Graduate Research Fellowship (GRF) Learning Plan

This form is to be used when providing a Graduate Research Fellowship to support a graduate student while they develop the research, professional and/or technical skills needed to complete their degree requirements. The Learning Plan supports students in developing and articulating their graduate learning experiences and skill development. It should be completed by the supervisor and the student in consultation, and reviewed annually by both parties and revised as needed.

There are many different facets to becoming a successful researcher. One must develop a wide range of intellectual and interpersonal skills as well as a strong knowledge base. Some aspects of the training are not found in textbooks, journals, and courses, or in the work documented in a thesis. A researcher must learn to develop new ideas and new approaches to succeed. They must be able to respectfully engage research participants and communicate their findings. They must also learn how to be an effective and supportive team member, mentor and, at the PhD level, take ownership of a research effort.

The Learning Plan is designed to help the student to plan, and reflect upon, the activities that will be undertaken during the academic year, and to consider how these activities will contribute to the degree and program requirements. A copy of the completed form should be submitted to the Graduate Coordinator or department contact at the beginning of the academic year.

Graduate Program Name:

Supervisor's Name:

Graduate Student's Name:

Department/Program Contact:

Nature of activities, goals and relevant learning outcomes (approx. 3-4):
(Examples of activities and goals could include, but are not limited to: performing a literature review, acquiring a specific technical skill, completing course work, giving a conference presentation, participating in a professional development workshop or event, completing the qualifying/comprehensive examination).

(The learning outcomes listed below, organized according to the Queen's Learning Outcomes Framework, provide a possible list of knowledge, skills and habits of mind that a student might gain by the end of their graduate degree. The list is meant to promote reflection and discussion about the activities that the student will undertake during a given academic year, and how they will contribute to the student's mastery of some of these degree level expectations. For example, the student may be reading the literature to learn more about a new area and will thus improve their ability to critically evaluate and synthesize the research literature, identifying gaps in our current knowledge.)

_____   _____
Student Signature   Date

_____   _____
Supervisor's Signature   Date

Knowledge and Intellectual Capacities *Knowledge in Area of Specialization | Creative Thinking | Problem Solving | Critical Thinking | Quantitative Literacy |Information Literacy*

☐ Synthesize and critically evaluate scholarly literature and data to fill gaps in knowledge and make informed decisions.

☐ Integrate concepts and ideas from other disciplines into my area of research.

☐ Accurately interpret and analyze different forms of evidence for the purpose of constructing well-reasoned conclusions and predict implications.

☐ Draw sound evidence-based conclusions from their research, and the research of others, based on best practices that recognize scope for potential uncertainty arising from underlying assumptions, alternative interpretations, and gaps in knowledge.

☐ Evaluate, integrate, and apply appropriate information from various sources to create cohesive, persuasive and logical arguments and conclusions.

☐ Demonstrate mastery of theoretical, mathematical, numerical and experimental techniques needed for their research plan.

☐ Operate and maintain complex pieces of lab equipment or code, and help others achieve the same level of proficiency.

Research-Focused /Practice oriented *Foundations for Lifelong Learning | Application of Knowledge |Knowledge Creation and Dissemination | Inquiry and Analysis*

☐ Define a research question or issue in the field and devise a plan for investigating it using appropriate approaches to inquiry.

☐ Frame appropriate questions to investigate critical issues in the field through advanced, high quality and original independent research.

☐ Use appropriate research methodologies and critically evaluate scientific literature and data to fill gaps in knowledge.

☐ Apply appropriate methodologies and frameworks to investigate practical problems in an organization and produce a solution or solutions acceptable to the organization.

☐ Examine different approaches and models to be able to determine best practices (or high impact practices) and establish actionable strategies.

☐ Conduct self-driven, independent research on an applied problem in the field, including an evaluation of limitations as well as proposing promising avenues for future research.

☐ Conceptualize, design and implement research to generate new knowledge, learnings, and understandings.

Leadership *Initiative and persistence | Nurturing self and others | Integrity and social responsibility*

☐ Involve key stakeholders to build and sustain consensus, resolve problems and make decisions in a collaborative process.

☐ Demonstrate leadership skills in working with peers and/or mentoring trainees in the achievement of a specific task with specific boundaries.

Interpersonal Capacities *Collaboration | Oral and written communication*

☐ Collaborate effectively and respectfully with peers and key stakeholders to enable knowledge exchange and productive engagement.

☐ Build knowledge collaboratively by: listening carefully and respectfully to others' viewpoints; articulating your own ideas and questions clearly; and situating your own ideas in relation to other voices, ideas and viewpoints.

☐ Clearly and confidently communicate information, ideas, research outcomes in an oral, written and visual format to a range of audiences

☐ Effectively communicate across settings, purposes, and audiences.

Personal Capacities *Self-management | Disposition to improve | Ethical reasoning | Respecting diverse ways of knowing.*

☐ Employ intellectual independence to actively engage in continuing professional development and to adapt to changing social and professional contexts.

☐ Use appropriate guidelines and procedures for research ethics and academic integrity and articulate how these apply in a range of academic and non-academic contexts.

☐ Articulate personal strengths and identify areas for further development.

☐ Exercise self-awareness and self-regulation in decision-making, interacting with others, and adapting to changing circumstances.

☐ Employ ethical, responsible, reflexive and socially just modes of inquiry when investigating issues in a laboratory or research setting.

☐ Articulate limitations of your approach and identify potential contributions of other interpretations, methods, and disciplines.

☐ Organize time and exploit resources effectively.

Community Engagement *Civic engagement | Global learning | Intercultural competence*

☐ Demonstrate an ability to link academic knowledge and research to political and social issues, locally and globally.

☐ Formulate approaches for engaging Indigenous community partners.

☐ Demonstrate the ability to reflect upon, learn from, cope emotionally with and operate efficiently in intercultural contexts.

☐ Communicate research results as appropriate, to target groups such as researchers in the same field, granting organizations, and the general public.

☐ Support and/or lead outreach efforts to engage the broader public in their research.