

MCI Science Curriculum

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Grades 9-12 MCI

Course Description- The MCI Science course is designed for the mildly-moderately cognitively impaired student in grades 9-12. Science is integrated into the Language Arts, Mathematics and Life Skills curriculum and therefore, does not have a separate course number. Science is offered with a hands on approach to learning about our environment.

Course Goals and Objectives-

Goal- Students will gain an understanding of the characteristics and needs of living things.

- Objective- Students will maintain a class garden.
- Objective- Students will demonstrate their knowledge of animals by caring for a class dog.
- Objective- Students will be able to describe the phases of the life cycle of a butterfly.

Goal- Students will gain an understanding of the systems of the Earth.

- Objective- Students will describe and record current weather conditions and recognize how those conditions affect our daily life.
- Objective- Students will describe daily and seasonal changes and patterns in weather.
- Objective- Students will observe weather changes and patterns by measurable quantities such as temperature and amounts of precipitation.

Goal- Students will learn the steps involved in the scientific process

- Objective- Students will use proper tools to conduct experiments
- Objective- Students will practice observational skills
- Objective- Students will draw conclusions based on evidence

Goal- Students will understand the impact of human activities on the Earth

- Objective- Students will practice recycling in the school.
- Objective- Students will practice environmentally friendly gardening methods
- Objective- Students will transfer their knowledge into more conscientious use of energy in their homes.

Core Curriculum Content Standards Addressed-

High Point Regional High School's curriculum and instruction are aligned to the state's Core Curriculum Content Standards and address the elimination of discrimination by narrowing the achievement gap, by providing equity in the educational programs and be providing opportunities for students to interact positively with others regardless of race, creed, color, national origin, ancestry, age, marital status, affectional or sexual orientation, gender, religion, disability, or socio-economical status.

5.1- Scientific Processes
5.5- Characteristics of Life
5.8- Earth Science
5.10-Environmental Studies

Units of Study-

A. Living Things-

Unit Goal- Students will gain an understanding of the characteristics and needs of living things.

Objectives-

- Maintain a class garden by planting seeds, pulling weeds, watering and caring for plants.
- Care for a class dog, Scruffy, by learning to train him, water him, groom and toilet him.
- Raise butterflies from the larval stage to adult butterflies and then release them.

Evaluation- Students will be graded on participation in class discussions, worksheets and projects.

Materials-

Seeds

Garden tools

Butterfly larvae

Butterfly pavilion

Plant Life, Steck Vaughn

Land Animals, Steck Vaughn

B. The Weather

Objectives-

- Describe and record current weather conditions.
- Describe how weather conditions affect our daily lives
- Use measurement tools to measure the temperature, precipitation and humidity.
- Keep a daily log of weather information

Evaluation- Students will be evaluated based on participation, daily log books, worksheets, demonstration of the use of weather tools and writing assignments.

Materials-

The Earth and Beyond, Steck-Vaughn

Classroom weather center

Composition books

Teacher created worksheets

Scholastic News

C. Students will demonstrate their knowledge of the scientific process

Objectives-

- Make a hypothesis and conduct an experiment to collect data
- Use proper tools and observational skills
- Draw conclusions based on data

Evaluation- Students will be evaluated based on participation, worksheets, and discussions.

D. The Environment and You

Objectives-

- Practice recycling of paper, cans, and bottles in school.
- Extend recycling to the student's home.
- Garden in the class garden without pesticides or herbicides
- Discuss ways that we all play a part in the creation of garbage and unwise use of our natural resources.

Evaluation- Students will be evaluated based on quizzes, worksheets, class discussions and participation.

Materials-

Paper Recycling Primer, Paper Recycling Coalition

SOS Earth, Water Squeeze, Troll Associates