

## High School Science Credits

(revised April 8, 2016)

Upon completion of the Biology and “a physical science” (to include Chemistry, Physics, or Physical Science), in addition to the 2015 *Alabama Course of Study: Science*, students have the option of choosing specific courses from Career and Technical Education, Advanced Placement, International Baccalaureate, and postsecondary to satisfy the remaining two credits. State Department approved science courses may also be offered.

Courses offered for science credit must be laboratory-based and contain scientific and engineering practices and crosscutting concepts as outlined in the latest research in science and science education.

### Science and Career and Technical Education

The following Career and Technical Education courses are **science-credit eligible** and satisfy the third and fourth science elective credit as indicated in the Alabama High School Graduation Requirements (*Alabama Administrative Code 290-3-1-.02 (8) and (8)(a)*). The courses may be taught by a teacher holding certification in the appropriate science or Career and Technical Education area.

- Forensic and Criminal Investigations (410025)
- Plant Biotechnology (420053)
- Aquaculture Science (420037)
- Introduction to Biotechnology (490041)
- PLTW Principles of Engineering (560016)

Additionally, the Career and Technical Education courses below contain similar content as courses in the 2015 *Alabama Course of Study: Science*. A student may not receive science credit for a Career and Technical Education course that duplicates credit already awarded in a science course.

- Chemistry of Food (510013)—similar content as Chemistry (220061)  
Note: Chemistry of Food does not count as the “a physical science” option as indicated in the Alabama High School Graduation Requirements.
- Environmental Management (420026)—similar content as Environmental Science (220029)
- Human Body Structures and Functions (490015)—similar content as Human Anatomy and Physiology (220026)
- PLTW Human Body Systems (490043)—similar content as Human Anatomy and Physiology (220026)

### Science and Advanced Placement

Students may be awarded science credit for the Advanced Placement science courses below.

- AP Biology
- AP Chemistry
- AP Environmental Science
- AP Physics 1: Algebra-Based
- AP Physics 2: Algebra-Based
- AP Physics C: Electricity and Magnetism
- AP Physics C: Mechanics

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### Science and International Baccalaureate

Students enrolled in the Diploma Programme or Career Related Programme will follow the International Baccalaureate curriculum.

### Science and Postsecondary/Colleges and Universities

Students may have the opportunity to enroll in postsecondary/college courses in high school through dual enrollment. Postsecondary/college science courses that award high school science credit must be laboratory-based (4 semester hours credit). To be eligible science credit for a similar science course in the 2015 *Alabama Course of Study: Science*, the LEA and postsecondary institution must perform an alignment of standards. At a minimum, the postsecondary course must meet the performance expectation requirements of the high school science course being substituted. For example, to offer postsecondary Biology for high school Biology, the postsecondary institution and LEA must agree that all of the standards in the high school Biology course are met in the postsecondary course. No course may be offered to a student that duplicates the standards of a course already taken by the student.

### Science and State Department Approved Courses

LEAs may determine that a science course that is not offered in the 2015 *Alabama Course of Study: Science* meets the needs of the students being served based on the four-year plans that include student college and career interests. The LEA may use the following steps to submit a course for approval.

1. Research interest of the LEA and community to determine the need.
2. The **LEA superintendent** should submit a waiver letter to the state superintendent requesting the course, along with an [Academic Content Waiver Form found here](http://www.alsde.edu/sec/isvcs/Pages/prek-all.aspx?navtext=Waivers) or use the link below.  
<http://www.alsde.edu/sec/isvcs/Pages/prek-all.aspx?navtext=Waivers>
  - a. The Academic Content Waiver Form requests all information needed for the course to be considered.
  - b. Standards for the proposed course must align with the most current research in science and science education and include science and engineering practices and crosscutting concepts.
3. Courses should be submitted by the third week of October for consideration for the next school year. Specific dates will be communicated to LEAs during the fall of the school year prior to expected course implementation.
4. The appropriate science elective subject code specifying that the course counts as one of the four required science options will be used to identify the course.