

SCIENCE INSTRUCTION

The Governing Board believes that science education should focus on giving students an understanding of the biological, physical, earth, and space science aspects of science, key scientific concepts, and methods of scientific inquiry and investigation. Students should become familiar with the natural world and the interrelation of science, technology, engineering, and mathematics. As part of science instruction, students should learn how to apply scientific knowledge and reasoning.

Philosophical and religious theories that are based, at least in part, on faith and are not subject to scientific test and refutation, shall not be discussed during science instruction. It is recognized that the IB and AP curricula may include the study and discussion of the impact of philosophy on the development of scientific knowledge and understanding.

The district's academic standards for science instruction shall meet or exceed the California Next Generation Science Standards (CA-NGSS). The Superintendent or designee shall ensure that curricula used in district schools are aligned with these standards and the state curriculum framework.

The Superintendent or designee shall ensure that students have access to and are enrolled in a broad course of study including science courses.

The Superintendent or designee shall provide certificated staff with opportunities to participate in professional development activities designed to enhance their knowledge of district-adopted academic standards, instructional strategies for teaching science, and changes in scientific theories.

The Superintendent or designee shall develop and implement appropriate safety measures for science laboratory classes, including, but not limited to: staff and student safety training, use of eye safety devices, hearing protection, first aid procedures, regular equipment maintenance, safe use of heat sources, safe use and disposal of hazardous chemicals, proper ventilation, prevention of exposure to bloodborne pathogens from sharp instruments, fire prevention and control, an emergency response plan, and evacuation procedures. It is encouraged that parents/guardians be informed of the types of science laboratory activities that will be conducted. It is encouraged that parents/guardians sign lab safety agreements for the safe participation of their child in science laboratory activities.

The Superintendent or designee shall provide the Board with data from state and district science assessments and program evaluations to enable the Board to monitor program effectiveness.

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Legal Reference:**State**

5 CCR 14030

8 CCR 5191

Ed. Code 32030-32034

Ed. Code 32255-32255.6

Ed. Code 33475-33475.5

Ed. Code 49340-49341

Ed. Code 51210

Ed. Code 51210.3

Ed. Code 51220

Ed. Code 51225.3

Ed. Code 52060-52077

Ed. Code 60640-60648.5

Ed. Code 8774

Description

Preliminary procedure, planning and approval of school facilities

Chemical hygiene plan

[Eye safety](#)[Student's right to refrain from harmful or destructive use of animals](#)[Model curriculum on stem cell science](#)[Hazardous substances education](#)[Course of study for grades 1-6](#)[Elementary science coach](#)[Course of study for grades 7-12](#)[High school graduation requirements](#)[Local control and accountability plan](#)[California Assessment of Student Performance and Progress](#)[Residential outdoor science program](#)**Management Resources**California Department of Education
PublicationCalifornia Department of Education
PublicationCalifornia Department of Education
PublicationCalifornia Department of Education
Publication

CSBA Publication

DescriptionNext Generation Science Standards Systems Implementation
Plan for California, 2014

Science Safety Handbook for California Public Schools, 2014

California Next Generation Science Standards, 2013

Science Framework for California Public Schools:
Kindergarten Through Grade 12, 2016Supporting Implementation of the California Next Generation
Science Standards (CA-NGSS), Governance Brief,
November 2016

Website

[CSBA District and County Office of Education Legal
Services](#)

Website

[U.S. Department of Education, STEM Education](#)

Website

[California Science Teachers Association](#)

Website

[California Alliance for Next Generation Science Standards](#)

Website

[California Department of Education](#)

Website

[CSBA](#)**Cross References**

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Code	Description
0440	<u>District Technology Plan</u>
0440	<u>District Technology Plan</u>
0460	<u>Local Control And Accountability Plan</u>
0460	<u>Local Control And Accountability Plan</u>
0500	<u>Accountability</u>
3511	<u>Energy And Water Management</u>
3511	<u>Energy And Water Management</u>
3511.1	<u>Integrated Waste Management</u>
3511.1	<u>Integrated Waste Management</u>
3514.1	<u>Hazardous Substances</u>
3514.1	<u>Hazardous Substances</u>
4119.42	<u>Exposure Control Plan For Bloodborne Pathogens</u>
4119.42	<u>Exposure Control Plan For Bloodborne Pathogens</u>
4119.42-E(1)	<u>Exposure Control Plan For Bloodborne Pathogens</u>
4131	<u>Staff Development</u>
4157	<u>Employee Safety</u>
4157	<u>Employee Safety</u>
4219.42	<u>Exposure Control Plan For Bloodborne Pathogens</u>
4219.42	<u>Exposure Control Plan For Bloodborne Pathogens</u>
4219.42-E(1)	<u>Exposure Control Plan For Bloodborne Pathogens</u>
4257	<u>Employee Safety</u>
4257	<u>Employee Safety</u>
4319.42	<u>Exposure Control Plan For Bloodborne Pathogens</u>
4319.42	<u>Exposure Control Plan For Bloodborne Pathogens</u>
4319.42-E(1)	<u>Exposure Control Plan For Bloodborne Pathogens</u>
4331	<u>Staff Development</u>
4357	<u>Employee Safety</u>
4357	<u>Employee Safety</u>
5141.22	<u>Infectious Diseases</u>
5141.22	<u>Infectious Diseases</u>
5142	<u>Safety</u>
5142	<u>Safety</u>
5145.8	<u>Refusal To Harm Or Destroy Animals</u>
5148.2	<u>Before/After School Programs</u>
5148.2	<u>Before/After School Programs</u>
6011	<u>Academic Standards</u>
6141	<u>Curriculum Development And Evaluation</u>
6141	<u>Curriculum Development And Evaluation</u>
6141.2	<u>Recognition Of Religious Beliefs And Customs</u>
6141.2	<u>Recognition Of Religious Beliefs And Customs</u>
6141.4	<u>International Baccalaureate Program</u>
6142.1	<u>Sexual Health And HIV/AIDS Prevention Instruction</u>
6142.1	<u>Sexual Health And HIV/AIDS Prevention Instruction</u>
6142.5	<u>Environmental Education</u>

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6142.92	<u>Mathematics Instruction</u>
6143	<u>Courses Of Study</u>
6143	<u>Courses Of Study</u>
6146.1	<u>High School Graduation Requirements</u>
6161.1	<u>Selection And Evaluation Of Instructional Materials</u>
6161.1	<u>Selection And Evaluation Of Instructional Materials</u>
6161.1-E(1)	<u>Selection And Evaluation Of Instructional Materials</u>
6161.11	<u>Supplementary Instructional Materials</u>
6162.51	<u>State Academic Achievement Tests</u>
6162.51	<u>State Academic Achievement Tests</u>
6172	<u>Gifted And Talented Student Program</u>
6172	<u>Gifted And Talented Student Program</u>
6179	<u>Supplemental Instruction</u>