

Procedures for the Third Year Seminar and Oral Comprehensive Examination

Information for Analytical Chemistry Doctoral Students in the following research groups:
Berrie, Desaire, Dunn, Hartley, Johnson, Lunte, Soper, Whelan

Process Contacts

Graduate Program Coordinator: Avery Meadows, aimeadows@ku.edu, 785-864-4693

Adams Institute Administrative Associate: Amanda Morrow, amanda.morrow@ku.edu, 785-864-6832

Chemistry Department Office Manager: Angie Erdley, angie.erdley@ku.edu, 785-864-6749

Analytical Division Coordinator: Prof. Michael Johnson, johnsonm@ku.edu 785-864-4269

Introduction. During their fourth semester in the Ph.D. program, Aspirants will notify the Administrative Associate that they are ready to begin the seminar and examination process. General steps in this process include **1)** assembling the Orals Committee, **2)** preparing for and giving a seminar, and **3)** preparing and defending the orals proposal.

Steps in the Orals Process

1. Assembling the Orals Committee

The Orals Committee will be made up of at least five members, three of which should be Analytical Division members. The make-up of the committee should be:

- At least two members from the student's Research Advisory Committee
- One additional analytical division member selected by the Division Coordinator
- One Chemistry Department member outside of the Analytical Division suggested by the Aspirant and approved by the Committee Chair in consultation with the Aspirant's Advisor.
- One faculty member from outside of the Chemistry Department (Office of Graduate Studies Representative) suggested by the Aspirant and approved by the Committee Chair in consultation with the Aspirant's Advisor.

The Division Coordinator will determine who chairs the committee. After receiving approval from their Committee Chair, the Aspirant will contact the outside Analytical Division and outside Chemistry Department members to confirm their willingness to serve. Once these outside committee members have been finalized, the Aspirant will advise the Committee Chair and Division Coordinator. The Division Coordinator will notify the Aspirant and Advisor of the composition of the committee. The Advisor will not be a voting member of the Orals Committee.

2. Preparing for and giving a seminar

In accordance with Departmental policy, satisfactory completion of a seminar describing Aspirants' research efforts, as evaluated by the Aspirant's Research Advisory Committee, is required to proceed to the oral examination. Therefore, seminar procedures are discussed in this document.

Aspirants should be prepared to give the seminar on their research during their fifth semester in the Ph.D. program. The Aspirant will contact the Adams Institute Administrative Associate to reserve a one-hour session of the Analytical Seminar for their research presentation. At least one week prior to the seminar, the Aspirant will submit the following documents electronically to their Advisor:

- A research abstract written by the Aspirant, no more than 2 pages in length
- The Aspirant's most recent Degree Progress Report (DPR) (1) Checklist and (2) Advising Report. More information may be found here: <https://degreeprogress.ku.edu>.
- A Curriculum Vita, no more than 2 pages in length.

At least one week prior to the presentation, the Aspirant's Advisor will email the Aspirant's documents to the committee members, along with the Advisor's own letter describing the Aspirant's research and evaluating their performance.

In preparing the seminar, the Aspirant should plan for a 25–30-minute presentation followed by 20–25 minutes of questions and discussion, totaling not more than 50 minutes. This seminar should be a succinct summary of their research progress and a plan for the future direction of their research period. It is important that the Aspirants put their research in context, demonstrate a command of the relevant literature, and be prepared to use the chalkboard while answering questions.

The Aspirant's Research Advisory Committee, including the Aspirant's Advisor, should attend this seminar. The Research Advisory Committee will use this seminar to determine if the Aspirant is making satisfactory progress. After the seminar, the Research Advisory Committee will meet with the student to discuss strengths and weaknesses of their presentation and the results of this evaluation will be submitted to the Graduate Affairs Administrator.

3. Preparing and defending the orals proposal

After satisfactorily completing the seminar, the Aspirant may then proceed to the orals examination. The sequence of steps for this process are as follows:

