAM 1**	
3/01	More Brachiopoda	
3/02	LAB 6: Brachiopoda	
3/06	Molluscs	Chapter 15
3/08	More Molluscs	
3/09	LAB 7: Mollusca I	
3/20	More Molluscs	
3/22	More Molluscs	
3/23	LAB 8: Mollusca II	
3/25	**FIELD TRIP**	
3/27	Paleoecology	Chapter 4
3/29	More Paleoecology	
3/30	LAB 9: Fossil Preparation	
4/03	**EXAM 2**	
4/05	Echinodermata	Chapter15
4/06	LAB 10: Echinoderms	
4/10	Arthropoda	
4/12	More Arthropoda	Chapter14
4/13	LAB 11:Arthropoda	
4/17	Miscellaneous Groups	
4/19	Biodiversity	Chapter 7
4/20	LAB 12: Miscellaneous Groups	
4/24	Extinctions	
4/26	More Extinctions	
4/27	LAB 13: Paleoecology	
5/01	Biostratigraphy	
5/03	Paleogeography	
5/04	LAB 14: Visit to PRI	
5/10	**10:30 Final Exam**	