Frequently Asked Questions – Program Planning for Science

Q: What is the difference between Practical, Academic and Honors Biology?

• A: For 9th grade students – ALL students must sign up to take Biology during 10th grade. Below is a chart comparing the difference between practical, academic and honors biology:

Practical Biology	Academic Biology	Honors Biology
Students in this class are guided through	Students in this class are expected to	Students in this class are expected to
the big ideas in biology. Students are	work independently to construct their	work independently to construct their
not asked to do much independent	own understanding of Biology in and	own understanding of Biology in and
learning outside of class. Homework	outside of the classroom. There is	outside of the classroom. Assignments
typically entails studying for a test or	approximately 30 minutes of homework	and assessments ask students to know a
completing classwork. There is a final	a night. There is a final exam.	greater level of detail and reach a deeper
project but no final exam. The class is		understanding than in the academic
typically co-taught.		program. There are 30-60 minutes of
		homework a night. There is a final exam.

Q: Should my son/daughter 'double up?' in science during 10th grade?

A: A limited number of students should be 'doubling up' in science. Students should 'double up' only if they are
an advanced student who wants to take AP in 11th grade or are truly interested in science and want to explore
something besides Biology. There is plenty of time to take science in 11th and 12th grade.

Q: Should my son/daughter take chemistry during 10th grade? If so, which level?

• A: The key to chemistry is motivation and mathematics. If students are motivated and want to take chemistry in 10th grade they need to be in Geometry or Alg 2/trig as a pre-requisite and should be achieving a solid grade.

Q: How many science credits are required to graduate?

o A: 3 science credits

Q: For my college-bound student, which science courses should they take before they graduate?

A: All college-bound students should plan to take Biology, Chemistry & Physics. If they are interested in a career
in a science related field, then additional science courses should be completed based on their career interests.
This can be accomplished by completing multiple science courses per year.

Q: What science courses are offered at CB East – (all are 2 marking periods, unless otherwise noted):

- AP Biology 3 MP
- Chemistry Conceptual, Academic, Honors
- Physics Academic & Honors
- AP Chemistry 3 MP
- AP Physics: Newtonian Mechanics
- AP Physics: Electricity and Magnetism
- AP Environmental Science
- Environmental Science 1 MP

- Organic and Equilibrium Chemistry 1 MP
- Human Anatomy and Physiology
- Earth science electives:
- Forensic Science
- Astronomy 1 MP
- Oceanography 1 MP
- Geology

Q: What are the pre-requisites?

- Academic Chemistry Alg 2/Trig C- or better
- Honors Chemistry Alg 2/Trig B or better
- Academic Physics Alg 1
- Honors Physics Alg 2/Trig
- AP Environmental Science Academic Biology or Academic Chemistry
- AP Biology Honors Biology AND Honors Chemistry
- AP Chemistry Honors Chem B or better, Academic Chem A or better AND Pre Calc/Trig 3 B- or better
- AP Physics: Newtonian Mechanics Pre-calc
- AP Physics: Electricity & Magnetism AP Newtonian Mechanics or Honors Physics AND Calc 1
- Forensic Science Academic Biology C or better