

Earth Sciences 089G: Earth, Art and Culture

Aims of the Course: To provide the student with a non-science background a basic understanding of:

- a) Earth materials and processes
 - b) The importance of Earth materials and processes on art and other aspects of culture
 - c) Human perception of Earth from cultural and geological perspectives
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Office Hours: By appointment only.

Assignments: All necessary instructions and materials for assignments will be posted on the course website. Please ensure that you print these by the dates when they are assigned. All assignments will be submitted in the appropriate drop box located in the hallway outside Room 118 B&G (labeled by first letter of last name). Further information is provided below.

Course website: Refer to the course website for handouts, assignments and important announcements at

<http://instruct.uwo.ca/earth-sci/089g/>

Important Comments on the Availability and Nature of Lecture Materials:

You are forewarned that Powerpoint slides (and PDF versions of these) used for each lecture will be posted on the course website for one week following that lecture. If you fail to access them during this period, you are responsible for obtaining the necessary information from your fellow students. The lectures will not be posted again, nor will they be provided by the instructor or teaching assistants. Lecture slides are provided on the course website as a courtesy to allow you to review the general content of each lecture for a short period thereafter. This should not be regarded as a substitute for attending the lectures regularly and taking adequate notes. These slides are merely visual aids, and do not capture the full essence or content of any lecture. Consequently, if you do not attend the lectures, as in any other course, you will undoubtedly will be missing out on a considerable amount of important information.

Background Reading: There is no required textbook for this course. Links to relevant online or other references for each lecture will be provided on the course website to supplement the lectures where necessary.

Comments on Following Instructions: Specific instructions provided for assignments and exams are expected to be followed precisely. Any marks deducted for not following instructions are non-negotiable.

Policy on Late Assignments: All assignments handed in after 4:00 pm on the due date will have 10 % of the total value of the assignment deducted from their grade. Each additional day late (beginning 4:00 pm on the day following the due date) will result a further 10 % deduction. No assignments will be accepted after that same marked assignment is returned.

Policy on Missed Assignments/Exams: Students must notify the teaching personnel of any legitimate reasons for not completing assignments or attending examinations at the earliest possible opportunity. They must provide documentation or other evidence to support their claims to the satisfaction of the instructor. Otherwise, a grade of zero will be awarded. Make-up tests and assignments will be allowed only under exceptional circumstances.

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 website:

<http://www.uwo.ca/univsec/handbook/appeals/scholoff.pdf>

Lecture Assistant: David Dillon (Office: Biological and Geological Sciences (B&G) Rm. 118c; Email: davidd@uwo.ca)

Teaching Assistants: TBA

Lectures: 5:30 – 6:30 pm, Mondays, Tuesdays and Thursdays, Natural Sciences Rm. 1

Background: This course is intended for, but not limited to, students registered in faculties other than Science.

Prerequisites, Antirequisites: None

2007 General lecture topics

Minerals and their properties

Gemstones, mineral industries and culture.

Rocks, their classification and properties.

The Rock Cycle, lithogenic processes and plate tectonics.

Rocks as tools.

Rocks in art and architecture.

Origin, properties and classification of fossils.

Fossilization (taphonomic) processes.

Cultural uses and interpretations of fossils; fossil art.

Geological materials and technological development.

The Stone Age (Palaeolithic to Neolithic).

The Copper/Chalcolithic and Bronze ages.

The Iron Age.

Geology of metal deposits; ores, smelting and alloys.

Clay minerals, their properties, origins and cultural uses.

Cement, concrete, clay and steel as the foundation of modern building materials.

Mother of pearl; pearl culture and industry.

Minerals as sources of artistic media (pigments, paints, cosmetics etc.).

Hydrocarbons (Petroleum and Coal), their properties and origin.

Ancient and modern uses of hydrocarbons.

The economic and cultural significance of hydrocarbons (from the Industrial Revolution to the postmodern era).

Geological events and their influence on art and culture.

Palaeo-art and iconography and its effect on our perception of evolution and geological time.

Historical and modern concepts of the age of the earth and evidence employed to determine this.

Evolutionism vs. Creationism and their associated “cultural” biases.

Fluvial (River) processes and features.

Influences of rivers on ancient and modern civilizations.

