

## Department of Chemistry Preliminary Exam Rubric

Student Name:

Exam Date:

Committee: 1.

(chair) 2.

3.

4.

	<b>Excellent (4 pts)</b>	<b>Good (3 pts)</b>	<b>Fair (2 pts)</b>	<b>Poor (1 pt)</b>	<b>Score</b>
<b>Mastery of Chemical Concepts</b>	<i>Demonstrates in-depth knowledge of concepts in more than one sub-discipline of chemistry.</i>	<i>Demonstrates in-depth knowledge of chemical concepts in primary sub-discipline of chemistry and some knowledge of concepts other sub-disciplines of chemistry.</i>	<i>Demonstrates adequate knowledge of chemical concepts in primary sub-discipline, but has limited knowledge in other sub-disciplines.</i>	<i>Demonstrates limited knowledge of chemical concepts.</i>	
<b>Literature Review</b>	<i>Demonstrates in-depth knowledge of the relevant scientific literature. Correctly identifies and illustrates the importance of unanswered questions in the field and presents research project within the context of these questions.</i>	<i>Demonstrates sufficient knowledge of the relevant scientific literature. Correctly identifies and understands the importance of unanswered questions in the field.</i>	<i>Demonstrates adequate knowledge of the relevant scientific literature, but does not identify unanswered questions in the field.</i>	<i>Demonstrates limited knowledge of the relevant scientific literature.</i>	
<b>Experimental Approach</b>	<i>The experimental approach is clearly defined and logical. The expected outcomes are discussed and are plausible. Alternative outcomes have been sufficiently addressed.</i>	<i>The experimental approach is clearly defined and logical. The expected outcomes are discussed and are plausible. Alternative outcomes have not been sufficiently addressed.</i>	<i>The experimental approach is clearly defined and logical, however the expected outcomes are either not discussed or are not plausible.</i>	<i>The experimental approach is neither clearly defined nor logical. The expected outcomes are not discussed.</i>	

	<b>Excellent (4 pts)</b>	<b>Good (3 pts)</b>	<b>Fair (2 pts)</b>	<b>Poor (1 pt)</b>	<b>Score</b>
<b>Research Progress</b>	<i>Significant progress has been made towards collecting data, developing a method or designing instrumentation.</i>	<i>Sufficient progress has been made towards collecting data, developing a method or designing instrumentation.</i>	<i>Some progress has been made towards collecting data, developing a method or designing instrumentation.</i>	<i>Limited progress has been made towards collecting data, developing a method or designing instrumentation.</i>	
<b>Oral Communication</b>	<i>Results and conclusions are not only successfully summarized and supported, but are also analyzed in the context of the field.</i>	<i>Successfully communicates results and conclusions, supporting information and explanations are provided.</i>	<i>Adequately communicates results and conclusions, however supporting information and explanations are missing.</i>	<i>Fails to clearly communicate results and conclusions.</i>	
<b>Overall Evaluation</b>	<b>Excellent:</b> Pass	<b>Good:</b> Pass	<b>Fair:</b> Cond. pass  Conditions:	<b>Poor:</b> Fail  Retake: Yes/No  Timeline:	

**Comments:**

**Student Signature:** \_\_\_\_\_ **Chair Signature:** \_\_\_\_\_

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