



## CHEM 794(0) M.Sc. Seminar

### M.Sc. Research Seminar Requirement

The Masters Seminar is a research proposal and seminar taken as a one-term course and completed by the second term of enrolment. The research proposal is a written document about 25 typed pages in length. It outlines the reasons for undertaking the thesis research, surveys the relevant literature concisely, and presents a detailed methodology for carrying out the thesis research. The material of the proposal is subsequently presented and defended in the course seminar. All full-time graduate students who are enrolled for an M.Sc. degree are required to fulfil the requirements for Chemistry 794 within their **first two terms** in the program.

The objectives of the Chem. 794(0) requirement are to encourage M.Sc. students to learn to use the literature at an early stage in their program, to stimulate in-depth thinking about the basis of their thesis research and to encourage development of the public speaking skills so essential for scientists. It involves the preparation of a written Research Proposal and its presentation and defence in a public seminar, together with attendance at, and participation in, the critical evaluation of analogous seminars presented by their peers. While most often based on the theme of their M.Sc. research project, subject to the approval of their supervisor, the Proposal may be on any topic of the student's choice. It should outline the reasons for undertaking the project, concisely survey the relevant literature, present a detailed description of the methodology to be used and outline any preliminary results.

**To reward strong performances in seminar presentations, a prize of \$100 is awarded annually on each campus of the Centre for the best Masters and Doctoral seminar.**

### For Guelph Graduate Students

#### Course Requirements

- ✓ a written research proposal
- ✓ an oral defense of the research proposal
- ✓ attend and participate at other course seminars

#### Details of Above Requirements

- ✓ The written project report will consist of a detailed research proposal including a major review of the literature related to the student's research area.

The report should be typewritten, double-spaced and would normally have 20-25 pages of content (i.e. excluding the title, abstract, etc). The report is to be saved in PDF format and submitted at least 1 week (7 days) in advance of the seminar to the Advisory Committee and Course Coordinator. The report should follow the format of a Master's thesis. Guidelines for formatting a thesis are available on the Graduate Program Services (GPS) website:

<http://www.uoguelph.ca/registrar/graduatestudies/index.cfm?records/thesis-part1>

The Schedule of Dates for deadlines is provided by the Graduate Secretary.

Marks will be deducted for late or/and incomplete written project reports.

To ensure useful feedback, the student is required to provide an electronic copy of their Power Point slides at least 24 hours (1 working day) before the seminar to the Advisory Committee and the Course Coordinator. **The electronic file should be put on a light background and saved in PDF format with 2 slides per page.**

- ✓ The oral defense will be a formal seminar of approximately 30-40 minutes duration followed by a question period.
- ✓ The student will be expected to attend and participate at other course seminars.

#### Evaluation

- ✓ An evaluation committee consisting of the CHEM 7940 instructor (course co-ordinator), the research advisor, and at least two other faculty members, usually members of the student's advisory committee, will mark the written proposal and submit a numerical grade before the oral presentation.
- ✓ The evaluation committee will grade the seminar based on the following criteria:
  - preparation and organization
  - presentation, speech and grammar
  - understanding of material
  - ability to handle discussion
- ✓ Attendance by the students at the seminars will be evaluated by the course instructor (co-ordinator).
- ✓ Students will be assigned a numerical grade at the end of the course in which the written and oral requirements of the course will have equal weight.

**Preparation of Research Proposal**

Possible headings for your report are listed below:

Suggested weighting of material presented	Sections	Description
30%	Introduction	- outline the various parts or aspects of your report.
	Background	- it should include the background literature related to your proposed research. - it should provide enough depth of information to support the proposal and its context.
40%	Research Proposal	- what do you propose to do in your research project and how do you propose to do it? - details of any special instrumentation or apparatus should be included.
30%	Significance	- why would this be a significant research contribution? - outline possible extensions or applications if this research was successful.
	Bibliography	- the whole report should be properly referenced. - the formal of the references should be appropriate to your sub-discipline or similar to theses in your area.

Variations on this suggested format may be appropriate or desirable. For examples of research proposals, the student should see his/her CHEM\*7940 Course Coordinator.

Please refer to the following link regarding plagiarism: <http://www.academicintegrity.uoguelph.ca/>

**For Waterloo Graduate Students**

Details regarding the Chemistry 794 requirement are to be found in copies of the Chemistry Orientation Graduate Booklet as well as the Chemistry Department website. **Sample Reports and requirements are also found on the Chemistry Department website** <http://www.chemistry.uwaterloo.ca/grad/index.html>.

**Please note in the information included on the website, details regarding penalties associated with late submission of the written research proposal or other materials.**

**These regulations are updated frequently and students are advised look them up and read them carefully. It is highly recommended that the student's supervisor be shown a draft of the report well in advance of the due date so that any gross errors may be corrected.**

The first step for students is to establish a date for the seminar presentation and the submission of a title for the oral presentation. Note that the title submitted at this time may be revised at a later date, when the proposal topic becomes more accurately defined. The possible dates for the current term are posted in the mail room (C2-261A):

- ✓ Students are requested to select **one** date for the presentation of Chemistry 794 and pencil their name on the posted timetable
- ✓ Secure the agreement (in writing) of the members of your committee and the (GWC)<sup>2</sup> Director. A form is provided by the Graduate Secretary for this purpose.
- ✓ When the form is completed and signed by all members of the advisory committee and the (GWC)<sup>2</sup> Director, the form is returned to the Graduate Secretary, in C2-280, and the student's name (in ink) is posted to the timetable in C2-261A in ink.

Before starting your Chem 794 proposal, you should consult the following websites regarding academic integrity and plagiarism: Policy 71 - Student Academic Discipline Policy <http://secretariat.uwaterloo.ca/Policies/policy71.htm> and Plagiarism and Other Written Offences [http://arts.uwaterloo.ca/arts/ugrad/academic\\_responsibility.html](http://arts.uwaterloo.ca/arts/ugrad/academic_responsibility.html). The website for academic integrity can be found at <http://uwaterloo.ca/academicintegrity>.

Infringements will not be tolerated! If your chemistry report is found to contain plagiarized material, it will receive a grade of zero (0).

**Attendance**

In order to obtain the grade for your master's seminar you must attend **8 (eight)** seminars other than your own of which **4 (four)** must be taken through the Chemistry Department and the remainder can be completed through a combination of Chemistry or IBBM Seminars. For MSc. Chem plus Nanotechnology students, seminar attendance requirements can be completed by attendance at **4 (four)** Chemistry Department and **4 (four)** Nanotechnology Seminars. Where you have attended a seminar outside the Chemistry Department, it is your responsibility to complete and submit the Alternate Seminar Attendance Form located on the Chemistry Graduate web page: <http://chemistry.uwaterloo.ca/pdf/alternate-seminar-attendance-form.pdf>

If you do not complete the student evaluation form at the seminar you will not be given credit for attending. If you have not presented, it is suggested that you should attend as many seminars as possible prior to your own presentation. Not only will you complete the requirements more quickly, you will be aware of what you have to do at presentation time.

The notices for the seminars are posted one week ahead of the seminar date (and e-mailed a day prior) on the board dedicated to this outside of the main office, as well as the mailroom door. They are bright yellow notices and cannot be missed.