



Process and Format for Developing the Chem 796(0) Ph.D. Oral (Qualifying) Examination.

Scope and Purpose of the Examination

The examination should ascertain whether the student is able to demonstrate a satisfactory comprehensive knowledge, to the B.Sc. level, of a sub-discipline of Chemistry, chosen from analytical, biological, inorganic, organic, physical-theoretical and polymer, as well as a more advanced knowledge in areas related to his/her research. In special cases, a combined examination covering parts of more than one sub-discipline may be required. The scope of the examination will be defined for the student by the student's Ph. D. Advisory Committee. Normally this will involve the specification of a suitable text or sections of texts to define the coverage and level of knowledge expected.

Process and Format of the Examination

1. Immediately following the Chemistry 795(0) Ph.D. Seminar presentation, the student's Ph. D. Advisory Committee, in consultation with the student's supervisor(s), will define the topics to be covered in the Chemistry 796(0) Oral Comprehensive Examination. The student may attend this part of the meeting at the discretion of the Advisory Committee.

2. The student's Advisory Committee will also make recommendations for three Examining Committee members (normally constituted so as to include representation from both campuses of the Centre and one of whom may be a non-Center member). **The Examining Committee will normally include some or all of the supervisory committee**, but will not include the student's supervisor.

3. **The Advisory Committee is requested to provide their recommendation for the examining committee membership for Chemistry 796(0) PhD Comprehensive/Qualifying Examination and the possible agreed meeting date (within 6 weeks of the Ph.D. Seminar). A form is provided to the Supervisor/Research Advisor for their use to fill in the recommended topics, referenced textbooks or papers, committee members and examination date and time. This form is to be returned to the (GWC)² Office by the supervisor/research advisor.**

4. If the student has not attended the Advisory Committee meeting, the student should meet with their supervisor/research advisor immediately following the meeting, to request the outcome of the Advisory Committee discussion on the examination committee membership, proposed date and topics and reference material for the upcoming oral comprehensive. A formal letter will be provided to the student and a memo to the committee members will be distributed, once the above details are confirmed by the supervisor/research advisor with the (GWC)² administrative assistant. This is normally distributed within one week of the Chemistry 795(0) Ph.D. Seminar.

5. The oral examination will be formatted to cover the assigned topics. The examining committee members may be assigned to provide questions for specific topics or to provide questions for all topics. The number of topic areas will be constrained by the number of questions to be provided by each committee member (4 questions each) and whether members are assigned one or more topics. The exam consists of nine questions, of which the student chooses 6. These questions should be able to be answered within 15 minutes. The student will be allowed to review the questions for 30 minutes prior to the start time of the examination. The total time booking for an exam will be approximately two (2) hours. The student is allowed to bring in blank paper and may be requested to bring other items such as a calculator or ruler.

6. Various exam formats have been utilized with the most common as follows:

- The exam is not divided into individual topic areas. Examiners are assigned to provide 4 questions each and the (GWC)² Director selects 9 questions from the 12 questions submitted.
- The exam is divided into two parts or more, where each part may cover one or more topic areas and each part is assigned to one or more examiners (minimum 2 questions assigned to a part). The examiners are requested to identify which questions are assigned to which part.

In all cases, the student is assigned to answer questions from each part and 6 questions in total.

7. The (GWC)² Centre will send out the following notifications:

- confirmation of the topic titles, assigned references, examination committee membership, date, time and place of the oral comprehensive. This confirmation may take up to a week after the PhD Seminar has occurred. Examiners will be assigned a due date two weeks before the oral comprehensive) to provide questions to the (GWC)² office.
- If the questions are not submitted by the due date, an email reminder is sent to the examiners.
- Email reminder 3 days prior to the examination. The committee reports and oral examination will be forwarded to the committee members at this time.