



NOTRE DAME OF MARYLAND UNIVERSITY

# 2019 STEM SUMMER CLASSES

*Notre Dame of Maryland University is endorsed by the Maryland State Department of Education as a leader in developing progressive STEM programs for teachers.*

## ENVIRONMENTAL FIELD STUDY (ENV562)

**June 24–28, 8:30 a.m.– 4:00 p.m.**

*Location: Various trails, streams, & creeks in the Baltimore area*

Learn to engage students in meaningful watershed experiences as defined by the Maryland Partnership for Children in Nature. Studies will be aligned with local curricula, the Next Generation Science Standards and Maryland's Environmental Literacy Standards. Daily activities include canoeing, hiking, and stream studies. For more information, please contact Joe Davis at JDavis17@ndm.edu.

**Fee: \$1,450**

## STEM INSTITUTE (ENV561)

**July 29–Aug. 2, 8:30 a.m.– 4:00 p.m.**

*Location: Notre Dame of Maryland University*

A week of workshops focused on interdisciplinary, hands-on learning. Each day focuses on engaging projects using guides from and presentations by the Department of Natural Resources and the National Oceanic, Atmospheric Administration (NOAA). For more information, please contact Dr. Juliann Dupuis at jdupuis@ndm.edu.

**Fee: \$1,450**

## INTRODUCTION & EXPLORATION OF DESIGN, TECHNOLOGY, & ENGINEERING: CONTENT & INSTRUCTION STRATEGIES (EDST-506)

**June 3-29, M, W 5:30–9:30 p.m.**

*Location: Notre Dame of Maryland University*

This course will introduce and expand on knowledge of the Engineering Design Process (EDP). Through instruction and direct experience, participants will develop knowledge and skill related to: design as a creative and innovative technological process and engineering as the focused application of science, technology, and math knowledge and skills through systematic problem solving processes. Learning activities will be based on the problem solving process and will address a variety of learning styles through the construction of operating models, products, systems, and environments that demonstrate solutions to problems. (3 credits). Contact Dr. Juliann Dupuis at jdupuis@ndm.edu

**Fee: \$1,450**

## TECHNOLOGY FOR STEM EDUCATORS (EDST-507)

**July 8–26, M, W, TH 6:00–9:15 p.m.**

*Location: Digital Harbor Foundation*

This course will introduce teachers to a variety of high-tech and low-tech technologies that can be utilized to reach students in new ways in the classroom. Teachers will receive hands-on experience with technology tools such as: 3D Printers, microcontrollers, and website coding. Through instruction and hands-on direct experience, participants will develop knowledge and skills related to: (1) "technology" as a tool for teaching rather than a topic for teaching; (2) implementation of technology tools in a variety of subjects and content areas; (3) methods for supporting creativity in technology heavy subjects. Contact Stephanie Grimes at steph@digitalharbor.org

**Fee: \$1,450**