1. The Aspirant will contact the Graduate Program Coordinator to negotiate a date and time for the oral exam with the Orals Committee and reserve a room for the defense. For a room in ISB, contact the Chemistry Department Office Manager. For a room in MRB, contact the Adams Institute Administrative Associate.
2. For the oral exam, the Advisor will generate a topic for the independent proposal with the input and agreement of the Orals Committee. Exactly five weeks prior to the defense date, the Committee Chair will send the topic to the Aspirant, Orals Committee, and Advisor. The Aspirant will then prepare a novel and creative research proposal based on this topic as described in the Chemistry Department Graduate Student Handbook, which is available on request from the department's Graduate Program Coordinator. The proposal shall be double spaced, written in 11-point Arial font, and shall be no more than 12 pages in length, excluding references and figures. Figures should be on separate pages at the end of the proposal after references. The source of any figures not prepared by the Aspirant should be cited. The Advisor will not assist the Aspirant in any way in the preparation of this proposal.
3. At least two weeks prior to the defense, the Aspirant will email the Graduate Program Coordinator and provide the following:
 - a. Date, time, place of exam
 - b. Names of committee members, identifying the chair and outside-of-department member
 - c. Title of proposal
4. The Graduate Program Coordinator will email the Aspirant and attach an Oral Comprehensive Committee Report that will be signed by all members of the committee upon completion of the defense and submit the Application for Comprehensive Oral Examination to the College.
5. Exactly one week prior to the defense, the Aspirant will submit the proposal electronically to the Graduate Program Coordinator, who will in turn send the proposal and a copy of the original research problem to all members of the committee.
6. The Aspirant will present and defend the research proposal to the committee at the oral examination. The examination will be administered in person. The research Advisor may attend the defense of the proposal. However, except in the case of a medical emergency, the examination shall not be carried out in a hybrid format in which either one or more committee members or the Advisor attends virtually through Zoom, Teams, Skype, or any other service. No substitute for the Advisor is allowed. The Advisor will not speak

unless the committee asks them questions. The Advisor may request from the Orals Committee chair a recess to address any points that require clarification. The Advisor shall not be present when the committee is deliberating and will not be a voting member of the committee. Although the research proposal will normally be a major portion of the oral examination, the committee may also examine the Aspirant on more general subject areas not directly related to the proposal.

7. The grade on this examination will be "Satisfactory" or "Unsatisfactory". The committee will complete the Oral Comprehensive Committee report, all members will sign it, and the chair of the committee will submit it to the Graduate Program Coordinator. If the Aspirant receives "Unsatisfactory", the committee must thoroughly justify this designation on the committee report. If the Aspirant receives a grade of "Unsatisfactory" on the comprehensive oral examination, they may be allowed upon the recommendation of the Department, to repeat it; but under no circumstances may the Aspirant take it more than twice.
8. Upon passing the Oral Comprehensive Examination, the Aspirant becomes a candidate for the Ph.D. See the Department of Chemistry "Graduate Students in Chemistry Handbook," available from the Graduate Program Coordinator, for required procedures for completing the Dissertation and Dissertation Defense.

Aspirant Checklist

1. Complete required curriculum.
2. Meet with your research Advisor to determine the timing of the third-year seminar and oral comprehensive exam.
3. Notify the Adams Institute Administrative Associate that you are ready to begin the process and schedule your research presentation during a one-hour session of the Analytical Seminar Series.
4. Discuss with your Advisor whom to recommend as the member outside of the Analytical Division and member outside of the department. Provide three candidates of each to your Committee Chair for approval before contacting them with requests to serve on your committee.
5. Contact your committee members to confirm their availability to attend your already-scheduled research presentation, and to schedule the date and time of the defense of your proposal.
6. Contact the Chemistry Department Office Manager to reserve a room for your oral exam in ISB, or the Adams Institute Administrative Associate to reserve a room in MRB.
7. At least one week prior to the presentation, submit the following electronically to your Advisor:
 - a. A research abstract, no more than 2 pages in length,
 - b. Your most recent (1) DPR Checklist and (2) Advisory Report
 - c. A Curriculum Vita, no more than 2 pages in length.
 - d. Your Advisor will submit a research and performance letter to committee [no action required].
8. Give your presentation.
9. Your Committee Chair will send the proposal topic to you, your committee, and Advisor exactly five weeks prior to the defense date [no action required].
10. At least two weeks prior to the oral exam, email the Graduate Program Coordinator and provide the following:
 - a. Date, time place of exam
 - b. Names of committee members, identifying the chair and outside-of-department member
 - c. Title of proposal
11. Print the Oral Comprehensive Committee Report emailed to you by the Graduate Program Coordinator.
12. One week prior to the oral exam, submit your proposal electronically to the Graduate Program Coordinator for dissemination to the committee.
13. Submit the Oral Comprehensive Committee Report to the committee chair.
14. Present and defend the research proposal to the committee at the oral examination.

Orals Committee Chair Checklist

1. Receive from the Aspirant's Advisor one week prior to presentation, Aspirant's:
 - a. research abstract, no more than 2 pages in length,
 - b. most recent DPR form,
 - c. Curriculum Vita, no more than 2 pages in length, and
 - d. research and performance letter from Advisor.
2. Work with Aspirant to schedule defense of proposal.
3. Receive topic from Advisor.
4. Work with committee to finalize topic.
5. Receive Aspirant's proposal from Graduate Program Coordinator one week prior to defense.
6. Attend defense.
7. Make decision, as a committee, on "Satisfactory" or "Unsatisfactory".
8. Complete and gather signatures on the Oral Comprehensive Committee Report and submit to the Graduate Program Coordinator.
9. If an "Unsatisfactory" grade is assigned, write a letter to the aspirant justifying the grade. Send the letter to the Aspirant, Advisor, and Graduate Program Coordinator.