

Course: 5th GradeScience

Instructor: Chelsea Duckett

Instructional Plan

Course Content Description Template

Provide a brief overview of the course content, including key topics and themes covered throughout the course.

This course will follow Texas Essential Knowledge and Skills (TEKS) standards. The course is designed to build foundational scientific knowledge and skills through hands-on activities, critical-thinking, and inquiry-based learning.

1. Scientific Investigation and Reasoning

- Safe practices in science labs
- Use of scientific tools (e.g., thermometers, magnifiers, rulers)
- Scientific method: making predictions, conducting experiments, collecting data, drawing conclusions

2. Matter and Energy

- Physical properties of matter: mass, magnetism, physical state, density, solubility
- Mixtures and solutions
- Changes in matter: physical vs. chemical changes
- Forms of energy: light, heat, sound, mechanical, electrical
- Energy transformations (e.g., electricity to light or heat)

3. Force, Motion, and Energy

- Types of forces: gravity, friction, magnetism
- Motion: position, direction, speed
- Simple machines and their uses
- How forces affect objects

4. Earth and Space

- Earth's rotation and revolution
- Moon phases and patterns in the sky
- Weather and climate
- Water cycle
- Natural resources: renewable and nonrenewable
- Changes to Earth's surface (e.g., erosion, weathering, deposition)

5. Organisms and Environments

- Ecosystems and food webs
- Adaptations and traits of plants and animals
- Lifecycles and inherited traits
- Environmental changes and their impacts on organisms

Themes and Skills Across the Curriculum

- Inquiry and scientific thinking
- Critical analysis and data interpretation
- Real-world applications of science concepts
- Environmental responsibility and conservation

This curriculum prepares students for more advanced science studies by building a strong foundation in core scientific principles and encouraging curiosity about the natural world

Major Assignments and Projects Template

List the major assignments and projects for the course, including their purpose and any relevant deadlines or evaluation criteria.

First-semester students will complete a beginning of the year assessment for baseline data, thirty-four experiments/investigations with fill-in lab reports, and Students will also complete nine formal assessments.

Required Textbooks and Instructional Materials Template

List the textbooks and other instructional materials required for the course, including authors, publication dates, and any additional resources needed for successful completion.

Students will be using Summit k12 Dynamic Science curriculum created in Texas by more than fourteen Texas educators. First semester students will be using Volume 1 Covering TEKS in 5.1, 5.2, 5.6, 5.7, and 5.8