

Department/Academic Unit: Geological Sciences and Geological Engineering (PhD)

Degree Level Expectations, Learning Outcomes, Indicators of Achievement and the Program Requirements that Support the Learning Outcomes

Expectations (general descriptors from OCAV)	Learning Outcomes (program specific)** This degree is awarded to students who demonstrate...	Indicators of Achievement As evidenced by...	Relevant Courses and academic requirements (requirements that contribute to the achievement of learning outcomes and degree expectations)
Depth and breadth of knowledge	A systematic understanding of knowledge, and a critical awareness of current problems and/or new insights, much of which is at, or informed by, the forefront of their academic discipline, field of study or area of professional practice	Successful completion of comprehensive exam Successful completion of PhD thesis	AODA 800 Thesis proposal Submission of annual progress report Thesis (GEOL 999) which must be orally defended
Research and scholarship	A conceptual understanding and methodological competence that enables: Comprehension and application of how established techniques of research and inquiry are used to create and interpret knowledge in the discipline; Critical evaluation of current research and advanced research and scholarship in the discipline or area of professional competence; and Treat complex issues and judgments based on established principles and techniques, And, on the basis of that competence, candidates are able to: Develop and support a sustained argument in	Successful completion of comprehensive exam Successful completion and defense of thesis	Comprehensive exam Completion of PhD thesis

	written form; Demonstrate originality in the application of knowledge		
Application of Knowledge	Competence in the research process by applying an existing body of knowledge in the critical analysis of a new question or of a specific problem or issue in a new setting	Successful completion of PhD thesis, which includes a literature review	Thesis proposal, PhD thesis
Professional capacity/autonomy	<p>a) the qualities and transferable skills necessary for employment training</p> <p>i. the exercise of initiative and of personal responsibility accountability; and</p> <p>ii. decision-making in complex situations; and</p> <p>b) the intellectual independence required for continuing professional development;</p> <p>c) the ethical behaviour consistent with academic integrity and the use of appropriate guidelines and procedures for responsible conduct of research; and the ability to appreciate the broader implications of applying knowledge to particular contexts</p>	<p>Successful completion of training activities during Orientation Week;</p> <p>Submission of applications for internal and external funding and scholarships/fellowships;</p> <p>Participation in teaching, supervision, and mentorship experiences;</p> <p>Development of academic/professional networks (e.g., attending conferences; serving on unit, university-wide, and external committees; engaging in collaborative research)</p>	<p>Completion and defense of PhD thesis</p> <p>AODA 800 non-credit course in Accessible Customer Services</p> <p>Conference and other public presentations May include serving on unit, university-wide, and external committees</p>
Communication Skills	The ability to: Clearly communicate ideas, issues, and conclusions in written and oral work to diverse audiences; Read and listen carefully and critically	<p>Successful completion of thesis requirements;</p> <p>May include presentation of research in a public forum;</p> <p>May include publication of research;</p> <p>Independent study projects</p>	<p>Annual progress reports</p> <p>PhD thesis</p> <p>Normally includes teaching assistantships</p>

<p>Awareness of limits of knowledge</p>	<p>Cognizance of the complexity of Knowledge, and of the potential contribution of other interpretations, methods, and disciplines, An appreciation of the limitations of one's own work and discipline.</p>	<p>Successful completion of thesis, which include a review of the literature, and oral defense before an interdisciplinary panel, Thesis may include a discussion of the "limitations" of results</p>	<p>Orally defended thesis</p>
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