Quantitative Reasoning (QR) Learning Outcomes

*Use this **interactive template** to *describe how* each of the specific learning outcomes will be addressed and assessed for this content area. The outcomes were designed to incorporate the Cardinal Core Program's overarching skills of critical thinking, quantitative reasoning, effective communication, and the understanding of historical, social and cultural diversity. The description of how the course meets the outcome and the subsequent assessment should reflect these key intellectual skills.

Course I.D:
Course Title:
Cardinal Core Course Code(s):
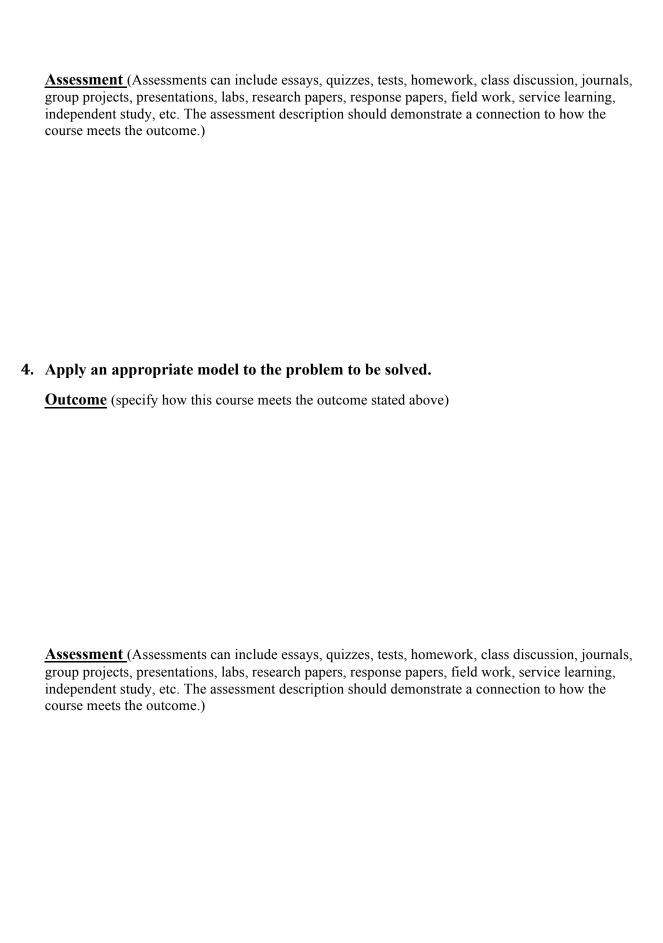

Quantitative Reasoning (QR)

Quantitative Reasoning is concerned with solving real-world problems through mathematical methods. Students who satisfy this requirement will ***demonstrate*** that they are able to do all of the following:

1. **Interpret information presented in mathematical and/or statistical forms.**

    Outcome (specify how this course meets the outcome stated above)

    Assessment (Assessments can include essays, quizzes, tests, homework, class discussion, journals, group projects, presentations, labs, research papers, response papers, field work, service learning, independent study, etc. The assessment description should demonstrate a connection to how the course meets the outcome.)

2. **Illustrate and communicate mathematical and/or statistical information symbolically, visually, and/or numerically.**

   <u>**Outcome**</u> (specify how this course meets the outcome stated above)

   <u>**Assessment**</u> (Assessments can include essays, quizzes, tests, homework, class discussion, journals, group projects, presentations, labs, research papers, response papers, field work, service learning, independent study, etc. The assessment description should demonstrate a connection to how the course meets the outcome.)

3. **Determine when computations are needed and execute the appropriate computations.**

   <u>**Outcome**</u> (specify how this course meets the outcome stated above)

Assessment (Assessments can include essays, quizzes, tests, homework, class discussion, journals, group projects, presentations, labs, research papers, response papers, field work, service learning, independent study, etc. The assessment description should demonstrate a connection to how the course meets the outcome.)

4. **Apply an appropriate model to the problem to be solved.**

   Outcome (specify how this course meets the outcome stated above)

   Assessment (Assessments can include essays, quizzes, tests, homework, class discussion, journals, group projects, presentations, labs, research papers, response papers, field work, service learning, independent study, etc. The assessment description should demonstrate a connection to how the course meets the outcome.)

5. **Make inferences, evaluate assumptions, and assess limitations in estimation, modeling, and/or statistical analyses.**

    Outcome (specify how this course meets the outcome stated above)

    Assessment (Assessments can include essays, quizzes, tests, homework, class discussion, journals, group projects, presentations, labs, research papers, response papers, field work, service learning, independent study, etc. The assessment description should demonstrate a connection to how the course meets the outcome.)