

Science 7 Course Outline

2017-2018 Science 7 Course Outline

This course is designed to introduce students to topics in biology, chemistry, geology, environmental science, and physics. It will build upon topics learned in previous years and prepare students for science 8.

Units of Study:

A: Biology - Ecosystems (2 months)

- Relationships between living things
- Flow of energy and cycling of matter
- Changes can be observed and monitored in ecosystems
- Maintaining suitable environments requires knowledge, decisions, and actions

B: Biology – Plants for Food and Fibre (2 months)

- Understanding structures of plants
- Plants roles in meeting human needs
- Soil
- Plant technology and the environment

C: Chemistry – Heat and Temperature (2 months)

- Human needs for obtaining and controlling heat
- How heat affects matter
- Temperature and natural phenomena

- Technologies that use heat

D Physics – Structures And Forces (2 months)

- Function of Structures
- External and internal forces
- Structural strength and stability
- Structure design to meet human needs

E Geology - Planet Earth (2 months)

- Earth's surface and changes
- Rock cycle
- Landforms
- Fossil record

Required Materials:

Students are expected to come to class prepared each day with access to the following items:

Textbook (provided)

Internet Ready Device (BYOD)

Binder with Paper, graph paper

Pens

Pencils

Erasers

Scissors

Glue stick

Pencil Crayons

Highlighters

Rulers

Calculator (Scientific)

Textbook: Addison Wesley Science in Action 7 Textbook

Assessment/Evaluation:

Projects – 50%

Quiz/Test – 20%

Labs – 30%

Assessment: Evaluation in this class includes both assessment *of*, and *for* learning. Assessment *for* learning includes all of the activities that we do to help students master the material and guide their learning. It is used by both the student and the teacher and in this class will include project work, self and peer feedback, parent feedback, revision, practice work, group work, and other assignments. While the majority of the assessment in the class is assessment for learning, it will usually be only a small part of the final grade because it is used mainly as a teaching and learning tool, rather than an evaluation tool. The report card grade will therefore be primarily based on assessments of learning. An assessment *of* learning is an evaluation of the student's mastery of the course outcomes at any given time and will include project work, written work, assignments, practical work, exams, and other evidence of mastery demonstrated by the student.

21st Century Competencies: Students will be using critical thinking and problem solving throughout the course in labs and solving problems. Students will also be working on communication, leadership, and collaboration when completing projects and assignments in groups. They will also be developing skills in self-directed learning when finding solutions to questions or problems.

Assignment Completion: At Beiseker Community School, it is our belief that a student's grade should demonstrate and reflect the student's knowledge. To this end, we will do our best to avoid assigning a mark of zero on a task or assignment. However, if after attempts such as: phone calls or e-mails home, PowerSchool notification, study hall referral, tutorials, adapted programming, administrative referral, etc. have been attempted and the student has still not complied, then an incomplete or failing grade may be applied.

Class Expectations: This is going to be a challenging and rewarding class. I know everyone is going to work their hardest and reach their full potential. Because we are all here for YOU to succeed and enjoy this class we have expectations for everyone in the class. In order to create a positive learning environment where everyone can succeed, we will follow these rules:

1. Arrive on time and prepared for class
2. Do not disrupt the class during lessons or work-time

3. Be respectful to everyone in the room

4. Cell phones must not be out during class time

*iPods can only be used with permission and only during work time but **not** during lessons*

5. No hats in class

6. No food or drink unless in a sealed bottle

Learning is an interactive process; therefore, I expect class participation from *every* student in discussions and question/answer periods.

Electronic Devices: (BYOD-Bring Your Own Device)

It is an expectation that each student's have their own device with a keyboards (not a cell phones) charged and ready to use for class each day. As much as possible Google Classroom will be used for class material such as assignments, notes, handouts etc. to cut down on paper costs and contribute to protecting the environment. These devices are to be used to educational purposes only that pertain directly to the tasks outlined by the teacher.

Cell Phone Policy:

Students are not permitted to have their cell phones during class time for personal communication or entertainment (text messages, emails, facebook, music etc.). If a student continues to be distracted by their cell phones or other devices after warnings it will be placed in the office until the end of the day, to be picked up after a conversation with an administrator.

Attendance:

Please refer to school attendance policy located on our school website.

Extra Help

Students who require extra help will be encouraged to meet with their teacher. At that time, they will determine what time(s) work for both parties.