

Geology ES 4458 / GL 9702A Course Outline

Title: Mineral Resource Development

Aim of the Course: This course will focus on the multi-disciplinary aspects of the mining cycle from exploration to production and remediation, and include introductions to environmental permitting, land management, mining finance and first nations consultation. It is intended to introduce students to the complex and sophisticated nature of resource development and empower them to develop an understanding of the 'big picture' role for various career paths. The course will include multimedia presentations, concept building, case studies and practical exercises.

Evaluation to include 1 presentation, 2 essays (750 words) and a final exam.

Instructor: Dr. David Good; BGS 1000E; Email: dgood3@uwo.ca

Lectures: 3 hrs per week: Thursday from 6:30 to 9:30 pm; room to be determined

Topics:

- 1) The mining cycle
- 2) Mineral exploration practices
- 3) First Nations consultation
- 4) Managing geochemical data (quality control-quality assurance)
- 5) Resource estimation process
- 6) Mining methods
- 7) Mineral processing
- 8) Impact of commodity price fluctuations
- 9) Environmental permitting
- 10) Tailings management and remediation
- 11) Metrics of project feasibility
- 12) Introduction to mining finance
- 13) Corporate social responsibility

Grading:

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| 1) Written assignment 1 (750 words) | 15% |
| 2) Written assignment 2 (750 words) | 15% |
| 3) Oral presentation | 20% |
| 4) Final exam | 40% |
| 5) Participation - participation in class discussion | 10% |

Course Website:

Students should check OWL (<http://owl.uwo.ca>) on a regular basis for news and updates. This is the primary method by which information will be disseminated to all students in the class. Students are responsible for checking OWL on a regular basis.

Policy on late assignments:

All assignments are due on the date specified on the assignment. 10% will be deducted for every day late. If you have exceptional circumstances, please contact Dr. Good prior to the due date.

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/handbook/appeals/scholoff.pdf>

Plagiarism is a serious academic offence. The UWO Senate Academic Handbook defines plagiarism as "The act of appropriating the literary composition of another, or parts or passages of his writings, or the ideas or language of the same, and passing them off as the product of one's own mind." Students must write their assignments in their own words. Whenever students take an idea, or a passage from another author, they must acknowledge their debt both by using proper referencing such as citations. For more information see Scholastic Offence Policy in the Western Academic Calendar.

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>).

Support Services: Learning-skills counsellors at the Student Development Centre (<http://www.sdc.uwo.ca>) are ready to help you improve your learning skills. They offer presentations on strategies for improving time management, multiple-choice exam preparation/writing, textbook reading, and more. Individual support is offered throughout the Fall/Winter terms in the drop-in Learning Help Centre, and year-round through individual counselling. Students who are in emotional/mental distress should refer to Mental Health@Western (http://www.health.uwo.ca/mental_health) for a complete list of options about how to obtain help. Additional student-run support services are offered by the USC, <http://westernusc.ca/services>. The website for Registrarial Services is <http://www.registrar.uwo.ca>

Policy on Illness: If you are unable to meet a course requirement due to illness or other serious circumstances, you must provide valid medical or supporting documentation to the Academic Counselling Office of your home faculty as soon as possible. If you are a Science student, the Academic Counselling Office of the Faculty of Science is located in WSC 140 and can be contacted at 519-661-3040 or scibmsac@uwo.ca. Their website is http://www.uwo.ca/sci/undergrad/academic_counselling/index.html

David Good
Dated: May 1, 2019

A student requiring academic accommodation due to illness must use the Student Medical Certificate (https://studentservices.uwo.ca/secure/medical_document.pdf) when visiting an off-campus medical facility.

For further information, please consult the university's medical illness policy at http://www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_medical.pdf

Accessibility Statement: Please contact the course instructor if you require lecture or printed material in an alternate format or if any other arrangements can make this course more accessible to you. You may also wish to contact Services for Students with Disabilities (SSD) at 661-2111 ext. 82147 if you have questions regarding accommodation.