Geology of soils, agriculture and nutrition.

Geological concepts in literature and film.

And some others

Evaluation Scheme and Schedule:

- 4 Very Short Practical Assignments (Due Jan. 25, Feb. 1, 8, & 15): **10% total**
 - 1 Midterm Exam (Monday February 19, 2007): **15%**
 - 1 Term paper topic proposal (Due February 22): **5%**
 - 1 Short Written Assignment (Due March 8) : **10%**
 - 1 Final Term Paper (Due March 22): **20%**
 - 1 Final Exam (Date TBA): **40%**
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Additional Comments on Assignments:

1. Four very short practical assignments will be assigned in the early part of the course. These will be available on the course website for two days each beginning on Jan. 18, Jan. 25, Feb. 1, and Feb. 8, 2007. Completed practical assignments must be placed in the drop box outside B&G Rm 118 by 4:00 pm on the Thursday following the date of issue of each assignment (i.e. you will have one week to complete each assignment).
2. A more involved writing/research project will be assigned in late January. This will be due in the drop box at 4:00 pm on Thursday March 8, 2007.
3. A relatively short (2500-3500 words; 10 to 12 double spaced pages of text) term paper addressing an issue related to geology and culture is due by 4:00 pm, Thursday March 22, 2007. The topic of the term paper will be of your choosing. However, each topic must be approved by the instructor. A more complete set of instructions for preparing your term paper will be provided on the course website in mid January.
4. Each student is required to submit a short (2-3 page) term paper topic proposal outlining (1) a tentative title, (2) the intended thesis/theme of the paper, (3) a brief summary of the main points to be addressed (these must support your thesis/theme), (4) some preliminary conclusions, and (5) a short list of relevant references (5-10 references—provide those that are most pertinent to what you intend to discuss). The proposal must be written in clear, complete sentences. Point form style is not acceptable. References must be formatted in the proposal, as well as the term paper, according to the style of the Canadian Journal of Earth Sciences. Proposals will be evaluated on the basis of the level of adherence to the indicated format, the quality (and to some extent quantity) of cited sources, as well as on the coherence of the presented argument/evidence, regardless of whether or not the topic is deemed to be appropriate. Feedback will allow students to identify problems with their topic, reference formatting, general presentation and reasoning, sufficiently in advance of the term paper deadline. Ideally, students should submit their proposals as early as possible, however, an absolute deadline of 4:00 pm, Thursday February 22, 2007 will be imposed to ensure adequate time for evaluation and return. Please provide two copies for review. Topic proposals will be subject to the same late penalties as other assignments; they will, however, not be accepted after a period two weeks prior to the term paper deadline (i.e. March 8, 2007). Students who fail to submit a topic proposal may submit the term paper, however their chances of achieving a favourable grade on the latter will be reduced. E-mails inquiring as to the suitability of term paper topics will not be returned at any time.
5. A NOTE ABOUT PLAGIARISM AND REFERENCES: Plagiarism is a very serious academic offence meriting severe penalties up to and including expulsion from the university (see the current UWO Calendar for details). Any incidence of suspected plagiarism in this course will be investigated thoroughly and appropriate action will be taken. All work submitted by each student must reflect a unique effort that is their own. All assignments must be written in the student's own words. Citations of passages from the literature must be paraphrased by the student (direct quotes are unacceptable except where unavoidable for purposes of accuracy). In all cases, the source of cited material must be referenced adequately according to the format

indicated. Any ideas presented in assignments which are not those of the student must be credited (i.e. referenced) in the same manner. Any violation of these rules will be regarded as an act of plagiarism! Please note that in scientific literature, footnotes are not an acceptable referencing format. They are not to be used as such in this course. Online references should be used sparingly in all of your assignments. Only websites that cite scholarly articles and/or reputable sources should be used. As for printed references, web articles must be properly cited (at minimum you must provide the title and the web address of the page(s) in the reference list).

6. TECHNICAL DIFFICULTIES: As this course is highly dependent upon the world wide web for distribution of course information, it is entirely possible that technical problems preventing access to lecture materials, assignments etc. will arise. If you encounter such difficulties, please contact the instructor or teaching assistants as soon as possible. Alternate arrangements will be made if necessary.