

Research Proposal Rubric

1) Identifies and summarizes the problem/question to be investigated			
<i>Inadequate</i>	<i>Minimally Developed</i>	<i>Moderately Developed</i>	<i>Substantially Developed</i>
Question identified is too broad or vague to provide a coherent thesis	Has identified an appropriate topic but be studied, but lacks a clearly stated hypothesis. Organized as a catalogue of information about the topic rather than pointing toward a hypothesis.	Uses prior knowledge to identify a question to be studied. Has a clearly stated hypothesis. Breaks questions down into smaller steps, but has not identified all the complexities and nuances inherent in the question.	Uses prior knowledge to identify a question to be studied. Has a clearly stated hypothesis. Breaks question down into a series of steps that will lead to the questions to be addressed in the study. Identifies complexities and nuances in the question.
2) Identifies existing, relevant knowledge and views			
<i>Inadequate</i>	<i>Minimally Developed</i>	<i>Moderately Developed</i>	<i>Substantially Developed</i>
Review of relevant knowledge is seriously incomplete. Inadequate variety of sources. Major issues are ignored. Many factual errors or inconsistencies	Uses some appropriate sources to discover what is already known about the system/problem, but discussion omits important aspects of the problem.	Uses appropriate sources to discover what is already known about the system/problem, but does not make clear connections between this information and the question to be investigated. Adequate variety of sources. Most information is factually correct.	Provides a thorough and relevant literature review. Excellent variety of sources. There are clear linkages among the information and to the question under consideration. All information is factually correct.
3) Analysis/Synthesis			
<i>Inadequate</i>	<i>Minimally developed</i>	<i>Moderately developed</i>	<i>Substantially developed</i>
Vague discussion of detail. Lack of insight/analysis	Vague discussion of detail. Little insight/analysis; that which is provided is conventional or underdeveloped.	Adequate discussion of detail Adequate depth of insight/analysis	Excellent discussion of detail. Impressive depth of insight/analysis
4) Draws sound inferences from previous research that lead clearly to the hypothesis/research question.			
<i>Inadequate</i>	<i>Minimally Developed</i>	<i>Moderately Developed</i>	<i>Substantially Developed</i>
Draws inferences which are not justified.	Draws reasonable conclusions from the previous research, but does not convincingly connect the hypothesis to the previous research.	Draws sound conclusions from the previous research and communicates a logical path from the data to the hypothesis.	Draws sound conclusions from the previous research and communicates a logical path from the data to the hypothesis.

3) Proposes appropriate equipment and investigations to collect data			
<i>Inadequate</i>	<i>Minimally Developed</i>	<i>Moderately Developed</i>	<i>Substantially Developed</i>
<p>Research plan provided will not answer the question, does not control relevant variables, or uses other inappropriate methodology.</p> <p>Experiments are designed without sufficient care, so that the accuracy of the data is in doubt.</p> <p>Serious safety/ethical issues are ignored.</p> <p>Does not recognize the limits or implications of the method to be employed.</p>	<p>Study is designed with appropriate methodology and safety/ethical measures, but the design contains some obvious and remediable flaws, e.g.,</p> <p>Quantity of data collected is insufficient for statistical significance, or there is no check for interrater reliability of coding.</p>	<p>Designs controlled investigation using equipment to the experiment and using appropriate safety /ethical measures. Identifies relevant constraints.</p> <p>Data collection is planned carefully and with appropriate precision and adequate statistical power. Any flaws are relatively minor/excusable due to practical constraints.</p> <p>Consideration of the consequences and limits of the method to be employed are incomplete.</p>	<p>Designs controlled investigation using equipment appropriate to the study and using appropriate safety /ethical measures. Identifies relevant constraints.</p> <p>Data is collected carefully and with appropriate precision and adequate statistical power. Flaws are not readily apparent.</p> <p>Plans pilot work or other methods to refine the study. .</p> <p>Considers possible criticisms of the experimental plan and addresses them.</p>

This rubric is based on the Washington State Critical Thinking Rubric, with modifications made by Cecilia Shore with the help of Beverley Taylor.