

Seal for Excellence in Science and the Environment

The Board of Education's [Seal for Excellence in Science and the Environment](#) shall be awarded to students who complete the requirements below. The Seal is available to students who enter Grade 9 in 2018-19 and beyond. Students must:

- **Earn a standard or advanced studies diploma**
- **Take and earn a B or above in three Level I [VBOE approved laboratory science courses](#) from amongst the below:**
 - Biology
 - Chemistry
 - Environmental Science
 - Geosystems
 - Physics
 - Integrated Science HN Sequence
 - Completion of this requirement will be tracked using the data in SIS.
- **Take and earn a B or above in one rigorous advanced-level or postsecondary-level laboratory science course from amongst the options below:**
 - Advanced Placement (AP) courses (e.g. AP Biology)
 - International Baccalaureate (IB) courses (e.g. IB Chemistry)
 - Dual enrollment or concurrent enrollment courses (e.g. BIO 141 and BIO 142 at NOVA)
 - Completion of this requirement will be tracked using the data in SIS.
- **Complete laboratory or field-research and present that research in a formal, juried setting**
 - Can include participation in FCPS science fairs (school-site or higher) or other presentations to industry professionals or scientists
 - Juried is defined as settings in which students receive feedback from a professional other than their teacher or sponsor of their research
 - This requirement can be tracked using the SIS division gradebook assignment in the Q4 gradebook.
- **Complete 50 hours of voluntary participation in community service or extracurricular activities involving *any* application of science.**
 - While it is not required, the application of science may include environmental monitoring, protection, management, or restoration.
 - Students may track hours towards the Seal within x2VOL:

GOAL NAME	START DATE	END DATE	GOAL HOURS	REQ	SHARED HOURS	JOINED
Service Learning Cord If you are not completing service for a particular class or club, y...	07/01/2018	06/30/2022	40.00	✓	✓	11
Civics Seal See Virginia Department of Education for criteria: http://www.pen.k...	07/01/2018	06/30/2022	50.00	✓	✓	11
Science Seal See Virginia Department of Education for criteria: http://www.pen.k...	07/01/2018	06/30/2022	50.00	✓	✗	11

- The hours towards the Seal for Excellence in Science and the Environment will be tracked separately from hours for the Seal for Excellence in Civics Education and the

Service Learning Cord within x2VOL. However, all hours will be combined towards the Civics Seal and Service Learning Cord.

- If x2VOL is used, the completion of this requirement will be tracked using data from the application.
- While schools are strongly encouraged to use x2VOL with students to track hours towards seals and the Service Learning Cord, schools may also choose to track hours through alternate means.
 - Schools who choose to track progress on this requirement **will have to manually enter this information into the seal spreadsheets** provided by DIT as part of senior processing. The meeting of this requirement would not be centrally populated for students.

Please note that the guidance above is subject to change as the Virginia Department of Education (VDOE) provides additional information over the next four years as the seal criteria are implemented.