7th Grade Science Mrs. Omiecinski and Mrs. Reidl 2022-2023 Rooms 2017 & 2013

1. District 123 Vision:

A dynamic and supportive environment that ignites lifelong learners who embrace diversity and contribute positively to our community and global society.

2. District 123 Mission:

Preparing today's learner for tomorrow's world.

3. Course Description

What is the purpose of this course?

- -Students explore and investigate a variety of phenomena and learn to apply their knowledge and abilities through completing units ("bundles") and lessons ("scopes).
- -Students apply their learning within the context of the work of scientists and engineers.
- -Centering education around phenomena pushes students to move from learning about topics to figuring out why and how things happen, so they become scientists and engineers in the classroom.

How will it relate to the District's Strategic Plan?

WHOLE CHILD SUCCESS:

- -Implement rigorous, coherent, and content-rich written curriculum
- -Support social-emotional well-being
- -Create challenging classrooms

ACTIVE LEARNING:

- -Initiate student agency through project-based learning
- -Empower students as critical creators and designers

OPERATIONAL EXCELLENCE:

-Develop optimal learning spaces

COMMUNITY SPIRIT:

-Build reciprocal relationships between students and their families

4. Learning Outcomes or Big Ideas

By the end of this course, students will be able to:

- Analyze and interpret data
- Construct a scientific explanation
- Develop models

Utilizing the following unit/bundle resources:

- Organisms and Nonliving Things are Made of Atoms
- Matter Cycles and Energy Flows through Organisms and Rocks
- Natural Processes and Human Activities Shape Earth's Resources and Ecosystems
- Sustaining Biodiversity and Ecosystem Services in a Changing World

5. Daily Procedures

Each day, students will...participate in a learning activity that follows the 5E format: engage, explore, explain, elaborate, and evaluate.

6. Expectations of Student

Students are expected to complete classroom assignments, take ownership of their learning, take responsibility for checking STEMscopes and Google classroom when absent, respect classroom lab equipment, safely engage in science exploration activities, and respect peers and teachers in the classroom.

7. Expectations of Teacher

Articulation of teacher responsibilities

- -guide students in rich scientific discourse through modeling, questioning, and feedback, while probing for deeper responses that help students explore their ideas more thoroughly.
- -engage students with real STEM work that leads to real-world positive outcomes for students and our world.
- -facilitate the 5-E process and provide feedback to students while providing differentiated materials and experiences
- -provide students a variety of resources to use in their learning, including the use of technology
- -prepare, stock, and maintain require materials for lessons
- -provide opportunities to connect to other areas of curricula across different content

8. Assessment Criteria

Homework/Grading policy: In alignment with the <u>D123 Grading Policy</u> Formative and Summative Assessments: Formative assessments include pre-tests, engage activities, explore activities, and explain activities. Summative assessments include open-ended response, claim-evidence-reasoning, multiple choice, or a combination of those together.

Policy on re-teaching/test retakes, etc.: Students must retake assessments by the end of the same trimester in which the assessment was given.

9. Materials

STEMscope Curriculum App and coordinated lesson materials

ID and Charged Chromebook

Pencil case with pens, pencils, calculator (put name & advisory teacher's name on it)

1" Three ring Binder with 2 divider tabs

Loose Leaf notebook paper

An inquiring mind & positive attitude!

10. Instruction and Directions for Help?

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Students will be using a combination of Google Classroom and the <u>STEMscopes website</u>. These can be accessed through the Student Portal.

11. Curriculum Map (Units of Study)

Bundle 1: Organisms and Nonliving Things are Made of Atoms

Bundle 2: Matter Cycles and Energy Flows through Organisms and Rocks

Bundle 3: Natural Processes and Human Activities Shape Earth's Resources and

Ecosystems

Bundle 4: Sustaining Biodiversity and Ecosystem Services in a Changing World

Last updated: 8/30/2022

MO & JR