Q-Core Assessment Report

<u>Course:</u> M105Q, Contemporary Mathematics

<u>Semester:</u> Spring 2017

<u>Assessment done by:</u> Kimberly Graham and John Lund

<u>Number of students in course:</u> 194 students (over seven sections)

<u>Description of questions used in the assessment:</u> We used three questions on the final exam to determine if the learning outcomes were demonstrated at an acceptable or unacceptable level. The questions are described below following each learning outcome that the question relates to.

Learning Outcome 1: Using a given table that shows how much money all U.S. colleges spent each year in millions of dollars, determine the percent change between two given years, estimate what the expenditures might have been in a specified year using interpolation, and estimate what the expenditures will be in a specified year using extrapolation.

Learning Outcome 2: Given a data set that includes eight ratings for breakfast burrito options in town, determine the five number summary for the data, draw a box plot representing the data, and interpret findings related to where 50% of the ratings fall.

 Learning Outcome 3: Using a given table that shows the speed of a train based on time, find a formula for the linear function giving the speed of the train in terms of time.

****

<u>Learning Outcome 1:</u> Interpret and draw inferences from mathematical or statistical models represented as formulas, graphs, or tables.

- Total number of assignments assessed: 50
- Number of student assignments demonstrating the learning outcome at an acceptable level as defined in the Q-Core Rational and Assessment Plan: 40
- Percent of assignments rated at "acceptable": 80%
- Is this over the threshold of 2/3?   Yes
- Comments and ideas for better aligning the course or the assignments with the Q-core rationale: The course curriculum is adequately designed for this outcome.
- Comments and ideas for improving the process of assessment: None

Learning Outcome 2: Represent mathematical or statistical information numerically or visually.

- Total number of assignments assessed: 50
- Number of student assignments demonstrating the learning outcome at an acceptable level as defined in the Q-Core Rational and Assessment Plan: 31
- Percent of assignments rated at "acceptable": 62%
- Is this over the threshold of 2/3?   No
- Comments and ideas for better aligning the course or the assignments with the Q-core rationale: The lower percentage for this outcome was because the question had a final component where students were asked to "interpret your findings…", an extension of the learning outcome of representing the statistical information visually. The course should spend more time working with students on interpretation of their findings and on answering more open ended questions in general.
- Comments and ideas for improving the process of assessment: The "interpret your findings" component of this question should be left out or assessed as part of Learning Outcome 1.

Learning Outcome 3: Employ quantitative methods such as arithmetic, algebra, geometry, or statistical inference to solve problems.

- Total number of assignments assessed: 50
- Number of student assignments demonstrating the learning outcome at an acceptable level as defined in the Q-Core Rational and Assessment Plan: 37
- Percent of assignments rated at "acceptable": 74%
- Is this over the threshold of 2/3?   Yes
- Comments and ideas for better aligning the course or the assignments with the Q-core rationale: The course curriculum is adequately designed for this outcome.
- Comments and ideas for improving the process of assessment: None