

Teacher: _____ Course/Section: _____

Dear Parents/Guardians,

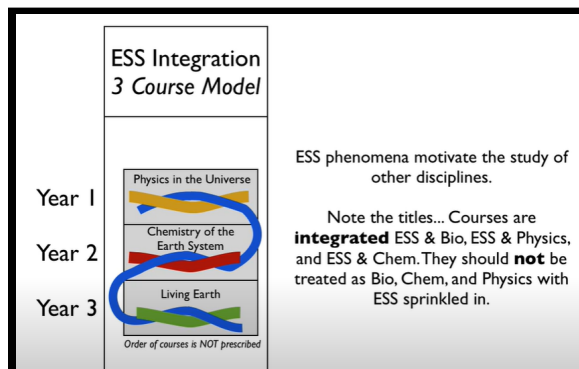
TVUSD has adopted the 3 course model of the CA NGSS Framework. As a result of this adoption, TVUSD will be entering into a pilot cycle to determine the best instructional materials to be used to support our students' learning. During the fall semester of the 2022-2023 school year your child will be participating in a pilot process for the NGSS 3 Course Model. Discovery Education Science Techbook and Houghton Mifflin Harcourt Science Dimensions will be used for instructional and learning purposes during this time. To learn more about NGSS, please refer to [Understanding New Science Standards for Grades 9-12](#). To learn more about the NGSS 3 Course Model, please watch this introductory video: [CA NGSS Framework 3 Course Model Introduction](#).

The three-course model combines all high school performance expectations into three courses. To highlight the nature of Earth and space science (ESS) as an interdisciplinary pursuit with crucial importance in California, each of the three courses presents an integration of ESS and one of the other high school domains. In each course, the integration adds value to both domains in the pair, with each providing an engaging motivation for and a deeper insight into the other. ESS phenomena can serve as an engaging motivation for studying the other domains while understanding of each domain provides deeper insight into processes in ESS. The three courses have been explicitly titled to emphasize this synergy:

- *Living Earth*: Integrating Biology and Earth Science
- *Chemistry in the Earth System*: Integrating Chemistry and Earth Science
- *Physics of the Universe*: Integrating Physics and Earth and Space Science

This model is based on the Modified Domains model presented in appendix K of the NGSS. The choice of which ESS performance expectations would be included with biology, chemistry, and physics courses was based on their conceptual fit. Individual districts can integrate performance expectations between courses differently as long as they strive to ensure that all students meet all the standards.

Should you have any further questions, please reach out to your science teacher directly.



SCIENCE EDUCATION NEEDS AN UPDATE

Most states based their current K-12 science standards on reports dating back nearly twenty years! Since that time, we've made major advances in science and technology, and gained a better understanding of how students learn these subjects.

HOW CAN U.S. STUDENTS RECEIVE A HIGH-QUALITY SCIENCE EDUCATION IF STATES' STANDARDS ARE STUCK IN THE '90S?

1995	TEXT MESSAGING becomes more popular with T9 or "predictive" typing	
1996	DVDS CHANGE HOME ENTERTAINMENT WITH DIGITAL OPTIC STORAGE	
1997	NASA lands first successful Mars rover!	
1999	Toyota unveils Prius, the first HYBRID on the market	
2000	Endemic MEASLES are eliminated from the US!	
2001	Apple releases the IPOD	
2003	HUMAN GENOME Project is complete!	
2005	French doctors perform the first successful FACE TRANSPLANT	
2006	PLUTO is reclassified as a dwarf planet	
2008	HUBBLE SPACE TELESCOPE OBSERVES FIRST PLANET OUTSIDE OF OUR SOLAR SYSTEM	
2010	The first SYNTHETIC GENOME for a bacterial cell is created!	
2011	IBMS WATSON wins Jeopardy!	
2012	CERN DISCOVERS HIGGS BOSON	
2014	SIX FLAGS AMERICA'S GOLIATH becomes the fastest wooden roller coaster in the world at 72 mph!	