

PH.D. EXAMINATION INFORMATION CHEMISTRY OPTION

The final examination consists of two parts; a Ph.D. propositions defense and a Ph.D. thesis seminar and defense. The Ph.D. Propositions Defense is a separate examination on three propositions by your Ph.D. examining committee. The Ph.D. Thesis Seminar and Defense is a public, one-hour oral presentation followed by a closed-door defense of your thesis by your PhD. Committee.

The Ph.D. Committee

The Ph.D. committee shall consist of at least four faculty members, three of whom must be from the Division of Chemistry and Chemical Engineering. The committee shall normally include all members of the candidacy committee. Typically one member will be in chemistry and in the same field, and one member will be in chemistry but out-of-field. If you need to replace one or more members of your Candidacy Committee please see Agnes for the paperwork.

You are required to meet with your Thesis Committee in a 4th year meeting before you begin your 5th year (i.e. by the end of September). When planning your 4th year meeting, you should consult with your advisor to select a fourth member of your committee. Get a Ph.D. Committee Approval Form from Agnes and list 3 choices for your fourth committee member. The option representative will choose the fourth member, and a memo will be sent to you, your advisor, and the fourth member informing them of the decision.

The Propositions Examination

Before the end of the fifth year and not less than ten weeks in advance of the Ph. D. examination, you must take the final Ph. D. proposition examination. Three original propositions must be presented to the Ph. D. thesis committee at least two weeks prior to the examination. No more than one of the propositions may be a carry-over from the candidacy examination, and at least one must be well removed from the field of thesis research. The propositions are defended orally

and they must be acceptable to the committee before the final Ph. D. examination may be scheduled.

NEW: The Ph.D. propositions exam will begin with a 15-minute PowerPoint presentation by the student on a proposition of their choosing, but not a proposition derived from a postdoctoral application. The format would be like that of a job interview. The other propositions will be examined in the usual, oral way. If one of the propositions is based on a proposal that the student prepared for a postdoctoral fellowship, it should be preceded by a brief statement that this is so and that describes the student's original contributions to the proposal.

After selecting a date for the propositions exam that is mutually satisfactory for you and your Ph.D. committee, contact Agnes for the Propositions Defense Date Form. Fill out the form and return it to Agnes.

You must submit a copy of the propositions along with suitable abstracts to the examining committee and to Agnes not less than two weeks before the propositions examination. These propositions must be acceptable to the committee before you can schedule your final Ph.D. examination.

Three propositions are required. Not more than one of these may be a carryover from the candidacy examination, and there is no guarantee that a proposition accepted at candidacy will be accepted at the Ph.D. proposition exam. **At least one** proposition must be **well removed** from your field of research. Each proposition shall be stated explicitly and the argument presented in writing with adequate documentation. The propositions should display originality, breadth of interest, and soundness of training; you will be judged on your selection and formulation of propositions as well as on your defense of them. You should begin formulating a set of propositions early in the course of graduate study.

Before the Ph.D. Examination

A guideline for preparing your thesis is available from the Graduate Office. (<http://www.gradoffice.caltech.edu/Documents/PHD-Thesisregulations.pdf>) Pick this up and read it **before** typing your thesis.

1. **Select a tentative date** (determined by you and your research advisor). Your thesis seminar should precede the exam. Make sure that the date and time are compatible with your committee members' schedules. Contact Agnes to get a Ph.D. Committee and Date Form pick up a Committee and Date Form.
2. **At least one month prior** to the defense date obtain the following forms from the Graduate Office:
 - a. **Petition for Examination**
 - b. **University Microfilms, Inc. Agreement**
 - c. **Survey of Earned Doctorates**
 - d. **Proofreader Agreement**
 - e. **Athenaeum Termination**
 - f. **Forwarding Address Form**
 - g. **Instructions for submitting and ETD**

These forms can be downloaded from

http://www.gradoffice.caltech.edu/documents_default.htm

3. **Petition for Examination – At least three weeks prior** to the defense date complete Part I in its entirety and sign at the bottom. On page two, have Part II completed by the Registrar. Take the petition to Agnes to have Part III signed. Agnes will contact you once Part III is signed so that you can return the form to the Graduate Office two weeks before the week of your exam for the Dean's approval.
4. **At least two weeks before your exam** distribute copies of your thesis to each member of the examining committee. Also submit a complete version to the Institute Graduate Office for proofreading.

5. **A day or two before your examination** pick up your Petition for Examination along with the corrected copy of your thesis from the Graduate Office. Take the petition form to Agnes to have it signed by your committee

One reproduced copy of the thesis, with all corrections made, is to be submitted to Agnes after the defense. This copy is to be unbound and on regular paper. One final copy (on archival bond paper) is to be submitted to the Institute Graduate Office, along with one electronic copy.

After the Examination

The Petition and Approval of Thesis form will not be signed at the time of the examination unless the thesis is completely acceptable. If corrections or revisions are required, it is your responsibility to: **(1)** make the necessary corrections or revisions; **(2)** submit the revised thesis to the members of your committee; and **(3)** secure committee signatures on the Petition for Examination which can be obtained from Agnes.

If you have a subject minor, secure the Minor Department Representative's signature on the Part IV of the Petition. Return the Petition for Examination form to Agnes who will get the Division Chairman's signature and forward the signed Petition to the Grad Office.

When you have made all the necessary corrections and made the final copies of your thesis, submit **one** unbound corrected copy of the thesis to the Graduate Office. This copy should be on archival bond paper. Submit one unbound corrected copy (on any kind of paper) to Agnes.

Before leaving the Institute, submit a forwarding address and information on your future employer and position to Agnes and return your keys to Anne in the Division Office.

(Rev 04/10)