

## Guidelines for the Project-Based Geology MSc

### Purpose

This is a professional degree program intended to address the rapidly increasing industry demand for highly trained applied geoscientists. The program offers an accelerated format (1-year) in which students and professionals can undertake graduate-level coursework, gain research experience, and earn an MSc. It is ideal for students looking for further training for industry careers, professional accreditation, or research experience.

### Core Curriculum

**Coursework:** Students enrolled in the project-based MSc must complete 7 graduate-level courses over 3 terms. Course selection is based on students' interests and career goals, and must meet the following requirements:

- 4 courses must be in Geology or Geophysics.
- 1 course must be a graduate-level field course\*.
- \*GP9509 Geophysical Field Techniques is required for all Geophysics students. If/when GP9509 is not offered, geophysics students may select from other departmental field courses.
- 1 course must be the Graduate Seminar (GL/GP 9580A; Winter term only)
- 1 course can be undergraduate-level (i.e. not cross-listed)

Students must achieve a grade of  $\geq 60\%$  in all courses taken for credit and an overall average grade of  $\geq 70\%$ .

**Project Requirement:** Students must complete a research project and submit a professional report that details the project background, objectives, methods, results, and implications. The project should be limited in scope to one year and focus on a clearly defined research question. The work begins on day one of the program, with data collection and analysis occurring

within the first eight months, followed by 2.5 months dedicated to writing, 2 weeks for review, and 1 month for revising the final report (**Fig. 1**). The review should be done by the supervisor and a reader who is qualified to comment on the quality of the report and the project. (selected by the supervisor).

**Report Guidelines:** The report should be ~30 pages (1.5-line spacing; excluding figures and references) and formatted as an academic manuscript using the *guide for authors* of a peer-reviewed journal. The journal should be selected based on relevance to the students' degree program. The manuscript does not need to be published, but should be polished and complete. The report is submitted to the supervisor and reader by July 15, with the final report submitted to the supervisor for approval at the end of the 3<sup>rd</sup> term.

**Fig. 1:** Example timeline of project-based MSc

	Geology	Geophys	Project Timeline
Sep	GL9### GL9###	GP9### GP9###	Project planning
Oct	†GP9###	†GL9###	Data collection
Nov	<b>PS9604 or</b>	<b>GP9509</b>	
Dec	<b>GP9509</b>		
Jan	GL9580	GP9580	
Feb	†GL9###	†GP95###	Report writing
Mar	*GEOG9###	*CIVL9###	
Apr			
May	<b>Or GL9600</b>		
June	<b>Or GL9601</b>		Review & revision
July (15)	<b>Or PS9605</b>		
July (31)			
Aug			

\*Example of non-ES or undergraduate ES course; †Any GL, GP, PS, or HRR grad course. **Field Course**

**Capstone Presentation:** Each student is expected to deliver a 5 min presentation on their research project at the project-based MSc reception in late August.