

Geophysics 223 - Winter 2009

Environmental monitoring and mining exploration techniques

Instructor Professor Martyn Unsworth
Offices : CEB348B
e-mail : unsworth@phys.UAlberta.ca
Tel : 780-492-3041

Teaching Assistant Greg Nieuwenhuis, CEB448

Course Schedule

Classes	Monday, Wednesday and Friday	11:00 - 11:50	CEB442
Labs	Wednesday	14:00 - 17:00	CEB324
Mid-term exam	Wednesday February 11, 2009	14:00 - 15:30	CEB324
Final exam	Check exam schedule		

Objectives of class

To understand the basic concepts of near-surface geophysical methods used in environmental geophysics and mineral exploration.

Course outline

- A. Introduction
- B. Electrical resistivity methods
- C. Magnetic exploration
- D. Electromagnetic methods
- E. Ground penetrating radar
- F. Shallow seismic exploration

Office hours

Office hours will be announced when the assignments are distributed in class. If you have questions about class material, please contact me to arrange a convenient time to discuss.

Assignments

There will be a total of **six** assignments in this class. These will be due in class on the due date.

Recommended textbook

Introduction to Applied Geophysics: Exploring the Shallow Subsurface, H.R. Burger, A.F. Sheehan and C.H. Jones, published by Norton, 2006.

Course weighting

Assignments	15%
Mid-term exam	25%
Labs	15%
Final exam	45%

Statement on academic integrity

"The University of Alberta is committed to the highest standards of academic integrity and honesty. Students are expected to be familiar with these standards regarding academic honesty and to uphold the policies of the University in this respect. Students are particularly urged to familiarize themselves with the provisions of the Code of Student Behaviour (online at www.ualberta.ca/secretariat/appeals.htm) and avoid any behaviour which could potentially result in suspicions of cheating, plagiarism, misrepresentation of facts and or participation in an offence. Academic dishonesty is a serious offence and can result in suspension or expulsion from the University." (GFC 29 SEP 2003)

Grading in Undergraduate Courses

Description	Letter Grade	Grade Point Value
Excellent	A+	4.0
	A	4.0
	A-	3.7
Good	B+	3.3
	B	3.0
	B-	2.7
Satisfactory	C+	2.3
	C	2.0
	C-	1.7
Poor	D+	1.3
Minimal Pass	D	1.0
Failure	F	0.0

Policy about course outlines can be found in Section 23.4(2) of the University Calendar (CGF 29 SEP 2003)