Procedures for the Second Year Research Evaluation (SYRE)

Department of Chemistry, University of California Riverside

July 2026

1. Purpose and Expectations

Every graduate student in Chemistry must demonstrate proficiency in his/her dissertation research area, the ability to express these ideas using concise scientific writing, and the ability to communicate and defend these ideas effectively orally. ***The Second Year Research Evaluation (SYRE) should be taken during the fourth quarter of residence in the Ph.D. program*** (i.e. typically during Fall quarter in the second-year). ***Students must adhere to UCR Academic Integrity policies (Section 4.1)*** in all components of the SYRE. See the *Requirements for the M.S. and Ph.D. Degrees* document for further details about the SYRE.

2. Exam Structure and Content

The exam consists of a written research proposal describing the student's current and future research and an oral defense of that proposal. The written document and oral presentation will typically include some discussion of the research accomplished to-date, but they should constitute ***a research proposal with a significant emphasis on the larger context and future work.***

The student may consult the Chair of the SYRE Committee regarding the exam structure, format, general expectations, or other aspects that do not relate to the scientific ideas presented. ***The student may not solicit feedback from any faculty member, including the dissertation advisor, regarding the scientific content of the written proposal or oral presentation materials prior to the exam.***

2.1. Written Proposal

The written proposal should be no more than ***five pages*** in length (including all tables and figures), 1-inch margins, single spacing, and 12-point font. The bibliography does not count against the page limit. A good proposal will describe:

- **Specific Aims:** What are your broad, long-term goals? What specific hypothesis will be tested?
- **Significance:** What is the state of existing knowledge, and what gap(s) will your project fill? What impact will your project have on the field if successful?
- **Innovation:** What makes your proposed project innovative in the field? How does it differ from current research?
- **Approach:** Describe the experimental design/analyses that will be used to achieve your specific aims. What are your expected results? What potential difficulties or limitations do you anticipate, and how might these be overcome?

The discussion of the longer-term proposed research plan should be a significant component of the document. It must be well-written, communicate ideas clearly, and be scientifically sound. The written proposal must be completely standalone and will be evaluated directly on its merit. Sample proposals are available.

2.2. Oral Presentation

The student should prepare a brief ***Powerpoint-style presentation*** (no more than ∼15 minutes) to assist in the exam. Students should think carefully about how to present their key results and proposed research concisely, avoiding the use of excessive numbers of slides. Students should be prepared to answer questions at any time before, during, or after the presentation. The slides may be used to help organize the presentation and to show data or complicated schemes. However, slides may not be used as a substitute for the student's own knowledge. Students must be familiar with the details of anything presented on a slide, and the committee may instruct the student to explain such details without referring to the slide(s) at any time.

The oral component of the exam should last approximately one hour in total, including questions. The student should be prepared to cut his/her presentation short to select the most relevant information as needed if the exam is running late.

3. Exam Administration

SYRE Committee: The Chemistry Department will assign the three-member committee for the SYRE. Students will typically be notified about their committees in late summer or early fall.

Modality: By default, the Second-Year Research Evaluation (SYRE) will occur in an in-person format, with the student and all committee members physically present in the exam room. If one or more participants is unable to attend an in-person exam within the appropriate time frame, some or all participants may attend remotely via video conferencing software. The decision to adopt a remote or hybrid exam modality should be mutually agreed upon by the committee chair and the student, and the student must notify the Graduate Advisor of the change prior to the exam. If the exam participants cannot reach a consensus regarding the exam modality, the Graduate Advisor will arbitrate.

Scheduling: The student will be assigned a month of the quarter during which to schedule the exam. The student should arrange a date for the SYRE with the committee members ***at least six weeks before the desired exam date.*** Ideally, a time block of ***90 minutes*** should be reserved to allow for discussion before and after the exam. Once the exam has been scheduled, the student should ***reserve a room for the exam.*** The student must formally notify the Graduate Affairs Officer and the Committee members of the exam date, time, and location in writing as soon it is confirmed, and ***at least three weeks prior to the exam date.***

Proposal Submission: At least one week prior to the SYRE date, email PDF copies of the final written proposal to:

1. All members of the SYRE Committee.
2. The Chemistry department Graduate Student Affairs Officer, who will add it to the student's file for record keeping purposes.

