
eosc350website Documentation

Release 0.0.1

UBC GIF

Dec 03, 2018

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Note: [Teams](#) for TBL have been created.

Note: [TBL 2 Individual](#) online quizz is available here and through the course schedule. Due September 24th 2018.

CHAPTER 1

Course Description

Principles of geophysical survey design, data acquisition, processing and interpretation with emphasis on near-surface problems. Magnetic, seismic reflection/refraction, electromagnetic and ground penetrating radar surveys. Case history analysis of environmental and geotechnical problems.

- [Course syllabus](#)

CHAPTER 2

Course Times

Lectures:

- Mon Wed Fri 13:00-14:00 in ESB 2012

Labs:

- Section L1A: Mon 15:00-17:00 in EOS Main 203
- Section L1C: Tue 13:00-15:00 in EOS Main 203

TBL Teams:

- [Teams](#)

CHAPTER 3

Contact Information

Instructors:

- Doug Oldenburg: doug@eos.ubc.ca, ESB 5194
- Seogi Kang: skang@eos.ubc.ca, ESB 4037

Office hours: contact the instructors via email to set up an appointment. Please include 'EOSC350' in the subject line.

Teaching Assistants:

- Michael Mitchell: mmitchel@eoas.ubc.ca, ESB 4033
- Thibaut Astic: tastic@eoas.ubc.ca, ESB 4037

Office hours: contact the TA's by e-mail or in person for availability. Please include 'EOSC350' in the subject line.

Additional Support:

- Devin Cowan: devinccowan@gmail.com
- Dominique Fournier: dfournie@eoas.ubc.ca

Contents

3.1 Course Schedule

This page will be updated regularly throughout the year, check it often.

Note: Please print out the labs before attending the lab period!

Latest course grades can be downloaded here: [Semester Grades](#).

Midterm answers can be downloaded here: [Midterm answers](#).

month	day	wk	topics	required readings	activity	lab	TA Contact	Instructor Contact
Sept	5	1	Introduction and Course Goals	<ul style="list-style-type: none"> Syllabus 	<ul style="list-style-type: none"> Lecture 1 Intro 	No Lab		Doug
	7		Physical Properties	<ul style="list-style-type: none"> GPG Physical Properties 	<ul style="list-style-type: none"> Lecture 2 Physical Properties 			
	10	2	Seven step framework for geophysics	<ul style="list-style-type: none"> GPG Foundations 	<ul style="list-style-type: none"> Lecture 3 Framework 	<ul style="list-style-type: none"> Lab 1 Physical properties 	Devin	Doug
	12			<ul style="list-style-type: none"> TBL 1 Case History 	<ul style="list-style-type: none"> Phys Prop Quiz TBL 1 Individual TBL 1 Team 			

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	14		Magnetics	<ul style="list-style-type: none"> • GPG Mag-net-ics 	<ul style="list-style-type: none"> • Lecture 4 Mag-net-ics • Magnetic Dipole ap-plet 			
	17	3			<ul style="list-style-type: none"> • Lecture 5 Mag-net-ics • Magnetic Prism ap-plet 	<ul style="list-style-type: none"> • Lab 2 Mag-net-ics Part 1 	Mike	Doug
	19				<ul style="list-style-type: none"> • Lecture 6 Mag-net-ics 			
	21				<ul style="list-style-type: none"> • Lecture 7 Mag-net-ics 			

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	24	4		<ul style="list-style-type: none"> TBL 2 Case History 	<ul style="list-style-type: none"> TBL 2 Individual TBL 2 Team Each TBL team brings a laptop 	<ul style="list-style-type: none"> Lab 3 Magnetics Part 2 Student Magnetic Data 	Mike	Doug
	26		Seismic	<ul style="list-style-type: none"> GPG Seismic 	<ul style="list-style-type: none"> Seismic Lecture 1 			Seogi
	28				<ul style="list-style-type: none"> Seismic Lecture 2 			Seogi
Oct	1	5			<ul style="list-style-type: none"> Seismic Lecture 3 	<ul style="list-style-type: none"> Lab 4 Seismic Part 1 		Mike
	3				<ul style="list-style-type: none"> Seismic Lecture 4 			

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	5				<ul style="list-style-type: none"> • Seismic Lec- ture 5 • Seismic re- view 		
Oct	8	6	Thanksgiving No class			<ul style="list-style-type: none"> • Thanksgiving Week: NO LAB! 	Seogi
	10				<ul style="list-style-type: none"> • Seismic Quiz • Equations • Quiz re- view 		
	12			<ul style="list-style-type: none"> • TBL 3 Case His- tory 	<ul style="list-style-type: none"> • TBL 3 In- di- vid- ual • TBL 3 Team • TBL re- view 		
Oct	15	7	GPR	<ul style="list-style-type: none"> • GPG GPR 	<ul style="list-style-type: none"> • GPR lec- ture 1 	<ul style="list-style-type: none"> • Lab 5 Seis- mic Part 2 	Seogi

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	17				<ul style="list-style-type: none"> GPR lecture 2 			
	19				<ul style="list-style-type: none"> GPR lecture 3 			
Oct	22	8		<ul style="list-style-type: none"> TBL 4 Case History 	<ul style="list-style-type: none"> TBL 4 Individual TBL 4 Team GPR Quiz 	<ul style="list-style-type: none"> Lab 6 GPR 		Seogi
	24		Midterm		<ul style="list-style-type: none"> Midterm 			
	26				<ul style="list-style-type: none"> Midterm Overview DC lecture 1 			
Oct	29	9	DC	<ul style="list-style-type: none"> GPG DC 	<ul style="list-style-type: none"> DC lecture 2 	<ul style="list-style-type: none"> Lab 7 DC 		Doug

