**Example NATURAL SCIENCE Text for Syllabus**

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

This course meets UWM General Education Requirements (GER) for Natural Science.

**Definition:** A branch of science concerned with the physical world and its phenomena and with discovering the laws governing them. The branches of Natural Sciences–such as astronomy, geosciences, biological sciences, chemistry, physics–that deal primarily with matter, energy, and their interrelations and transformations; with living organisms and vital processes; with the laws and phenomena relating to organisms, plants and animal life; with the physical processes and phenomena of particular systems; and with the physical properties and composition of nature and its products.

This course will address the following Natural Science learning outcomes:\*

(a) **understand and apply** the major concepts of a natural science discipline, including its breadth and its relationship to other disciplines; and

(b) **explain and illustrate** the relationships between experiments, models, theories and laws;

(c) **demonstrate** an understanding of the process of generating and testing data, and **apply** this knowledge to the solution of problems;

**UW Shared Learning Goal**

As part of the UW System Shared Learning Goals, this course is also expected to foster ***Critical and Creative Thinking Skills*** *including inquiry, problem solving, and higher order qualitative and quantitative reasoning.†*

**GER Assessment:**

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

* Learning for Criteria (b) will be evaluated as part of the grading process for the final project report, where subscores from the grading rubric specific to Criteria (b) will be recorded to help me better gauge student learning.
* Your lab journal will also be assessed for learning on Criteria (c), using a rubric with performance levels Exceeds, Meets Expectations, Emerging, or No Evidence. This assessment will be *separate* from how the lab journal is included in the final course grade (see page 3 of the syllabus).
* Criteria (a) and quantitative reasoning will both be assessed through the second portion of your final project report grade, using the subscore for quantitative reasoning on the project rubric. Both will also be assessed using a portion of the mid-term and final exams.

\*The full list of Natural Science Outcomes is below. Each NS course should incorporate outcome (a) and at least one other of these:

Students will be able to:

1. **understand and apply** the major concepts of a natural science discipline, including its breadth and its relationship to other disciplines; and
2. **explain and illustrate** the relationships between experiments, models, theories and laws;
3. **demonstrate** an understanding of the process of generating and testing data, and **apply** this knowledge to the solution of problems;
4. **discuss and assess** the limitations of data and the possibility of alternative interpretations; or
5. **apply** ethical reasoning to questions, concepts, and practices within a natural science discipline.

*†***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.