Russell O. Brackman Middle School Grade 7 Science - Syllabus

Course Information

Grade 7 Science Full Year

Class Location: Room #W201

Teacher Information

Name(s): Ms. Brown Phone: (609)698-5880

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Teacher Website:

https://www.barnegatschools.com/Domain/

1793

Course Description:

Under the Next Generation Science Standards, students will be using authentic scientific investigation techniques throughout the 7th school year. The crosscutting concepts of cause and effect; system and system models; stability and change; and the influence of science, engineering, and technology on society and the natural world serve as organizing concepts for these disciplinary core ideas. Students are expected to demonstrate proficiency in asking questions, planning and carrying out investigations, and designing solutions, and engaging in argument; and to use these practices to demonstrate understanding of the core ideas.

The performance expectations in PS2: Motion and Stability: Forces and Interactions focuses on helping students understand ideas related to why some objects will keep moving, why objects fall to the ground and why some materials are attracted to each other while others are not. Students answer the question, "How can one describe physical interactions between objects and within systems of objects?" By the end of middle school, students will be able to apply Newton's Third Law of Motion to relate forces to explain the motion of objects.

The performance expectations in LS2: Interactions, Energy, and Dynamics Relationships in Ecosystems help students formulate an answer to the question, "How does a system of living and non-living things operate to meet the needs of the organisms in an ecosystem?" The LS2 Disciplinary Core Idea is divided into three sub-ideas: Interdependent Relationships in Ecosystems; Cycles of Matter and Energy Transfer in Ecosystems; and Ecosystem Dynamics, Functioning, and Resilience.

The performance expectations in LS4: Biological Evolution: Unity and Diversity help students formulate an answer to the question, "How do organisms change over time in response to changes in the environment?" The LS4 Disciplinary Core Idea is divided into four sub-ideas: Evidence of Common Ancestry and Diversity, Natural Selection, Adaptation, and Biodiversity and Humans.

Course Competencies/Learning Objectives

Students who successfully complete 7th grade science will be competent in the following areas:

- The crosscutting concepts of cause and effect; system and system models; stability and change; and the influence of science, engineering, and technology on society and the natural world serve as organizing concepts for disciplinary core ideas
- Students are expected to demonstrate proficiency in asking questions, planning and carrying out investigations, and designing solutions, and engaging in argument; and to use these practices to demonstrate understanding of the core ideas.

Course Texts / Online Resources

Science Fusion Series: Motion, Forces, and Energy; Ecology and the Environment; The Diversity of Living Things

Science Fusions Series: http://www-k6.thinkcentral.com/ePC/start.do

LOGIN: all lower case no spaces (firstnamelastname)

password: your school user id

Remind Message: https://www.remind.com/join/72k9kc

Required Materials

- a POSITIVE ATTITUDE EVERY DAY! :)
- 3-ring binder with 3 dividers
- loose leaf paper
- a black, red, and blue pen
- pencils
- 100 index cards

Attendance Policy

Regular and prompt class attendance is an essential part of the educational experience. The Barnegat Township School District expects students to be responsible and exercise good judgment regarding attendance and absences. Students accept full responsibility for ensuring that they complete any/all work missed due to absences.

Course Topic Outline

Please find a list of the units for this course:

Content Area: Grade 7 Science		
Course Title: Grade 7 Science		
Unit 1: Diversity of Living Things		
Unit 2: Ecology and Environment		
Unit 3: Motion, Forces, Energy		

Student Grades

The grading system for this course is based on the category weights listed in each department's policy. For this course, those weights are listed below. Each marking period, students will have a minimum of four (4) Major Assessments and eight (8) Minor Assessments (explained below). Homework is graded for completion, and Class Participation is assessed using the district rubric.

Major Assessments	-	50% of marking period grade
Minor Assessments	-	30% of marking period grade
Course Participation	-	15% of marking period grade
Benchmark	-	5% of marking period grade

- Examples of Major Assessments include items that are summative in nature, such as: Summative unit assessments; Unit projects; Written lab reports using CER framework; Lab practicals/skills based assessments; NGSS performance tasks; research activities, or any other type of assessment used to capture evidence of learning at the culmination of a unit of study.
- Examples of Minor Assessments include items that are formative in nature, such as: CER lab reports, quizzes, comprehension checks, exit tickets, small-scale research activities, in class worksheets, or any other type of assessment that is diagnostic in nature and used to guide instruction and provide ongoing feedback to students.
- Note: grades for individual assignments are entered into Genesis for the marking period in which the assignment is assigned and collected, and not a subsequent marking period.
- Extra Credit will only be available for assignments that have been approved ahead of time by the teacher and department supervisor.
- In this course, it is expected that students will submit only their best work, and teachers reserve the right not to accept work that is substantially below what a student is capable of producing.

Plagiarism, Cheating, and Academic Integrity

The Barnegat Township School District places a strong emphasis on students' integrity, and the district will not tolerate instances of academic dishonesty. Plagiarism is the practice of copying words, sentences, images, or ideas for use in written or oral assessments without giving proper credit to the source. Cheating is defined as the giving or receiving of illegal help on anything that has been determined by the teacher to be an individual effort. Both are considered serious offenses and are subject to consequences described in the Student Handbook and Board Policy #5701.

Classroom Expectations (Include your specific class rules, etc. below. Samples have been provided for you.)

- 1. All school rules and policies apply to this class.
- 2. The teacher and students will work together for a respectful, safe classroom.
- 3. Students will come to class on time, prepared, and ready to learn.
- 4. Students will complete all assignments, including homework, by all deadlines.
- 5. Students will actively participate in class discussions and other activities in order to enhance their learning experiences.
- 6. Cell phones, iPods, or any other personal electronic devices are **NOT ALLOWED** in class at any time.

Extra Help and Support

If you feel that you are struggling, please contact me in person, via email, or phone immediately to set up additional help. Occasionally, students will require additional help to master the content and skills in this course. If you need additional help, there are a variety of options for you, including:

- Lunch or Core Enrichment help sessions with your teacher
- After School Assistance Program for Science (Wednesdays)
- Free online tutoring with Brainfuse (available from the Barnegat Library website)

As your teacher, I am committed to your success. If you need help, please ask!

I am looking forward to having a wonderful and successful year with you in my class!