

## CMB Program Preliminary Exam Evaluation

Use this form as a guide for evaluating the student's performance in the written and oral portion of the preliminary exam. It should be completed and handed to the chair of the committee at the end of the examination. The chair will prepare a statement summarizing the examination and provide a copy to each committee member, to the student and to the CMB graduate office within 1 week of the examination. It is the student's responsibility to give a blank copy of this form to each member of the committee and to give the final research proposal to the CMB graduate office within 1 week of completing the examination, regardless of whether they pass or fail.

The proposal should not be evaluated as if it were being considered for funding. One goal of the preliminary exam is to ascertain whether the student understands their chosen field sufficiently that they can formulate an interesting and original hypothesis and develop means to test it. This exam also tests the student's ability to communicate their ideas effectively both orally and on paper.

<b>Student Name:</b>	
<b>Date of Examination:</b>	
<b>Name of Committee Member:</b>	

Scoring: 4-Excellent 3-Very Good 2-Good 1-Needs Improvement 0-Unacceptable  
 (examples provided below)

Criteria	Score	Comments
<b>WRITTEN EXAMINATION</b>		
<b>Overall Appearance</b>		
The proposal was handed in on time		
The proposal adhered to the agreed format (font, margins, length etc)		
Grammar and spelling were acceptable		
Figures were relevant, clear and cited appropriately		
Literature was cited appropriately.		
<b>Overall Score for Appearance</b>		
<b>Significance</b>		
The background information was sufficient for the reader to understand the context of the research and gain perspective		
The student showed a good grasp of the literature		
The writing was concise and thoughts well-organized		
The significance of the proposed study is clearly stated		
<b>Overall Score for Significance</b>		

<b>Approach</b>		
The student formulated an interesting and original question		
The proposed experiments will test the hypothesis		
Potential pitfalls have been considered and alternative approaches are suggested		
Appropriate, state-of-the-art techniques are proposed.		
Techniques other than those the student routinely uses were proposed.		
<b>Overall Score for Approach</b>		
<b>Overall Score for the Written Examination</b>		<b>Pass/Fail</b>
<b>ORAL EXAMINATION</b>		
<b>Presentation</b>		
The slides were relevant and well-prepared		
The oral presentation was easy to follow and kept the audience's attention		
<b>Overall Score for Presentation</b>		
<b>Questioning</b>		
The student demonstrated a clear grasp of the literature specific to the proposal		
The student has a strong background knowledge of the literature related to the general field of study		
The student demonstrated the ability to think creatively and confidently communicate their ideas		
The student demonstrated an solid understanding of cellular and molecular biology		
<b>Overall Score for Questioning</b>		
<b>Overall Score for Oral Examination</b>		<b>Pass/Fail</b>

**General Comments:**

Committee members are free to weight the various criteria to come up with an overall score – these are just guidelines. If the student fails either the oral or the written part of the exam, they fail the examination. In this case, the requirements to pass the exam should be defined by the committee and may include rewriting the proposal, taking additional classes and/or repeating the oral defense of the proposal.

Examples to help with scoring:

Score	Criteria
4 Excellent	Exceptional, at most only one or two minor weaknesses.
3 Very Good	Several minor weaknesses.
2 Good	Many minor weaknesses or one moderate weakness.
1 Needs Improvement	At least one major weakness or many moderate weaknesses.
0 Unacceptable	Multiple major weaknesses.

Minor weaknesses:

This type of weakness is easily rectifiable and does not substantially reduce the impact of the research. e.g. Occasional grammatical errors/spelling. Experiment missing a control. Inadequate description of experimental details. Lack of knowledge in one area of expertise. Use of an out-dated but valid experimental approach. Failure to adequately consider alternative approaches. Proposal slightly over-ambitious. Insufficient or incorrect citations.

Moderate weaknesses:

This type of weakness significantly impacts the research but can be rectified with some effort. e.g. Poorly defined hypothesis. Use of an out-dated experimental approach when far better approaches are in common use. Inadequate background knowledge in important areas within the field of study. Significance of the research is questionable. Written proposal does not follow required format (too long, significance not addressed, excess/irrelevant background, insufficient space devoted to experimental design). Experiment does not test the hypothesis presented. Controls not considered. Poor oral communication of ideas. Proposal is under-ambitious (e.g. would take one person a few months to complete). Proposal relies mainly on approaches that the student uses on a daily basis in their own work.

Major weaknesses:

This type of weakness amounts to a “fatal flaw” and requires extensive work to bring up to standard. e.g. Entire proposal is very poorly written (e.g. no logical flow, poor English). Student does not appear to understand fundamental concepts in their field. Student demonstrates little ability to present a solution when flaws in the proposal are pointed out. No hypothesis and/or no ability to develop one. Proposal consists of data collection with no plans for analysis, interpretation or follow-up. Plagiarism.

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