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	31		DC	<ul style="list-style-type: none"> • GPG DC 	<ul style="list-style-type: none"> • DC lecture 3 		
Nov	2		DC	<ul style="list-style-type: none"> • GPG EM 	<ul style="list-style-type: none"> • DC Quiz • EM lecture 1 		
Nov	5	10	EM	<ul style="list-style-type: none"> • GPG EM 	<ul style="list-style-type: none"> • EM lecture 2 	<ul style="list-style-type: none"> • Lab 8 EM 1 	Doug
	7		EM	<ul style="list-style-type: none"> • GPG EM 	<ul style="list-style-type: none"> • EM lecture 3 		
	9		EM	<ul style="list-style-type: none"> • GPG EM 	<ul style="list-style-type: none"> • EM lecture 4 • Individual case-history discussion 		
Nov	12	11	RemembranceDay No class			<ul style="list-style-type: none"> • No Lab on Monday! • Individual case-history discussion (Tuesday) 	Doug

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	14		EM	<ul style="list-style-type: none"> • GPG EM 	<ul style="list-style-type: none"> • EM Quiz • TBL 5 Individual • EM re-view 		
	16		EM	<ul style="list-style-type: none"> • GPG EM 	<ul style="list-style-type: none"> • IP lecture 1 		
Nov	19	12	IP	<ul style="list-style-type: none"> • GPG IP • GPG IP 	<ul style="list-style-type: none"> • DC/IP re-view 	<ul style="list-style-type: none"> • Lab 9 EM 2 • em-31.xls 	Doug
	21			<ul style="list-style-type: none"> • TBL 6 Case History 	<ul style="list-style-type: none"> • TBL 6 Individual (DC/IP) • TBL 6 Team 		

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	23				<ul style="list-style-type: none"> • TBL 7 Individual: Apps • TBL 7 Team: Apps 			
Nov	26	13			<ul style="list-style-type: none"> • Student presentations 	<ul style="list-style-type: none"> • No Lab! 		
	28				<ul style="list-style-type: none"> • Student presentations 			
	30				<ul style="list-style-type: none"> • Final wrap-up & assessment 			

3.1.1 Check back soon!

The page you are looking for has not been posted yet

3.2 Assignments

Note: All the material is available through the course schedule.

Note: Please print out the labs before attending the lab period.

Note: Apps for the assignment are available by clicking below binder badge!

3.3 Resources

3.3.1 Course Resources

- GPG: Geophysics for Practicing Geoscientists
- Instructions Using UBC-JupyterHub, Syzygy, for the Course Apps
- Binder for the Course Apps

3.3.2 External Resources

- Physics Toolbox Magnetometer App

3.4 Lecture Video Lists

- Introduction (09/05/2018): <https://youtu.be/7kFPNooixyw>
- Physical Properties (09/07/2018): <https://youtu.be/T6gE93CSYu0>
- Framework (09/10/2018): https://youtu.be/j1Z_yHgdGxI
- Magnetic Lecture1 (09/14/2018): <https://youtu.be/5W0ovJyRVjE>
- Magnetic Lecture2 (09/17/2018): <https://youtu.be/ZTd9XUaIWt4>
- Magnetic Lecture3 (09/19/2018): <https://youtu.be/Rjc9FIa98aM>
- Magnetic Lecture4 (09/21/2018): <https://youtu.be/XZ-C5kPgr5I>
- Seismic Lecture1 (09/26/2018): <https://youtu.be/Z3Xh66Ws7wo>
- Seismic Lecture2 (09/28/2018): <https://youtu.be/TsJg8N1ThHk>
- Seismic Lecture3 (10/01/2018): <https://youtu.be/ladQk39A7GU>
- Seismic Lecture4 (10/03/2018): <https://youtu.be/zdoaBvRDVhk>
- Seismic Lecture5 (10/05/2018): <https://youtu.be/IInmwOgU-d0>
- Seismic Review (10/10/2018): <https://youtu.be/oFg7wepygX8>
- GPR Lecture1 (10/15/2018): <https://youtu.be/guR3-VjJV4A>
- GPR Lecture2 (10/17/2018): https://youtu.be/Ges1fcx_UsI

- GPR Lecture3 (10/19/2018): <https://youtu.be/pQJcfvexBg4>
- DC Lecture1 (10/26/2018): <https://youtu.be/R4x3W-N0CfY>
- DC Lecture2 (10/29/2018): <https://youtu.be/RMHtrPGRJNc>
- EM Lecture1 (11/02/2018): https://youtu.be/vc6Uoj_b45s
- EM Lecture2 (11/05/2018): <https://youtu.be/ORoriWVXYT8>
- EM Lecture3 (11/07/2018): <https://youtu.be/Rv6dCAMz6a0>
- EM Lecture4 (11/09/2018): <https://youtu.be/7OHNua1P2IU>
- IP Lecture1 (11/16/2018): Not available
- DC/IP review (11/19/2018): <https://youtu.be/ZiMezjsz-Jw>