

**Advanced Analytic Rigour**

**Seminar 7 – Practice Exercises**

The Hunt Laboratory for Intelligence Research

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# Reasoning Stress Test Form

1 Review Reasoning

**What is the structure of the reasoning?**

|  |  |
| --- | --- |
| Main conclusion: | |
| Summarise the main steps or parts of the argument: | Type of reasoning: |

2 Identify Flaws

**What are the most important reasoning flaws in the text?**

Use the reasoning flaw taxonomy to help find them.

* Is it hard to identify a clear argument?
* Check the Primary Judgements
* Does the argument use a reasoning stratagem poorly?
* Check the relevant category to do with Sources, Causal or Explanatory reasoning, Probability and Statistics, Predictions, or Evidence such as case studies and examples.
* Is there a more general problem with the logical consistency of the argument?
* Check Logic, Assumptions, Uncertainty

*Write down the flaws in the table below and describe where they occur in the argument.*

3 Evaluate Impact

**Do the flaws weaken the argument?**

In other words:

* Do the flaws prevent the reasoning from establishing the conclusion as stated?
* Do the flaws mean that reasoning doesn’t imply the level of certainty the author attributes to the conclusion?
* Do the flaws undermine the support the auther intends the argument to provide to the conclusion?

Determining the impact a flaw has on an argument involves thinking about where it appears in the structure of the argument, how badly it weakens that part of the argument, and how essential that part of the argument is the entire reasoning.    
   
*Describe how seriously the flaws impact the reasoning in the table below. Order the flaws in the priority of what should be fixed.*

4 Fix Flaws

**What is the best way to fix the flaws?**

* Should the flaws be fixed by changing the reasoning that supports the conclusion, the conclusion itself, or both?
* If you are changing the reasoning that supports the conclusion, what part of the argument should be changed?
* Do you currently have sufficient information to fix the flaw in question?
* If so, suggest the required fix
* If not, make recommendations as to what the author needs to determine, find out or consider ahead of fixing the flaw

*Suggest fixes in the table below*

|  |  |  |  |
| --- | --- | --- | --- |
| **Identify reasoning flaws in the document** |  |  |  |
| **Flaw**  Specify a reasoning flaw from the taxonomy | **Description**  Describe where and how the flaw occurs in the reasoning | **Impact**  Assess the flaw’s impact | **Fixes/recommendations**  Suggest how best to fix the flaw or, if this isn’t possible, make recommendations for what needs to happen ahead of fixing the flaw |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |



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