RPTU/ RPTA Reasoning & Problem Solving: 9 Competency Units
In the Context of the Humanities

- Explain ways in which open-ended questions/problems could be described differently from different points of view.
- Distinguish between questions/problems that are open-ended (for which there is more than one reasonable answer/solution) and questions/problems for which experts generally agree about a single “correct” solution.
- Identify and discuss reasons for uncertainties, ambiguities or controversies related to an open-ended question/problem.
- Divide a question/problem into related sub-questions or sub-problems.
- Describe in your own words the question/problem to be addressed.
- Discuss the sufficiency of a given set of information for evaluating a given hypothesis/solution option.
- Generate alternative hypotheses/solution options related to a question/problem.
- Gather information from multiple sources that is relevant for evaluating a given hypothesis/solution option, including, when appropriate, information in each of the following categories: 1) data, facts, observations or experiences; 2) specific theories, definitions, laws, principles or models; and 3) different ethical, philosophical, cultural or other value-related points of view.
- Identify and explain the strengths and weaknesses of a set of assumptions or values related to a question/problem.
- Explain how different possible sets of assumptions and values (including your own) can lead to different conclusions about a question/problem.
- Explain how a given assumption or value, if adopted, may lead to a conclusion about a question/problem.
- Identify underlying assumptions or values for a given definition, law, principle, theory, model or cultural point of view.
- Identify the strengths and weaknesses of an assumption or value related to a question/problem.
- Upper-Division Interpretation and Analysis of Information/Data (s0127)
- Identify your own point of view and cultural perspective; explain how these affect your interpretation of information related to a question/problem.
- Discuss the strengths and weaknesses of alternative interpretations of a set of information for evaluating a given hypothesis/solution option.
- Interpret the results of quantitative and qualitative analyses of information related to a question/problem.
- Discuss how a set of information could be interpreted in multiple ways, including clear statements of how assumptions and values affect the interpretations.
- Sort, manipulate or categorize information to clarify its meaning and usefulness in thinking about a question/problem.
- Use appropriate quantitative techniques from the quantitative domain as well as qualitative techniques to analyze and summarize information related to a question/problem.
- Determine whether a given piece of information is reliable for evaluating a given hypothesis/solution option, including distinguishing fact from opinion and primary from secondary sources.
- Identify the strengths and weaknesses of a given set of information items for evaluating a given hypothesis or solution option.
- Explain how different interpretations of a set of information can be linked to different conclusions about a question/problem.
- Explain how new or different information might lead to alternative conclusions about a question/problem.
- Apply skills from the Language and Communication Skills domain to refine presentations of your analysis and conclusions for different contexts/audiences.
- After completing your analysis, clearly state your conclusion about a question/problem.
- Explain how particular pieces of information are logically related to your conclusion about a question/problem.
- Apply skills from the language and communication domain to present your analysis and conclusions effectively.