Spring 2017

# APPLICATION FOR QUANTITATIVE REASONING INTENSIVE COURSE DESIGNATION

**Quantitative Reasoning: Students will learn to interpret and manipulate quantitative information and apply mathematical concepts and skills to solve real-world problems.**

Course Proposed: _____
Course Number Course Title

***If this course required a description change for this application, please check here:*** ____

**PROPOSER:**

1. Complete the following section and attach documentation (course description, assignments, sample syllabi, performance objectives, and/or other source of evidence) to show that the course meets **all of the necessary criteria**. Check the criteria on this form and indicate on your documentation the associated criteria by number.

2. Submit the form, signed by the appropriate department chairperson or program coordinator and the dean in your area, for approval by April 18, 2017 to either of the Core Academic Skills Committee co-chairs – Suzanne Van Wert or Elle Yarborough.

**CRITERIA:**

Courses that can be used to fulfill the Quantitative Reasoning (QR) Intensive requirement must meet the following criteria.

_____ 1. At least three QR assignments per semester (exclusive of in-class quizzes and exams).

_____ 2. At least 15% of class time and graded content involves the teaching, learning, and assessment of QR skills.

_____ 3. Quality of student QR must be an important component in determining student's course grade.

_____ 4. The courses will include some of the following QR skills, but are not limited to:

- Graphical and statistical analysis, such as trends over time
- Descriptive and/or inferential statistics
- Data analysis
- Experimental design and creation of data sets with simple evaluation
- Application of Mathematics in context
- Reading, Writing, and/or Critical thinking in context with numbers
- Development of mathematical solutions and equations to solve problems in context
- Discussion of multiple interpretations of a single data set
- An emphasis on the difference between cause and effect versus correlation data
- Proportional reasoning in the context of real situations

_____ 5. The course syllabus will explain the quantitative-intensive nature of the course and contain a schedule for QR activities and assignments.

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**Intended Student Learning Outcomes – Recommended to be included on course syllabi along with any other course-specific outcomes:**

*Students will have the opportunity to develop knowledge and/or skills concerning the ability to:*

1. Decipher and explain information presented in mathematical forms such as graphs, diagrams, or tables.
2. Convert relevant information into various mathematical forms such as equations, graphs, diagrams, or tables.
3. Interpret and evaluate statistical data or other quantitative data.
4. Use quantitative information to support assertions and/or to solve real world problems.
5. Successfully perform calculations required to solve a given problem.

**Further Justification/Explanation**

If the course description and/or attached documentation do not clearly demonstrate that the proposed course meets all of the criteria for the designation listed on page 1, please provide further explanation here as to how the course fulfills those criteria.

Please provide the name and contact information for a faculty member that can answer questions and serve as a point of contact for this application: _____
_____

Signatures of Approval:

_____
Department Chairperson/Program Coordinator Date

_____
Supervising Dean/Assistant Dean Date

_____
Committee Chairperson Date