

NEW STANDARDS FOR PHYSICS I AND PHYSICS II IN VIRGINIA

CSAAPT

MARCH 16, 2024

9:45 – 10:00 A.M.

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VIRGINIA DEPARTMENT OF EDUCATION

WHAT ARE THE STANDARDS OF LEARNING?



Standards of Learning

The Standards of Learning (SOL) for Virginia Public Schools establish expectations for what students should know and be able to do at the end of each grade or course.



Local Curriculum

Local school divisions create their own “aligned” local curriculum that guides the day-to-day instruction of the approved Standards. This is not controlled by the State.



SOL Assessments

SOL Assessments measure the success of students in meeting the Board of Education’s expectations for learning and achievement. Currently, there is not an SOL assessment for Physics or Physics II.

2025 SCIENCE STANDARDS REVISION TIMELINE

- Spring 2024 – Virtual and in-person roundtable meetings to solicit feedback on the 2018 *Science Standards of Learning*
- June 2024- Teacher SOL Revision Committees meet to review feedback on the 2018 *Science Standards of Learning* and make recommendations for the 2025 *Science Standards of Learning*
- October 2024 – Proposed Draft of 2025 *Science Standards of Learning* presented to BOE
- November – December 2024 – Virtual and in-person public hearings on the Proposed Draft 2025 *Science Standards of Learning*
- January 2025 – Anticipated BOE approval of 2025 *Science Standards of Learning*

PROPOSED GUIDING PRINCIPLES

- Reflects accurate and current science content
- Develops students' ability to apply knowledge and skills to analyze and explain the world around them
- Recognizes investigation, experimentation, and problem-solving as central to scientific understanding
- Provides a progression of knowledge and practices over time
- Acknowledges that learners use their own experiences and background knowledge to make meaning in science
- Provides opportunities to integrate science across all content
- Conveys high academic expectations for all students

OVERVIEW OF STANDARDS

Physics I	Physics II
PH.1 Science and Engineering Practices	PHII.1 Science and Engineering Practices
PH.2 Kinematics and Projectiles	PHII.2 Energy, Work, & Power
PH.3 Newton's Laws	PHII.3 Impulse & Momentum
PH.4 Conservation and Momentum	PHII.4 Fluid Dynamics
PH.5 Waves	PHII.5 Thermodynamics
PH.6 Light and Optics	PHII.6 Electricity and Magnetism
PH.7 Gravitation and Electric Fields	PHII.7 Dual Nature of Light
PH.8 Electric Circuits	PHII.8 Physics Topics
PH.9 Physics Topics	

WE NEED YOU!

- Elementary
- Physical Science
- Physics

Comments on 2018
Science Standards of Learning

- Physics II

Comments on the
Proposed Draft of 2025
Physics II Standards of Learning

WE NEED YOU!

- SOL review committee application is open.
Applications are due 3/29.
 - 5 members per grade level, K-physics
 - Committee will meet virtually and then in person June 25 – 27 at ODU
- SOL item review committee application is open.
Applications are due 3/22.

THANK YOU!

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