**Example Quantitative Literacy, Part B Text for Syllabus**

**GER Statement: Learning Outcomes for this Course**

This course meets UWM General Education Requirements (GER) for Quantitative Literacy, Part B. A QL-B course must make significant use of quantitative tools in the context of the other course material and formally assess for proficiency in applying these quantitative tools. Quantitative literacy includes the recognition, construction, and use of valid mathematical models to analyze and manipulate quantitative information to reach reasonable conclusions, predictions, or inferences.

Learning Outcomes for QL-B courses include the following:

1. Students will recognize and construct mathematical models and/or hypotheses that represent quantitative information.
2. Students will evaluate the validity of these models and hypotheses.
3. Students will analyze and manipulate mathematical models using quantitative information.
4. Students will reach logical conclusions, predictions, or inferences.
5. Students will assess the reasonableness of their conclusions.

**UW Shared Learning Goal**

As part of the UW System Shared Learning Goals, this course is also expected to foster Effective Communication Skills, including the ability to effectively communicate quantitative information*.†*

**GER Assessment:**

Here’s how your learning for these GER outcomes will be assessed:

The final project consists of two data sets and accompanying articles, and provides students with the opportunity to demonstrate outcomes (a) through (e) above, as well as communication.  Students will analyze the data sets and create three visualizations for each of the data sets (six visualizations total). Students will submit an excel file which includes the analyzation process and calculations and tests used; explanations of why specific inferential tests were used ; assumptions about the data and why the assumptions are appropriate; and what conclusions may be limited by the accuracy of assumptions.

The following criteria will be used to assess the project:

1. Interpretation. Are the data visualizations explained in their placement?

2. Representation. Do the visualizations appropriately represent the results of statistical analyses?

3. Calculations. Were calculations successful and sufficiently comprehensive for the text?

4. Application/Analysis. Were appropriate statistical tests used? Were appropriate visualizations used?

5. Assumptions. Did assumptions appropriately align with the text?

6. Communication. Did the visualizations support the text appropriately?

Note that for QL-B courses *all* QL-B learning outcomes (a-e, above) must be incorporated into the course.

In the example above the instructor chose Critical and Creative Thinking as their additional UWS Shared Goal, however you can choose below:

*†***UW System Shared Learning Goals**

Select **one** additional learning objective from the options below that will be assessed in your class. Note that Goal 1 is assumed to already be met by all GER courses, and many Cultural Diversity courses will likely also be able to assess aspects of Goal 4. Please choose your additional UWS Shared Goal from among goals 2-5.

1. **Knowledge of Human Cultures and the Natural World** including breadth of knowledge and the ability to think beyond one’s discipline, major, or area of concentration. This knowledge can be gained through the study of the arts, humanities, languages, sciences, and social sciences.
2. **Critical and Creative Thinking Skills** including inquiry, problem solving, and higher-order qualitative and quantitative reasoning.
3. **Effective Communication Skills** including listening, speaking, reading, writing, and information literacy.
4. **Intercultural Knowledge and Competence** including the ability to interact and work with people from diverse backgrounds and cultures; to lead or contribute support to those who lead; and to empathize with and understand those who are different than they are.
5. **Individual, Social, and Environmental Responsibility** including civic knowledge and engagement (both local and global), ethical reasoning, and action.