

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.

	Exceeds Expectations	Meets Expectations	Does Not Meet Expectations
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.	The translation of available information is incomplete or inappropriate and results in an ineffective portrayal.
Construct or evaluate numerical, logical, or statistical arguments that are applied to real-world problems	Uses appropriate quantitative language and/or constructs in connection with a mathematical or logical argument.	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.	Presents an argument that may be relevant, but does not provide adequate quantitative justification.