

# SECOND YEAR QUALIFYING EXAM

Return Second Year Qualifying Exam form and all faculty comment sheets to the Graduate Program Coordinator.

The Second Year Qualifying Exam is intended to evaluate early career graduate students on their acquisition of basic research skills and knowledge of the literature as well as their work ethic and motivation. A completed Second Year Qualifying Exam requires both a written research report and a closed-door oral presentation and defense of the report to be conducted before a three-person committee.

All second-year students should register for CHEM 798: Research and Evaluation in Chemistry (3 credits) in the Spring semester. Grading for coursework will be on an S/U basis. Students will prepare the Second Year Qualifying Exam as a component of the course.

## **Committee Selection**

In consultation with their advisors, scholars should begin the process of asking faculty to join their committee no later than the start of their second year. The Director of Graduate Studies will inform the student of their committee's membership by the middle of the fall semester. Although the committee is initially convened for the Second Year Qualifying Exam, it is intended that the committee will continue to monitor student progress via the Annual Report and will ultimately comprise the dissertation committee. Committee members are available to help address research problems that arise during a student's graduate studies.

## **Written Report**

The written component of the Second Year Qualifying Exam must be submitted to the committee at least one week before the oral presentation and no later than February 1<sup>st</sup>. The sections outlined in the attached chart are loose guidelines intended to help you and your advisor choose the best method for sharing your accomplishments. Appropriate figures, schemes, and/or references may exceed the suggested 10 to 12-page limit.

## **Oral Presentation and Defense**

The student should arrange a room and time for the presentation of the Second Year Qualifying Exam, no later than March 1<sup>st</sup> of the 2<sup>nd</sup> year. The student is responsible for coordinating scheduling with the committee. The prepared oral presentation should be 20 minutes long with accompanying PowerPoint. The total exam will last about 50 minutes, allowing for about 30 minutes of discussion.

### Suggested Guidelines

<b>Abstract</b>	1 paragraph	As a whole, your abstract should address the question: "What is the significance of your experiments and what did you accomplish?" <ul style="list-style-type: none"><li>• 1-2 sentence objective</li><li>• 3-4 sentence summary of results</li><li>• 1-2 sentences about conclusions</li></ul>
<b>Introduction</b>	2-3 pages	<ul style="list-style-type: none"><li>• Introduction of the problem</li><li>• Background/precedents that your work builds on</li></ul>
<b>Results and Discussion</b>	4-6 pages	<ul style="list-style-type: none"><li>• What you have accomplished</li><li>• What your experiments show</li><li>• How you drew your conclusions from your data</li></ul>
<b>Conclusion and Future Work</b>	1 page	<ul style="list-style-type: none"><li>• Revisit the question of "what is the significance of your experiments and what did you accomplish?"</li><li>• Explore directions for future work, including your dissertation project</li></ul>

### Grading

The student is graded based on the attached comment sheets. Holistically, the committee will seek to evaluate the student's scientific maturity, work ethic, perseverance, and promise.

### Due

The paper must be submitted at least one week prior to the scheduled oral defense and no later than **February 1**. The oral defense must be completed by **March 1**.

# SECOND YEAR QUALIFYING EXAM

Student Name: \_\_\_\_\_ ID \_\_\_\_\_ Date \_\_\_\_\_

## GRADING

Satisfactory paper and presentation, recommended as Ph.D. candidate.

Unsatisfactory paper and/or oral presentation. Recommend one of the following:

Possible Ph.D. Candidate

Re-evaluation will take place before the end of:

FALL

SPRING

SUMMER semester.

Items to be re-tested (check one or both):

Written report

Oral exam

M.S. Candidate

*Student will finish research work and submit Master's thesis by the end of Fall / Summer (circle one) semester. No further coursework is required.*

No Degree

*Student will leave the program by the end of the current semester.*

Advisor Name \_\_\_\_\_ Signature \_\_\_\_\_

Committee #1 Name \_\_\_\_\_ Signature \_\_\_\_\_

Committee #2 Name \_\_\_\_\_ Signature \_\_\_\_\_

*Please submit this page to the Graduate Coordinator, Ana Velez, Atwood 380K*

# Second Year Qualifying Exam Faculty Comment Sheet (1 – Advisor)

Student Name: \_\_\_\_\_

Date of Exam: \_\_\_\_/\_\_\_\_/\_\_\_\_ Committee Member \_\_\_\_\_

	Needs Improvement	Good	Excellent
<b>Research Progress</b>			
Quality of Data Obtained			
Approach, Results and Conclusions			
<b>Knowledge of Field</b>			
Depth of understanding of project			
Relation to other work in field			
Level of critical thinking			
<b>Quality of Paper</b>			
Grammar and style			
organization			
figures			
<b>Quality of Oral Exam</b>			
Use of language			
organization			
Quality of slides			
Response to questions			

**Comments**

- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>• General Knowledge of the Field</li> <li>• Progress</li> <li>• Results</li> </ul> | <ul style="list-style-type: none"> <li>• Design</li> <li>• Technical proficiency</li> <li>• Problem solving</li> </ul> |
|---|--|

# Second Year Qualifying Exam

## Faculty Comment Sheet (2)

Student Name: \_\_\_\_\_

Date of Exam: \_\_\_/\_\_\_/\_\_\_ Committee Member \_\_\_\_\_

	Needs Improvement	Good	Excellent
<b>Research Progress</b>			
Quality of Data Obtained			
Approach, Results and Conclusions			
<b>Knowledge of Field</b>			
Depth of understanding of project			
Relation to other work in field			
Level of critical thinking			
<b>Quality of Paper</b>			
Grammar and style			
organization			
figures			
<b>Quality of Oral Exam</b>			
Use of language			
organization			
Quality of slides			
Response to questions			

**Comments**

- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>• General Knowledge of the Field</li> <li>• Progress</li> <li>• Results</li> </ul> | <ul style="list-style-type: none"> <li>• Design</li> <li>• Technical proficiency</li> <li>• Problem solving</li> </ul> |
|---|--|

# Second Year Qualifying Exam Faculty Comment Sheet (3)

Student Name: \_\_\_\_\_

Date of Exam: \_\_\_\_/\_\_\_\_/\_\_\_\_ Committee Member \_\_\_\_\_

	Needs Improvement	Good	Excellent
<b>Research Progress</b>			
Quality of Data Obtained			
Approach, Results and Conclusions			
<b>Knowledge of Field</b>			
Depth of understanding of project			
Relation to other work in field			
Level of critical thinking			
<b>Quality of Paper</b>			
Grammar and style			
organization			
figures			
<b>Quality of Oral Exam</b>			
Use of language			
organization			
Quality of slides			
Response to questions			

**Comments**

- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>• General Knowledge of the Field</li> <li>• Progress</li> <li>• Results</li> </ul> | <ul style="list-style-type: none"> <li>• Design</li> <li>• Technical proficiency</li> <li>• Problem solving</li> </ul> |
|---|--|