

Course Code	Title	Term	Instructor	Estimate Enrollment	# of TA ships and hours	Required Background/Skills	Description
APSC 200	<i>Engineering Design and Practice II/Engineering Communications</i>	F	Chris Pickles	34	2 UG TA (60 hrs)	<p>Technical writing</p> <p>Communication and presentation skills</p> <p>Teamwork abilities</p> <p>Confidence and ability to work with others as well as independently</p> <p>Self-motivation, initiative</p> <p>Time management</p> <p>Knowledge of Arduino software in an asset</p> <p>Knowledge of data acquisition systems is an asset</p>	<p>APSC 200 - In this course students will participate constructively on teams to create solutions to open-ended complex problems, using standard design methods and tools. This project-based course provides instruction primarily in the first 6 weeks of the semester focusing on problem scoping, creativity and idea generation, decision making incorporating technical, economic, societal, and environmental factors, safety, engineering codes and regulations, and engineering ethics. The final 6 weeks of the course centre around a design project delivered by each discipline. This course is integrated with APSC 293, and coordinated by the same instructor. (0/14/12/0/36)</p> <p>APSC 293 - This course provides an introduction to effective engineering writing and speaking skills with the emphasis on professional correspondence, engineering reports, oral briefings, and formal oral presentations. These skills are developed in lectures and small group tutorials. This course is integrated with APSC 200, and coordinated by the same instructor. (0/0/12/0/0)</p>
MINE201	<i>Introduction to Mining</i>	F	Charlotte Gibson	34	1 UG TA (30hrs) -First Half of Fall Term	<p>Must possess an undergraduate degree in Mining Engineering. Preferably has some experience working in the mining industry.</p>	<p>This course presents an overview of all aspects of mining from exploration, financing, development and mining operations. Underground and open pit mining are contrasted. Mineral processing systems for the production of gold, diamonds, copper, nickel, zinc and iron will be studied. Topics include decision-making process related to world market commodity pricing, mine planning and design, mining equipment, blasting and environmental considerations. Concepts of sustainability from economic, social and environmental perspective will be explored. Case studies, a major field trip and related assessment will be used to illustrate principles taught and how they are applied in a practical situation. Conservation equations for mass and energy, process flow diagrams, material and energy balances, First Law of Thermodynamics. (0/12/0/36/0)</p>