

**St. Olaf College OLE Core General Education Curriculum
Natural Science Requirement**

Description:

Using scientific paradigms and methods, students will learn about and develop skills to lead a meaningful and responsible life in the natural world that all inhabit. This course engages students in observation, measurement, experimentation, and the interpretation and analysis of data.

Intended Learning Outcomes:

Students will:

1. Interpret data about the natural world.
2. Communicate ideas using scientific principles and data.

Course Guidelines:

Natural science courses develop an understanding of a specific disciplinary or interdisciplinary field within the natural sciences. These courses examine how science involves subjecting ideas, theories, and hypotheses to experimental tests, and that scientific knowledge is the product of an evolving consensus.

1. Interpret data about the natural world.

Students should have an opportunity to engage regularly with scientific methods. Methods will vary by discipline and topic, but all students should use data to test hypotheses or identify patterns that generate new hypotheses. Data may be obtained from a variety of methods, including observation, measurement, experimentation, or acquisition of existing datasets. Natural science courses shall include a significant experiential component that allows students to meet these goals. While a dedicated lab section is a practical way to achieve this component; this objective can be met through other formats.

2. Communicate ideas using scientific principles and data.

Students should demonstrate an ability to accurately communicate scientific ideas. This means that students should be able to use scientific language to describe and interpret data, and to think coherently about science. The form of communication depends on the course and activity; some examples include: composing a lab notebook, discussing an investigation with peers or in relation to published literature, reading and responding to scientific writing in popular media, or giving oral or poster presentations. In any format, the communication may rely on graphical and other visual evidence.