

## ES-3370A Course Outline

### 1. Course Information

#### Course Information

ES3370A Metallogeny 1

2 lecture hours, Tuesday and Thursday, 9:30 to 10:30, Room: 1065 B&GS

3 laboratory hours, Monday 2:30 to 5:30pm, Room 1065 B&GS

#### List of Prerequisites

ES 2200a/b and 2206a/b, or written permission from the instructor. Unless you have either the requisites for this course or written special permission from the instructor 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 Information

| Instructors                             | Email           | Office     | Phone  | Office Hours      |
|---|-----------------|------------|--------|-------------------|
| Dr Nigel Blamey<br>(Course Coordinator) | nblamey2@uwo.ca | BGS-1000-D | x85246 | By<br>appointment |
|   |                 |            |        |                   |
|   |                 |            |        |                   |

Students must use their Western ([@uwo.ca](mailto:@uwo.ca)) email addresses when contacting their instructors.

### 3. Course Syllabus, Schedule, Delivery Mode

**DESCRIPTION:** An introductory course to the broad field of mineral deposit geology and the importance of mineral resources. Several ore deposit types are examined within the context of global theories of ore genesis. Various methods, including ore petrology, are related to specific ore types. Laboratory work focuses on reflected-light microscopy in the practical study of ore suites. Regular attendance and timely completion of assignments is expected.

**Principal Objectives of this course:**



### **Lecture Schedule** (tentative; subject to change):

Lecture 1: Metallogenic Concepts

Lecture 2: Laterites

Lecture 3: Fe & Mn deposits

Lecture 4: U unconformity deposits

Lecture 5: Red-bed copper deposits

Lecture 6: Terms and definitions; drilling; alteration

Lecture 7: MVT deposits

Lecture 8: SEDEX deposits

Lecture 9: VMS deposits

Lecture 10: Epithermal deposits

Lecture 11: Carlin-type gold deposits

Lecture 12: Porphyry deposits

Lecture 13: Skarn deposits

Lecture 14: Bushveld Igneous Complex

### **Contingency plan**

Although the intent is for this course to be delivered in person, should any university-declared emergency require some or all of the course to be delivered online, either synchronously or asynchronously, the course will adapt accordingly. The grading scheme will **not** change. Any assessments affected will be conducted online as determined by the course instructor.

## **4. Course Materials**

For labs, students are expected to have a hand lens, small magnet and any routine tools that may be used for mineral identification.

There is no formal text. Notes will be posted on the OWL website. There are several useful mineral deposits textbooks in the library. These include:

Moon, C.J., Whateley, M.K.G. and Evans, A.M., 2006, Introduction to mineral exploration.

Robb, L.J., 2005, Introduction to ore-forming processes

Ridley, J., 2013, Ore Deposit Geology (ma0.000TQ612 792Al bes/

If students need assistance with the course OWL site, they can seek support on the [OWL Brightspace Help](#) page. Alternatively, they can contact the Western Technology Services Helpdesk. They can be contacted by phone at 519-661-3800 or ext. 83800.

### **Technical Requirements**

A laptop or computer will be required to access the OWL site and access the virtual lectures should a covid or other lockdown force the university online.

## **5. Methods of Evaluation**

The overall course grade will be calculated as listed below:

|                   |      |
|-------------------|------|
| Mineral Test (x1) | 10 % |
| Laboratories (x4) | 35 % |
| Midterm Test      | 10 % |
| Presentation      | 15 % |
| Final Exam        | 30 % |

The mid-term test will cover material from class up until the test and the date will be prior to the fall Reading Week. The test will be during regular lecture hours and the date will be decided499p00 7he will be during r

## 6. Student Absences

If you are unable to meet a course requirement due to illness or other serious circumstances, please follow the procedures below.

### **Assessments worth less than 10% of the overall course grade:**

For work worth less than 10% of the total course grade, the instructor is empowered to grant academic considerations without referring the student to their academic counsellors. An extension or makeup will be offered, however, this does not apply to late labs or assignments unless your academic councillor has notified the instructor.

### **Assessments worth 10% or more of the overall course grade:**

For work totalling 10% or more of the final course grade, you must provide valid medical or supporting documentation to the Academic Counselling Office of your Faculty of Registration as soon as possible. For further information, please consult the U

[https://www.uwo.ca/univsec/pdf/academic\\_policies/appeals/accommodation\\_medical.pdf](https://www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_medical.pdf).

The Student Medical Certificate is available at

[https://www.uwo.ca/univsec/pdf/academic\\_policies/appeals/medicalform.pdf](https://www.uwo.ca/univsec/pdf/academic_policies/appeals/medicalform.pdf).

### **Absences from Final Examinations**

If you miss the Final Exam, please contact the Academic Counselling office of your Faculty of Registration as soon as you are able to do so. They will assess your eligibility to write the Special Examination (the name given by the University to a makeup Final Exam).

e.g., more

than 2 exams in 23-hour period, more than 3 exams in a 47-hour period).

If a student fails to write a scheduled Special Examination, the date of the next Special Examination (if granted) normally will be the scheduled date for the final exam the next time this course is offered. The maximum course load for that term will be reduced by the credit of the course(s) for which the final examination has been deferred. See the Academic Calendar for details (under [Special Examinations](#)).

## 6. Accommodation and Accessibility

### **Religious Accommodation**

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