

UK Core Quantitative Foundations Rubric

UK General Education Learning Outcome 3: *Students will demonstrate an understanding of and ability to employ methods of quantitative reasoning.*

Outcomes and Assessment Framework: Students will (a) demonstrate how fundamental elements of mathematical, logical and statistical knowledge are applied to solve real-world problems; and (b) explain the sense in which an important source of uncertainty in many everyday decisions is addressed by statistical science, and appraise the efficacy of statistical arguments that are reported for general consumption. Curricular Framework Students will take one 3-hour course on the application of mathematical, logical and statistical methods, and one 3-hour course devoted to a conceptual and practical understanding of statistical inferential reasoning.

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Demonstrate how fundamental elements of mathematical and/or logical knowledge are applied to solve real-world problems	Competently translates appropriate information into fundamental elements of mathematical or logical knowledge and provides an effective interpretation for the purpose of solving real-world problems.	Adequately translates available information into fundamental elements of mathematical or logical knowledge.	Translates available information, but resulting quantitative portrayal is somewhat appropriate or accurate.	The translation of available information is incomplete or inappropriate and results in an ineffective portrayal.	Does not attempt.
Appraise the efficacy of numerical/logical arguments that are reported for general consumption	Uses appropriate quantitative language and/or constructs in connection with a mathematical or logical argument for the purpose of evaluating efficacy.	Adequately uses quantitative language and/or constructions in connection with an argument. It may be presented in an ineffectual format or some parts of the explication may be uneven.	Uses appropriate quantitative language and/or constructions but these are insufficient to evaluate the efficacy of the argument.	Presents an argument that is relevant, but does not provide adequate quantitative justification.	Does not attempt.