

All virtual courses include a state mandated virtual synchronous session at least once per marking period. These sessions will be scheduled and facilitated by the course instructor.

## Science

### ASTRONOMY (.5 credit)

Grades: 9-12

Ever wondered how the Earth developed and exists in the vastness of space? How do the scientific laws of motion and gravity play a role in its existence? Discover answers to these questions and explore the origin of the universe, the Milky Way, and other galaxies and stars, including the concepts of modern astronomy and the methods used by astronomers to learn more about the universe.

### FORENSICS: Secrets of the Dead (.5 credit)

Grades: 9-12

Fingerprints. Blood spatter. DNA analysis. The world of law enforcement is increasingly making use of the techniques and knowledge from the sciences to better understand the crimes that are committed and to catch those individuals responsible for the crimes. Forensic science applies scientific knowledge to the criminal justice system. This course focuses on some of the techniques and practices used by forensic scientists during a crime scene investigation (CSI). Starting with how clues and data are recorded and preserved, the student will follow evidence trails until the CSI goes to trial, examining how various elements of the crime scene are analyzed and processed.

### FORESTRY & NATURAL RESOURCES (.5 credit)

Grades: 9-12

Thriving forests are an essential part of the health of the planet, from our wildlife's ecosystem to providing humans with clean air to lumber and paper products. But forests cannot protect themselves and depend greatly on humans for conservation. Learn more about this meaningful relationship and how environmental policy, land use, water resources, and wildlife management all factor into current forestry issues. Forestry offers diverse professional opportunities, and for those concerned about the environment, it is a great choice.

### PALEONTOLOGY (.5 credit)

Grades: 9-12

From Godzilla to Jurassic Park, dinosaurs continue to captivate us. In this course, students will learn about the fascinating creatures both large and small that roamed the earth before modern man. Watch interesting videos from experts at The Royal Tyrrell Museum, a leading paleontology research facility, and discover how the field of paleontology continues to provide amazing insight into early life on earth.

### RENEWABLE ENERGY (.5 credit)

Grades: 9-12

The earth's population is growing rapidly, and we need to find new, innovative ways to ensure that we are able to provide for our global energy needs. Students will look at the reasons why sustainability is important,

take a balanced and evidence-based look at climate change, and learn new ways that we can harness renewable resources.

## SPACE EXPLORATION (.5 credit)

### Grades: 9-12

In 1961, Yuri Gagarin became the first human to go to space. In 1969, Neil Armstrong became the first human to step on the moon. This comprehensive course will examine the history and future of space travel. Find out how we have put people in space in the past, and what it will take for us to reach new frontiers, including Mars and beyond.