**Expectations for a Master’s of Science degree in Veterinary Medical Sciences**

Whereas the definition of a doctoral degree is broadly similar among faculties and universities, the definition of a Master’s degree seems to vary considerably among graduate programs[[1]](#endnote-1). Notwithstanding clearly worded expectations in the Faculty of Gradute Studies calendar, the following reflections aim to better define—for student, supervisors, and examiners—what the Graduate Education Committee of the Veterinary Medical Sciences graduate program considers as the expectations of an MSc degree.

The expectation for timely completion of a thesis-based Master’s degree at the University of Calgary (Graduate Calendar section B.6) is two years, with a maximum completion time of four years of study (full or part time).

The UofC Graduate Calendar expectation is that an MSc thesis: “*should make* ***some*** *original contribution to knowledge in the field*” and “*that a* ***portion*** *of the thesis could be the basis for a publication.”*  (By comparison, a PhD thesis: “*must embody* ***original work*** *conducted while in program, and must constitute a* ***significant contribution*** *to knowledge”* and *“that the thesis could be the basis for a publication.”*) Hence, a Master’s degree is not a foreshortened or mini-PhD.

VMS Program Requirements include:

(1) Establishing a supervisory committee (no later than three months after registration), which includes a supervisor (where required, a co-supervisor), and two supervisory committee members.

(2) The presentation and “defense” of a research proposal to the supervisory committee (no later than 12 months after first registration, but realistically by 9 months).

(3) The completion of two required courses (VETM 601 and 605) and one elective course, typically within the first year.

(4) An annual supervisory meeting.

(5) A public seminar once during program (prior to thesis defense).

From the VMS Program Director:

The goals of academic rigor and timely completion of an MSc in VMS are not mutually exclusive, however, both require careful planning and diligent work on behalf both the student and supervisor. The Graduate Education Committee of UCVM supports the principles of MSc training outlined in the following paragraph.

The ultimate aim is for graduating students who are competent in the general principles of research including critical evaluation of the literature, experimental design, implementation, analyses, and oral and written communication. They do this through both coursework and the implementation of their own research project. MSc students are expected to obtain technical mastery of at least one technique used in their thesis work. The data acquired must be valid and an analysis of the data should yield further insights into a field (either by reinforcing or extending previous work or by revealing new information). Such work, even if confirmatory, should be worthy of communication to experts in the field. To effectively and efficiently complete a Master’s of Science program in a timely fashion, the scientific “problem” or goals should be clearly evident to both student and supervisor at the very beginning of the training, and the path to the addressing the problem or reaching the goals should also be evident at the beginning of the program. The supervisor is expected to assist the student in ensuring the path to completion is well defined. The student is expected to work diligently to acquire and analys their data using scientific principles, understand the basic foundational information available in their field, and be able to synthesize a reasonable interpretation of their data.

Essentially, to complete and defend an MSc degree in 24 months, courses need to be complete in the first year, a research proposal should be approved by the supervisory committee by 9 months, the acquisition of primary data should occur between 9-18 months, and the analysis and writing should be completed between 18 and 23 months.

1. Historically, a Master’s degree was a license to practice (theology), whereas a Doctoral degree was a license to teach (as an authority of the academy). Whereas this is true to a certain extent in some fields, these definitions have evolved somewhat over the past century. [↑](#endnote-ref-1)