Graduate Attributes Framework

Undergraduate Programs offered in the Faculty of Science will aim to develop the following attributes in our students.
Attributes are the desired knowledge and skills that students who graduate with degrees from the Faculty of Science seek to develop over the course of their programs.

	Sub-Category	Description
Knowledge	**Disciplinary Knowledge**	Acquire knowledge (conceptual and technical) specific to chosen area of study. Be able to understand and analyze issues across the spectrum of math and sciences and integrate knowledge from other fields of study. Understand how scientific and mathematical knowledge continually evolve and that it is subject to change.
	Science in Society	Understand the impact and ethics of scientific discoveries on influencing society locally, globally and ethically. Understand that science is a social endeavor. Scientists work together and within local and global communities seeking to improve understanding and explanations of the natural world.
Skills	**Critical Thinking**	Ability to assess scientifically-based arguments and/or information and critically evaluate the basis of the included ideas. Ability to distill salient points from assimilated information.
	Research	Ability to find information, collect data and assess its relevance and reliability. Ability to formulate or articulate a problem and recommend/implement solutions.
	Problem Solving	Understand how scientific knowledge is used to identify, define and permit analysis of problems, and arrive at solutions.
	Technical skills	Acquire skills specific to chosen area of study.
	Collaboration	Ability to work effectively as member of inter- and intra-disciplinary teams.
	Communication	Explain and present ideas effectively to different groups of people (scientific and nonscientific audiences). Explain and present ideas effectively in in multiple formats (written, oral, graphical, symbols)
	Self-directed learning	Ability to evaluate personal performance and independently seek and act upon means of improvement to allow for the advancement of knowledge and skills.
	Creativity and curiosity	Ability to adapt to new situations. Use or modify materials or equipment at hand to obtain results. Develop divergent and convergent ways of thinking. Ability to pick out unusual associations of ideas. Thirst for knowledge.
	Career skills	Organization, time management, professional approach to learning.
Commitments	**Diversity**	Understand that people from other disciplines and backgrounds bring different skills, knowledge and tools to problem solving.
	Ethical Practice	Demonstrate an understanding of the scope of ethical principles and a commitment to applying these principles in decision-making and scientific practice.
	Sustainability	Understand the importance of sustainability and the impact of scientific activities and discoveries on sustainability and environmental stewardship.
	Social Responsibility	Understand the responsibility of contributing or transferring one's knowledge, skills and expertise to community (community can incorporate local, municipal, national and international scopes)