Offer to provide a paper copy of the proposal to committee members as well.

The student is responsible for ensuring all tasks and deadlines are met. See the checklist at the end of this document for a summary of tasks required.

During the Exam: The committee chair will direct the SYRE exam. At the start of the exam, the student will be asked to leave the room while the faculty discuss the written proposal. Then the student will be invited back in to the room to present the research proposal. The committee may ask questions at any time during the presentation. These questions may test the student's

knowledge of the specific proposal topic, the field in general, and/or related fields. The dissertation advisor may ask questions, but he/she is strongly discouraged from answering any questions posed by the committee or otherwise intervening during the exam (even if the student's answers grossly misrepresent the advisor's research).

Students are not expected to provide snacks or refreshments for the committee during the exam.

4. Evaluation, Reporting of Results, and Feedback policy

The oral and written components will be evaluated together based on the student's demonstrated understanding of the research area, the ability to explain the research objectives clearly in the context of the field, the research progress to date, and the longer-term research plan. The student should demonstrate oral communication skills, writing ability, creative and independent thinking, and scientific knowledge that are commensurate with a student seeking to earn a Ph.D. The SYRE outcome should be based solely on the student's performance during the oral exam and the quality of the written proposal.

The SYRE will be graded on a Pass, Qualified Pass, or Fail basis. A ***Pass*** signifies that the student is on track for passing the Qualifying Exam; a ***Qualified Pass*** signifies that a student is largely on track, but needs to remedy certain deficiencies in order to pass the Qualifying Exam; a ***Fail*** signifies that a student is not on track to pass the Qualifying Exam unless steps are taken to correct severe deficiencies. Receiving a Qualified Pass or Fail does not directly impact the student's standing in the Ph.D. program, but the student should interpret such an outcome as a warning that improvements need to be made in order to pass the Qualifying Exam.

Note that ***failure to adhere to the exam guidelines specified here constitutes sufficient grounds for failing the student on the SYRE.*** The student may request additional feedback regarding his/her performance on the written and oral components from the chair and other members of the SYRE Committee. Formal notification of the exam results will be shared verbally with the student at the end of the exam. Written records will be sent to the Chemistry department.

4.1. Research and Academic Integrity

The ideas, data, figures, text, slides, and any other materials presented during the SYRE should either originate with the student or be properly attributed. Cheating, fabrication, falsification, plagiarism, research non-compliance, and other violations of UCR Academic Integrity policies will not be tolerated. Violations could include (but are not limited to):

- Copying text verbatim or nearly verbatim (i.e. with minor wording changes) from another source without proper quotation.
- Reusing data or figures from other sources without proper attribution.
- Presenting ideas from other sources as your own, without proper attribution.
- Presenting falsified or fabricated data/results.

Artificial Intelligence (AI): Acceptable uses of AI include background research or the refinement of proposal prose, but the key ideas and implementation plan proposed must originate from the student. **Use of AI tools to formulate research ideas or write substantial sections of the proposal is prohibited.**

Students violating these policies will receive a failing grade on the SYRE and will be reported to the Graduate Division for consideration of further sanctions. For more details, see:
https://conduct.ucr.edu/policies/academic-integrity-policies-and-procedures

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Student Checklist for the Second Year Research Evaluation (SYRE)

Department of Chemistry, University of California Riverside

☐ ***6 weeks in advance:*** Schedule an exam date & time with your exam committee during the month assigned to you. Formally notify your committee members of the final date/time as soon as possible.

☐ ***Reserve a room*** for the exam (through Kendall Thomas) as soon as the exam date is set.

☐ ***At least 3 weeks before the exam date:*** Notify Kellie McDonald of your exam date, time, & location in writing.

☐ ***Prepare your written research proposal*** in accordance with the instructions found in Section 2.1.

☐ ***At least 1 week before the exam date:*** Email electronic copies of your written proposal to your committee members and to Kellie McDonald. Ask your committee members if they also want a paper copy, and if so, provide that as well.

☐ ***Prepare your presentation slides*** in accordance with the instructions found in Section 2.2.
