**Perspectives in Physical Sciences and Life Sciences (WU 1780)**

Syllabus

Credits: 3-6

**Course Description**: This course will address ...

**Text**:

**Grading**:

**Student Learning Outcomes**:

This general education course will meet the learning outcomes for Physical Sciences and Life Sciences. Specifically a student completing this course will demonstrate an understanding of the following features 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.

Also a student will demonstrate an 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.