



## **New York Mills High School**

### **Curriculum Document**

Curriculum Area: Science

Course Name: Science 8 – Earth Science

Common Course Catalog Number: **03001**

Length of Course: 1 year

Pre-Requisite: Life Science

Grade Level: 8<sup>th</sup> grade

#### **Course Description:**

This course presents the concepts and principles essential to understanding of the dynamics and history of the earth and explores oceanography, geology, astronomy, meteorology, and geography. Students will investigate and read about these subjects and their connections with a variety of disciplines and demonstrate an understanding of earth science as it relates to the Minnesota State Standards for 8<sup>th</sup> grade.

Embedded in the curriculum are the Minnesota State Standards for the nature of science and engineering, earth science, and physical science.

#### **Essential Learner Outcomes (5 to 7)**

What will students know and be able to do as a result of this course?

\* Recognize that the sun is the primary energy source for Earth, that it drives the circulation patterns in the atmosphere and oceans which transfer energy to all living and non-living systems.

Ex. The water cycle distributes materials and purifies water across the Earth.

Ex. Weather systems affect the biosphere and evolution of organisms.

\* Recognize that a planet's position in the solar system determined its composition, size, and gravitational pull and that these things are responsible for the predictable motions of each planet, their moon(s), and other observable phenomena.

\* Recognize that rocks & rock formations provide evidence of how the structure and composition of the Earth are responsible for major geological events such as earthquakes, volcanic eruptions, and mountain building.

**Units of Study:**

\* Introduction & Geography

\* Oceanography

\* Meteorology

\* Astronomy

\* Geology