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Science

- (b-1) The State Board of Education by rule shall require that the curriculum requirements for the foundation high school program under Subsection (a) include a requirement that students successfully complete:
 - three credits in science under Section 28.002(a)(1)(C), including one credit in biology, one credit in any advanced science course authorized under Subsection (b-2), and one credit in integrated physics and chemistry or in an additional advanced science course authorized under Subsection (b-2)
- (b-15) A student may earn a distinguished level of achievement under the foundation high school program by successfully completing:
 - (2) **four credits in science**, which must include the courses described by Subsection (b-1)(3)
- (c-2) In adopting rules under Subsection (c-1), the State Board of Education shall:
 - require a student in order to earn any endorsement to successfully complete:
 - (B) **four credits in science**, which must include:
 - (i) the courses described by Subsection (b-1)(3); and
 - (ii) an additional advanced science course authorized under Subsection (b-2) or an advanced career and technology course designated by the State Board of Education

Minimum High School Program	Recommended High School Program	Distinguished Achievement Program	Foundation High School Program
Two credits:	Four credits:	Four credits:	Three credits:
Biology	Biology	Biology	 Biology
 IPC or Chemistry and Physics (one of 	Chemistry	Chemistry	 IPC or an advanced science course
the two serves as an academic elective)	Physics	Physics	 Any advanced science course
·	An additional science credit	An additional science credit	

Minimum High School Program	Recommended High School Program	Distinguished Achievement Program	Foundation High School Program
Sciencetwo credits. The credits must consist of	Sciencefour credits. Three of the credits must	Sciencefour credits. Three of the credits must	Sciencethree credits. One credit must consist of
Biology and Integrated Physics and Chemistry	consist of a biology credit (Biology, AP Biology, or	consist of a biology credit (Biology, AP Biology, or	biology.
(IPC). A student may substitute a chemistry credit	IB Biology), a chemistry credit (Chemistry, AP	IB Biology), a chemistry credit (Chemistry, AP	The cooped gradit may be calcuted from IDC ar-
(Chemistry, AP Chemistry, or IB Chemistry), or a physics credit (Physics, Principles of Technology,	Chemistry, or IB Chemistry), and a physics credit (Physics, Principles of Technology, AP Physics, or	Chemistry, or IB Chemistry), and a physics credit (Physics, AP Physics, or IB Physics).	The second credit may be selected from IPC or:
AP Physics, or IB Physics) and then must use the	B Physics).	(A) The fourth credit may be selected from the	The third credit may be selected from the following
second of these two courses as the academic	(A) The additional credit may be Integrated	following laboratory-based courses:	Courses:
elective credit identified in subsection (b)(5) of this	Physics and Chemistry (IPC) and must be	(i) Aquatic Science;	COUISCS.
section.	successfully completed prior to chemistry and	(ii) Astronomy;	
	physics.	(iii) Earth and Space Science;	
	(B) The fourth credit may be selected from the	(iv) Environmental Systems;	
	following laboratory-based courses:	(v) AP Biology;	
	(i) Aquatic Science;	(vi) AP Chemistry;	
	(ii) Astronomy;	(vii) AP Physics B;	
	(iii) Earth and Space Science; (iv) Environmental Systems;	(viii) AP Physics C; (ix) AP Environmental Science;	
	(v) AP Biology;	(x) IB Biology;	
	(vi) AP Chemistry;	(xi) IB Chemistry;	
	(vii) AP Physics B;	(xii) IB Physics;	
	(viii) AP Physics C;	(xiii) IB Environmental Systems; and	
	(ix) AP Environmental Science;	(xiv) pursuant to the TEC, §28.025(b-5), a science	
	(x) IB Biology;	course endorsed by an institution of higher education as a	
	(xi) IB Chemistry;	course for which the institution would award course credit or as a prerequisite for a course for which the institution	
	(xii) IB Physics;	would award course credit. The TEA shall maintain a	
	(xiii) IB Environmental Systems; and	current list of courses approved under this clause.	
	(xiv) pursuant to the TEC, §28.025(b-5), a science course endorsed by an institution of higher education as a	(B) The additional credit may be selected from the	
	course for which the institution would award course credit	following laboratory-based courses and may be	
	or as a prerequisite for a course for which the institution	taken after the successful completion of biology	
	would award course credit. The TEA shall maintain a	and chemistry and either after the successful	
	current list of courses approved under this clause.	completion of or concurrently with physics: (i) Scientific Research and Design;	
	(C) The additional credit may be selected from the following laboratory-based courses and may be	(ii) Anatomy and Physiology;	
	taken after the successful completion of biology	(iii) Engineering Design and Problem Solving;	
	and chemistry and either after the successful	(iv) Medical Microbiology;	
	completion of or concurrently with physics:	(v) Pathophysiology;	
	(i) Scientific Research and Design;	(vi) Advanced Animal Science;	
	(ii) Anatomy and Physiology;	(vii) Advanced Biotechnology;	
	(iii) Engineering Design and Problem Solving;	(viii) Advanced Plant and Soil Science;	
	(iv) Medical Microbiology;	(ix) Food Science; and	
	(v) Pathophysiology;	(x) Forensic Science.	
	(vi) Advanced Animal Science;		
	(vii) Advanced Biotechnology; (viii) Advanced Plant and Soil Science;		
	(viii) Advanced Plant and Soil Science; (ix) Food Science; and		
	(x) Forensic Science.		
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Considerations:

- Advanced science courses must prepare students to enter the workforce successfully or postsecondary education without remediation.
- Students will have the option to select up to two advanced science courses for the foundation high school program and up to three advanced science courses to earn an endorsement.
- Three out of four courses could be CTE courses for science credit which would limit the number of pure science courses a student takes in high school.
- Science courses have a variety of prerequisites, including some mathematics prerequisites.
- New, more specific AP Physics 1: Algebra-Based and AP Physics 2: Algebra-Based courses will replace current AP Physics B and AP Physics C courses. The new courses will align with first-semester and second-semester college courses.
- Students must be permitted to use a course that has been developed locally by a school district in partnership with a public or private IHE and local business, labor, and community leaders to satisfy an advanced science requirement.

Decisions Points:

- Determine courses that will be eligible to satisfy the advanced science credit requirements.
- Determine whether to differentiate between courses that may satisfy a second science credit under the foundation high school program and courses that may satisfy a third science credit under the foundation high school program.
- Determine whether to differentiate between courses that may satisfy a third science credit under the foundation high school program and courses that may satisfy a fourth science credit for the endorsements.
- Allow AP/IB courses to satisfy the biology credit, advanced science credit, or either.

Examples:

- Second science credit options: IPC, chemistry, or physics
- Allow chemistry, physics, and courses that may currently satisfy a science credit requirement to satisfy the third science credit under the foundation high school program.
- Allow chemistry, physics, and courses that may currently satisfy a science credit requirement to satisfy the fourth science credit required to earn an endorsement.
- Identify additional CTE courses to satisfy the advanced science requirements.