

EARTH SCIENCES 3314B SEDIMENTARY PETROLOGY

1) Description: Identification and description of various types of siliciclastic and carbonate rocks; sedimentary textures and geochemical composition; sedimentary structures and depositional environments; diagenetic and weathering processes that alter original properties of primary sediments.

Prerequisites: Earth Sciences 2200a/b, Earth Sciences 2206a/b

Statement on Requisites: Unless you have either the requisites for this course or written special permission from your Dean to enroll in it, you may be removed from this course and it will be deleted from your record. This decision may not be appealed. You will receive no adjustment to your fees in the event that you are dropped from a course for failing to have the necessary prerequisites.

2) Instructor: Dr. P.L. Corcoran; BGS 0164; Email: pcorcor@uwo.ca

Lecture Schedule: 11:30-12:30 Monday and Wednesday P&AB-117

Laboratory: Wednesday 2:30-5:30 BGS 1065

3) COURSE SYLLABUS

LECTURES

Topics

Introduction to sedimentary rocks

Siliciclastic rocks: textures, fluid flow, sedimentary structures

Siliciclastic rocks: classification, provenance, tectonic setting, depositional environments, chemical weathering, diagenesis

Carbonate rocks: composition and classification, depositional environments, diagenesis

Evaporites, sulphates, BIF, chert, Earth's atmosphere and sedimentary deposits, mineral deposits and sedimentary rocks

LABORATORY (One session = 3 hours)

Sessions

Topics

4	Composition and classification of siliciclastic rocks
4	Composition and classification of carbonate rocks
2	Composition and classification of other sedimentary rocks
2	Oral presentations

4) COURSE MATERIALS

Any sedimentology textbook can be used as a resource, but none are required.

5) METHODS OF EVALUATION

Mid-term exam 1 hour (date TBA): 15%

Final exam 2 hours (date TBA): 35%

Quizzes: 10%

Oral presentation: 15%

Lab assignments: 25%

6) ATTENTION: All lab assignments must be completed during each laboratory session. One lab assignment may be missed during the term, or the student may opt to remove their lowest lab assignment score from the total at the end of term.

7) Statement on academic offences

Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at the following Web site: http://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_undergrad.pdf.

8) Use of plagiarism-checking software

All required papers may be subject to submission for textual similarity review to the commercial plagiarism detection software under license to the University for the detection of plagiarism. All papers submitted for such checking will be included as source documents in the reference database for the purpose of detecting plagiarism of papers subsequently submitted to the system. Use of the service is subject to the licensing agreement, currently between The University of Western Ontario and Turnitin.com (<http://www.turnitin.com>).

9) Use of cheating-analysis software

Computer-marked multiple-choice tests and/or exams may be subject to submission for similarity review by software that will check for unusual coincidences in answer patterns that may indicate cheating.

10) Statement on services for students in emotional/mental health distress

Students who are in emotional/mental distress should refer to Mental Health@Western <http://www.uwo.ca/uwocom/mentalhealth/> for a complete list of options about how to obtain help.

11) Link to policy on Accommodation for Illness

http://www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_illness.pdf

(which includes a link to the Student Medical Certificate)

* Accessibility statement: Please contact the course instructor if you require material in an alternate format or if you require any other arrangements to make this course more accessible to you. You may also wish to contact Services for Students with Disabilities (SSD) at 661-2111 x 82147 for any specific question regarding an accommodation.

12) Link to the policy on Accommodation for Students with Disabilities

www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_disabilities.pdf

13) Link to the policy on Accommodation for Religious Holidays

www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_religious.pdf