



# Lamar High School

An International Baccalaureate World School

## Lamar Program of Inquiry 9<sup>th</sup> grade Cycle 1



In an increasingly global society, disease outbreaks are more widely reported and have the potential to become international epidemics. Understanding what can cause disease, how diseases spread, and how the global community works together on health security is important as citizens of the world.

Students will act as epidemiologists from the Centers for Disease Control and Prevention. Their goal is to explain how we can work to prevent the spread of a disease, beginning with preventative measures, how to treat those who have contracted the disease, and how to communicate with the population. By the end of the exploration, the students will use the tools of their varying disciplines to solve real-world problems and showcase their understanding.



### Project based learning

Students are active participants in their learning and make connections across subjects so that learning is relevant in their lives.

### Fueled by inquiry

Critical thinking and problem solving are skills students need as they explore their world. Through asking questions and driving their own exploration of topics to gather and analyze information, students are the center of instruction and have ownership of their learning.

### Flipped Instruction

Flipped instruction supports student learning by moving some instructional content to homework, allowing teachers more time to work with the application of content and to support students who may need extra help.

### Integrating Technology

Students learn digital literacy to help them responsibly use technology in an efficient and effective way. Technology is also used to explore and experiment with content that may be inaccessible through other methods.

### Modeling real-world workplace skills

In addition to digital literacy, future employees need skills in effective communication, self-management, personal responsibility, collaboration with others, and the ability to produce high quality work. Students get practice with these "soft-skills" employers have ranked as important qualities.

- In **Individuals and Societies**, students research historical outbreaks, creating maps of how disease spreads.
- In **Science**, students will gain an understanding of how microorganisms and viruses function, how interactions of microorganisms and viruses with the environment and other cells can cause and spread disease.
- In **Language Acquisition**, students will read articles in the target language to determine how mass danger was historically handled in that culture.

- In **Design**, students use the economic decision making process to develop prevention plans and outbreak solutions.
- In **Language and Literature**, students will inquire into the significance of historical epidemics while exploring literature of the time period.
- In **Math**, students will determine a formulaic or systematic way of determining if there is an outbreak, and when or if an emergency plan should be activated.