

1541 --- **Science - Basic Science.** 5-12. Complete 24 semester hours of credit in science which includes the following:

Six semester hours of credit in earth and space science which includes the following essential concepts and skills:

- Understand and apply knowledge of energy in the earth system
- Understand and apply knowledge of geochemical cycles

Six semester hours of credit in life science/biological science which includes the following essential concepts and skills:

- Understand and apply knowledge of the cell
- Understand and apply knowledge of the molecular basis of heredity
- Understand and apply knowledge of the interdependence of organisms
- Understand and apply knowledge of matter, energy, and organization in living systems
- Understand and apply knowledge of the behavior of organisms

Six semester hours of credit in physics/physical science which includes the following essential concepts and skills:

- Understand and apply knowledge of the structure of atoms
- Understand and apply knowledge of the structure and properties of matter
- Understand and apply knowledge of motions and forces
- Understands and applies knowledge of interactions of energy and matter

Six semester hours of credit in chemistry which includes the following essential concepts and skills:

- Understand and apply knowledge of chemical reactions
- Design and conduct scientific investigations

**6 hours in earth sciences**

Course #	Course Title	Institution	Semester Hr.	Year Completed

**6 hours in biology**

Course #	Course Title	Institution	Semester Hr.	Year Completed

**6 hours in physics/physical science**

Course #	Course Title	Institution	Semester Hr.	Year Completed

**6 hours in chemistry**

Course #	Course Title	Institution	Semester Hr.	Year Completed

**Methods for content and level**

--

**Graded field experience (if needed)**

--