

## Geophysics 224 - Geophysical exploration techniques Winter 2006

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### Course Schedule

Classes	Tuesday and Thursday	08:00 to 09:20	P631
Lab	Wednesdays	14:00 to 17:00	P145
Mid-term exam	Tuesday February 14 <sup>th</sup> 2006	08:00 to 09:20	P631
Final exam	Thursday, April 27 <sup>th</sup> 2006	09:00 to 12:00	P631

### Objectives of class

To learn the basic principles of three geophysical exploration techniques. This will include both the **physical basis** of the method and **data interpretation**. Simple mathematics will be used where needed, but the emphasis will be on understanding concepts and methods. Where appropriate, PC based software will be used in the lectures and the labs.

### Course outline

- A. Introduction
- B. Gravity exploration ~ 2 weeks
- C. Seismic exploration ~ 6 weeks
- D. Magnetic exploration ~ 2 weeks

### Office hours

If you have questions about class material or assignments, I will happy to arrange a convenient time to meet with you. To do this, please see me after class, e-mail me or drop by my office.

### Assignments

There will be a total of four assignments in this class. These will be due at 5 pm on the appropriate day, and should be handed in at my office (Physics 545B)

### Recommended text

*An introduction to geophysical exploration*, by P. Keary, M. Brooks and I. Hill, 3<sup>rd</sup> Edition, Blackwell, 2002. ISBN 0-632-04929-4

### **Course weighting**

Labs	20%
Assignments	10%
Mid-term exam	25%
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](http://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)