Honors Program Learning Outcomes

1. Clear and compelling written expression
2. Critical thinking that is open-minded, objective, and as free as possible from prejudice and presupposition
3. The comprehension of abstract arguments and the ability to move between the general and the particular
4. An appreciation for the variety of human experience, exploring both its universality and its diversity
5. An understanding of and appreciation for the various modes of artistic expression
6. Collaboration on group projects or activities

Honors Program Mission Statement

The Weber State University Honors Program offers students a comfortable and friendly learning environment. We offer a:

- Place for students looking for an academic community, both through classes and in the Honors Center;
- Number of small, challenging, and creative classes, many of which fulfill General Education requirements;
- Commitment to diversity, in terms of the variety of classes offered, as well as our respect for individual differences;
- Preparation for professional life and graduate school after Weber.

Natural Sciences General Education Program

Mission Statement

The mission of the natural sciences general education program is to provide students with an understanding and appreciation of the natural world from a scientific perspective.

Science is a way of knowing. Its purpose is to describe and explain the natural world, to investigate the mechanisms that govern nature, and to identify ways in which all natural phenomena are interrelated. Science produces knowledge that is based on evidence and that knowledge is repeatedly tested against observations of nature. The strength of science is that ideas and explanations that are inconsistent with evidence are refined or discarded and replaced by those that are more consistent.

Science provides personal fulfillment that comes from understanding the natural world. In addition, experience with the process of science develops skills that are increasingly important in the modern world. These include creativity, critical thinking, problem solving, and communication of ideas. A person who is scientifically literate is able to evaluate and

propose explanations appropriately. The scientifically literate individual can assess whether or not a claim is scientific, and distinguish scientific explanations from those that are not scientific.

Foundations of the Natural Sciences Learning Outcomes

After completing the natural sciences general education requirements, students will demonstrate their understanding of general principles of science:

1. **Nature of science.** Scientific knowledge is based on evidence that is repeatedly examined, and can change with new information. Scientific explanations differ fundamentally from those that are not scientific.
2. **Integration of science.** All natural phenomena are interrelated and share basic organizational principles. Scientific explanations obtained from different disciplines should be cohesive and integrated.
3. **Science and society.** The study of science provides explanations that have significant impact on society, including technological advancements, improvement of human life, and better understanding of human and other influences on the earth's environment.
4. **Problem solving and data analysis.** Science relies on empirical data, and such data must be analyzed, interpreted, and generalized in a rigorous manner.

The Life Sciences Learning Outcomes

Students will demonstrate their understanding of the following characteristics of life:

1. **Levels of organization:** All life shares an organization that is based on molecules and cells and extends to organisms and ecosystems.
2. **Metabolism and homeostasis:** Living things obtain and use energy, and maintain homeostasis via organized chemical reactions known as metabolism.
3. **Genetics and evolution:** Shared genetic processes and evolution by natural selection are universal features of all life.
4. **Ecological interactions:** All organisms, including humans, interact with their environment and other living organisms.

The Physical Sciences Learning Outcomes

Students will demonstrate their understanding of the following feature of the physical world:

1. Organization of systems: The universe is scientifically understandable in terms of interconnected systems. The systems evolve over time according to basic physical laws.
2. Matter: Matter comprises an important component of the universe, and has physical properties that can be described over a range of scales.
3. Energy: Interactions within the universe can be described in terms of energy exchange and conservation.
4. Forces: Equilibrium and change are determined by forces acting at all organizational levels.