ERTH 4131 / ERTH 5131 – Advanced Petroleum Geoscience Field Methods Winter 2019 COURSE OUTLINE

Lectures The course is a team based, experiential competition during the winter semester with regular, frequent meetings with the course instructor. The class will use the specialised equipment and software in the Basin and reservoir Laboratory.

Instructor: Professor Grant Wach, P. Geo LSC 3060 (Earth Sciences)

Tel. 494-2358 Grant.Wach@dal.ca

Office Hours: By appointment, please e-mail me (or come by my office and see if I am in).

Teaching Assistant: Darragh O'Connor (M.Sc.) LSC 3060 Darragh.OConnor@dal.ca

Office Hours: Please email for a meeting, or visit the Basin & Reservoir lab during weekdays

Course Description: This is a specialised, advanced course in petroleum geoscience applications and interpretation for basin/prospect evaluation. Students work in a team interpreting industry data, including well logs and reflection seismic, in a competitive environment. The course is designed to provide advanced competency in the latest techniques of geoscience interpretation including 2D and 3D seismic reflection seismology, petrophysics and core description. The team submits its findings and recommendations in written and oral presentations.

PREREQUISITES: ERTH 3303.03 and ERTH 4153.03 and permission of instructor

Assessment

Component	Grade (%)	
Exploration and Development	35%	
strategy proposal		
Data Analysis	10%	
Technical Report	30%	
Video and final presentation	25%	

Faculty of Science Numerical and Letter Grades

A+	90-100	4.30	
			Considerable evidence of original thinking; demonstrated outstanding capacity to analyse and
Α	85-89	4.00	synthesize; outstanding grasp of subject matter; evidence of extensive knowledge base.
A-	80-84	3.70	
B+	77-79	3.30	
			Evidence of grasp of subject matter, some evidence of critical capacity and analytical ability;
В	73-76	3.00	reasonable understanding of relevant issues; evidence of familiarity with the literature.
B-	70-72	2.70	
C+	65-69	2.30	Evidence of some understanding of the subject matter; ability to develop solutions to simple
			problems; benefitting from his/her university experience.
С	60-64	2.00	
C-	55-59	1.70	
			Evidence of minimally acceptable familiarity with subject matter, critical and analytical skills (except
D	50-54	1.00	
			in programs where a "C" is required).
		0.00	Insufficient evidence of understanding of the subject matter; weakness in critical and analytical skills;
F	<50	0.00	limited or irrelevant use of the literature.

Professional Conduct:

All work will be done on a professional level. You are representing your nation and the University. All data will be your own work. Ask questions of both your classmates and the instructor but do not copy. Copying will result in you being presented to the Senate Committee on Academic Discipline & Integrity.

Reports:

Reports are due as a hard copy and an electronic file. Please use a scientific referencing system.

Presentations: Presentations are due as an electronic copy.

University Policies and Statements

This course is governed by the academic rules and regulations set forth in the University Calendar and by Senate

Academic Integrity

At Dalhousie University, we are guided in all of our work by the values of academic integrity: honesty, trust, fairness, responsibility and respect (The Center for Academic Integrity, Duke University, 1999). As a student, you are required to demonstrate these values in all of the work you do. The University provides policies and procedures that every member of the university community is required to follow to ensure academic integrity.

Information: https://www.dal.ca/dept/university_secretariat/academic-integrity.html

Accessibility

The Advising and Access Services Centre is Dalhousie's centre of expertise for student accessibility and accommodation. The advising team works with students who request accommodation as a result of a disability, religious obligation, or any barrier related to any other characteristic protected under Human Rights legislation (Canada and Nova Scotia).

Information: https://www.dal.ca/campus life/academic-support/accessibility.html

Student Code of Conduct

Everyone at Dalhousie is expected to treat others with dignity and respect. The Code of Student Conduct allows Dalhousie to take disciplinary action if students don't follow this community expectation. When appropriate, violations of the code can be resolved in a reasonable and informal manner—perhaps through a restorative justice process. If an informal resolution can't be reached, or would be inappropriate, procedures exist for formal dispute resolution.

Code: https://www.dal.ca/dept/university_secretariat/policies/student-life/code-of-student-conduct.html

Diversity and Inclusion – Culture of Respect

Every person at Dalhousie has a right to be respected and safe. We believe inclusiveness is fundamental to education. We stand for equality. Dalhousie is strengthened in our diversity. We are a respectful and inclusive community. We are committed to being a place where everyone feels welcome and supported, which is why our Strategic Direction prioritizes fostering a culture of diversity and inclusiveness

Statement: http://www.dal.ca/cultureofrespect.html

Recognition of Mi'kmaq Territory

Dalhousie University would like to acknowledge that the University is on Traditional Mi'kmaq Territory. The Elders in Residence program provides students with access to First Nations elders for guidance, counsel and support. Visit or email the Indigenous Student Centre (1321 Edward St) (elders@dal.ca).

Information: https://www.dal.ca/campus life/communities/indigenous.html

Important Dates in the Academic Year (including add/drop dates)

https://www.dal.ca/academics/important dates.html

University Grading Practices

https://www.dal.ca/dept/university_secretariat/policies/academic/grading-practices-policy.html

Missed or Late Academic Requirements due to Student Absence (policy)

https://www.dal.ca/dept/university_secretariat/policies/academic/missed-or-late-academic-requirements-due-to-student-absence.html

Student Resources and Support

Advising

General Advising https://www.dal.ca/campus life/academic-support/advising.html

Science Program Advisors: https://www.dal.ca/faculty/science/current-students/academic-advising.html

Indigenous Student Centre: https://www.dal.ca/campus life/communities/indigenous.html

Black Students Advising Centre: https://www.dal.ca/campus_life/communities/black-student-advising.html

International Centre: https://www.dal.ca/campus_life/international-centre/current-students.html

Academic supports

Library: https://libraries.dal.ca/

Writing Centre: https://www.dal.ca/campus life/academic-support/writing-and-study-skills.html

Studying for Success: https://www.dal.ca/campus life/academic-support/study-skills-and-tutoring.html

Copyright Office: https://libraries.dal.ca/services/copyright-office.html

Fair Dealing Guidelines https://libraries.dal.ca/services/copyright-office/fair-dealing.html

Other supports and services

Student Health & Wellness Centre: https://www.dal.ca/campus_life/health-and-wellness/services-support/student-health-and-wellness.html

Student Advocacy: https://dsu.ca/dsas

Ombudsperson: https://www.dal.ca/campus life/safety-respect/student-rights-and-responsibilities/where-to-get-

help/ombudsperson.html

Safety

Biosafety: https://www.dal.ca/dept/safety/programs-services/biosafety.html

Chemical Safety: https://www.dal.ca/dept/safety/programs-services/chemical-safety.html

Radiation Safety: https://www.dal.ca/dept/safety/programs-services/radiation-safety.html

Scent-Free Program: https://www.dal.ca/dept/safety/programs-services/occupational-safety/scent-free.html