**Sample Science Course Pathways**

(Note: School divisions must follow the Standards of Accreditation and Board Approved Course list when developing pathways. Other course pathways are available based on school division course guides, prerequisites, academic and career interests.)

To meet the requirements for Standard diploma, students must have three credits of science in a minimum of two disciplines.Sample pathways in science for standard diploma include three different options.     The first pathway option is Earth Science I, Biology I, and Chemistry I, Physics I or any other BOE approved advanced level course.  Option two is Environmental Science, Earth Science I or Biology I, and any other BOE approved course.  Prerequisites for the courses must be met prior to enrolling in any courses.  Option three is only for students eligible for credit accomodations as indicated in a IEP.  This option includes Earth Science I  Part I, Earth Science I Part II, Biology I Part I and Biology I Part II.

For Advanced Studies Diploma, students must have four years of science in a minimum of three disciplines.  Three sample pathways are provided.  Sample pathway one for advanced diploma includes coursework in Biology I, Chemistry I, Physics I, and any other BOE approved science course.  Pathway two include Earth Science I, Biology I, Chemistry I, and any other BOE approved science course.  Option three includes Environmental Science, Earth Science I or Biology I, Chemistry I, and any other BOE approved laboratory science course.  Students must meet pre-requisitie requirements for advanced science coursework.  Please refer to the BOE approved course document for more information.

**Courses in Science**

The picture displays the BOE approved course options in science.  The original document can be found on the Virginia Deparment of Education website at http://www.doe.virginia.gov/instruction/graduation/standard.shtml


1The Board of Education’s Guidelines on Credit Accommodations allow students with disabilities who are eligible for credit accommodations in science to use each part of Earth Science, Parts I and II, and Biology, Parts I and II, to earn a standard credit towards the three science credits required for the Standard Diploma only.  A student who chooses to earn standard credits by taking both Earth Science and Biology in two parts must complete *both* parts of both courses to meet the minimum course requirements, and would earn three standard credits in science plus one additional elective credit. Two-part courses may also be combined with full-year courses in other Board- approved science courses to meet the requirements.

2Students who have not taken the first level course in this discipline are required to take the corresponding SOL test.

3The prerequisite content for this course is the first-level SOL core course in this discipline.

4Advanced Placement Environmental Science and Environmental Science may count as either Biology or Earth Science credit. It is highly recommended that students planning to apply or attend college take four science courses to include Biology, Chemistry, and Physics

5The sequence of Principles of Technology I [9811/10153 (1 of 2)] and Principles of Technology II [9812/10153 (2 of 2)] will satisfy one (1) standard unit of credit in laboratory science for physics and one (1) elective credit. Students who enroll in Principles of Technology courses for a physics credit must have completed Algebra I and two (2) other laboratory science courses as specified by the Standards of Accreditation prior to enrolling in Principles of Technology. There is no SOL test associated with Principles of Technology I and II.

6Advanced Placement Physics 1 and 2 will begin to be offered in the 2014-2015 academic year, and Advanced Placement Physics B will be discontinued following the 2013-2014 academic year. SCED codes have not yet been determined for AP Physics 1 and 2.

7Students will take the Earth Science, Biology, and Chemistry test(s) when they have completed the appropriate SOL content, as determined by the local school division.