

QRP Course Application Form
(see application process following this document)

Passed by Curriculum Committee on:

Course Name _____

Course Dept. and Number _____

Course Credit (note that students must complete one
full course credit to fulfill this requirement) _____

Check if this course is for a specific major's QRP requirement (chart 1 in course catalog), or if this course is for any major that does not have a designated QRP (chart 2 in course catalog).	For a specific major	For any majors
---	----------------------------	----------------------

If for a specific major's QRP requirement, what is
the major? If not for a specific major, leave blank. _____

List prerequisites for this course _____

Indicate frequency of offering for this course _____

Submitter _____

Chair of Submitting Department _____

Course Description:

QRP Course Application Form (continued)

Rationale for how the course meets the following criteria (QR definitions follow this document)

*Attachments such as syllabi and assignments will facilitate the approval process

Quantitative Reasoning:

Critical Thinking:

Problem Solving:

Communication:

QUANTITATIVE REASONING IN PRACTICE (QRP) APPLICATION PROCESS

Overview: All students will be required to complete a QRP course (one course credit) designated by their department of major. In addition, incoming students (freshman and transfer) who earn less than a Math ACT of 22 will be required to enroll and complete QRAC110 (arithmetic) or QRAC120 (algebraic).

QRP Course Criteria: For consideration by the Curriculum Committee, QRP courses should satisfy the following four components through exercises, assignments, and topics (below, see working definitions of these four terms as used in QR literature):

QRP Application Process: Please fill out the QRP Course Application Form with as much detail as would be necessary for the Curriculum Committee to determine whether or not your course fits the QRP criteria. Committee members are more than happy to assist in this process and will give feedback that will allow for success in submission approval. Please note that if this is a new course then a New Course Proposal Form will need to be submitted to Curriculum Committee along with this QRP Course Application Form. The process for the Curriculum Committee to approve an existing course as a QRP course will be an informational item for the faculty. If it involves a new course, the process for a new course proposal will be used and the course will be brought to the faculty for a vote. The Curriculum Committee will indicate its approval for QRP status.

(1) **Quantitative Reasoning (QR)** refers to the reasoning and critical thinking skills required to understand and create effective arguments supported by quantitative data. While QR includes a person's comfort and competency in working with numerical data, it goes beyond solving quantitative problems. A person skilled in QR can also interpret and communicate about quantitative issues within a particular discipline or in everyday life.

(2) **Critical Thinking** in a QR context means the ability to make judgments and draw appropriate conclusions based on the quantitative analysis of data, while recognizing the limits of this analysis. It can also include the ability to make and evaluate important assumptions in arguments, estimation, modeling, and data analysis.

(3) **Problem Solving** teaches students how to apply appropriate quantitative reasoning as a resource for proposing solutions to various real-world or disciplinarily specific problems. In addition to identifying and analyzing the accurate context for the problem, students will learn to apply mathematical, logical, and/or statistical tools appropriate to the class in specific assignments (including projects, papers, exams, presentations and performances).

(4) **Communication** describes the ability of students to explain information in mathematical forms (e.g., equations, graphs, diagrams, charts, tables, etc.), as well as the capacity to express quantitative evidence in support of the argument or purpose of the work. It might also include asking students to make accurate and comprehensive conclusions about a new situation using information previously learned in another context.