

QUANTITATIVE REASONING COURSES

The Science and Quantitative Education Office is responsible for certifying courses as meeting the quantitative reasoning requirement. For further information, contact Alexia Belperron. (alexia.belperron@yale.edu)

GUIDELINES FOR QUANTITATIVE REASONING COURSES (ALEXIA.BELPERRON@YALE.EDU)

A course may be used to satisfy the quantitative reasoning requirement if it meets the following criteria:

- A primary aim of the course is to develop quantitative reasoning or its application. Quantitative reasoning includes mathematics, statistics, algorithms, and formal symbolic logic. Calculation, quantification, and measurement can supplement but cannot replace quantitative reasoning and problem-solving.
- More than 70% of course exercises, such as problem sets, should be designed to develop and strengthen quantitative reasoning skills through regular practice. Examinations or assigned projects should similarly be primarily quantitative in nature and should require students to demonstrate their quantitative reasoning skills.
- A minimum of 50% of the assignments should be independent assessments. Problem sets may be included as independent assessments, but should not constitute the majority of them.

A course proposal for a potential QR course should be accompanied by a complete or almost complete syllabus that includes all the assignments and their breakdown for grading as well as course materials/reading assignments. For courses with assigned projects, a description of expectations as to the QR component of the project should be included.

Instructors of potential introductory-level QR courses, in particular, are urged to initiate discussion with the Science and Quantitative Reasoning Education Office in advance of submitting a course proposal. Examples of problem sets and exam questions should accompany course proposals for potential QR courses.