



A Snapshot of the Medical and Health Specialties Program

@ Maury High School

2019-2020 school year

- 100% of the MHSP Class of 2019 were accepted to a 4-year college or university.
- Thirty three of the forty students in the MHSP Class of 2019 planned to pursue a major in medically related track of studies or in the hard sciences.
- Six of these seniors graduated in the top 10 of their graduating class of 358 students; 50% of these seniors graduated in the top 10% of the graduating class; 70 % were in the top 20% and 100% were in the top 40% of the graduating class.
- The average GPA of the MHSP class of 2019 was 4.2. Twenty one seniors had GPA's over a 4.0
- Graduating seniors in the MHSP Class of 2019 received scholarship offers totaling more than \$8.64 million in scholarship and grants.
- Graduating MHSP seniors completed a total of 10,655 documented community service hours during their 4 years at Maury.
- Currently, there are 182 students in the Medical and Health Specialties Program in grades 9-12. The highest GPA is 5.08 and the average GPA of all students is 3.85.

The students in the Classes of 2017 , 2018 & 2019 were accepted into the following Colleges and Universities

American University	Emory University	University of Florida
Boston College	George Mason University	University of Georgia
Boston University	George Washington University	University of Mary Washington
Brown University	Georgetown University	University of Maryland-CP
Carleton University	James Madison University	University of North Carolina-CH
Christopher Newport University	Johns Hopkins University	University of Richmond
Clemson University	North Carolina State University	University of South Carolina
College of Charleston	Old Dominion University	University of Virginia
College of William and Mary	Radford University	University of Washington
Dartmouth College	United State Naval Academy	Virginia Tech
Duke University	University of Alabama	Virginia Commonwealth University
	University of California-SB	Wake Forest University
	University of California-SD	Washington and Lee University
	<i>MHSP 1986-2020..Thirty-four years of collaboration between NPS & EVMS</i>	

There are several key classes which make up the curriculum for the Medical and Health Specialties Program: BioMed; ChemMed; Anatomy and Physiology and Accelerated Health and Physical Education 9. Each of these classes will have medical applications enriching the basic curriculum. Specific course descriptions are listed below. Seniors will be required to select one of five possible classes as their core class for the senior year: BioEthics; Forensic Science or Sports Medicine.

ACCELERATED HEALTH & PE 9: FRESHMEN: All ninth grade MHSP students are required to take the specially designed Accelerated Health component integrated into PE 9. Essentially, this course is an introduction to anatomy and will provide students an overview of the human body. Special focus will include medical applications as they pertain to the human body systems, including the integumentary system, the cardiovascular system, the respiratory system, the skeletal system, the muscular system and the reproductive system. Specific diseases, conditions and treatments as they relate to each of these areas will be covered. Varied enrichment opportunities will enhance the career awareness of the students.

BIOLOGY w/MEDICAL APPLICATIONS: FRESHMEN: This course is the first in the sequence of required science classes. Included in the curriculum will be cell theory, bio-chemical processes, scientific investigations and the study of life functions including theories of evolution and natural selection. Specially designed mini-labs will focus on special sense and body systems. Speakers, field trips and peer mentoring will support the curriculum.

NOTE: Students who have not completed Biology in middle school will also take Honors Biology. **ALL MHSP freshmen students will take BioMed.**

CHEMISTRY w/ MEDICAL APPLICATIONS: SOPHOMORES: The study of chemistry will take on greater importance to the students in the MHSP as they explore in depth the intermingling between science and medicine. An introduction to the chemical basis of medications, chemical interactions within the body such as ion levels, issues of solubility in relationship to tooth decay as well as reaction rates as they related to body temperature and organic chemistry are but a few of the applications to be explored. Students will have specially arranged field trips to observe surgical procedures, clinical settings and specific lab techniques in practice.

SPORTS MEDICINE 1 & 2 : UPPER CLASSMEN This elective course is designed to introduce & familiarize the student to the field of sports medicine. Students will look at issues & skills associated with athletic training and sports medicine; focus on anatomy, recognition and treatment of various injuries and conditions related to the athlete. Labs will introduce the student to hands-on evaluation and treatment of injuries.

ANATOMY PHYSIOLOGY: JUNIORS: Building upon the introduction to anatomy in the accelerated health & PE class, this human anatomy and physiology class will provide a comprehensive, year-long examination encompassing topics covered in all prior MHSP science courses. Students will have an in-depth study of each body systems, including: anatomical structure, skeletal physiology as related to the muscular system; the sensory system, the endocrine, circulatory, lymphatic, immune, digestive, urogenital and respiratory systems as well as homeostasis, diagnostics, scientific terminology and development. Students will attend classes held in the labs of the Eastern Virginia Medical School and have unique learning experiences including working in the cadaver lab and clinical rotations.

AP CAPSTONE: RESEARCH METHODOLOGY: JUNIORS & SENIORS: 2 YEAR COURSE: Implemented in the 2018-2019 school year, this two year AP level course is designed to allow students to delve into research methodology and explore topics and issues in areas of specific interest. Students will focus, develop, implement and present during the senior year, a culminating ‘Capstone Project’.

BIOETHICS: SENIORS: Students will study ethical issues as they apply to fields such as health care, medical science and medical technologies. Students will be asked to justify and/or refute answers to difficult ethical questions related to topics such as, but not limited to, human cloning, medical research, organ recipients, euthanasia, etc. Students will be given an in-depth look at moral philosophy as it relates to medical, scientific, technological and legal fields.

FORENSIC SCIENCE: SENIORS: This course presents the scientific principles, laboratory and field methods forensic scientists use to solve problems. Students will take on the various roles of crime scene investigator, scientist and medical examiner in order to collect and evaluate evidence in a problem-solving environment. Topics include DNA technology and its uses, toxicology, anthropology, entomology, evidence law, criminalities and career opportunities.

EMERGENCY MEDICAL RESPONDER: SENIORS: Specifically geared for students who have an interest in pursuing studies in a health or medical related career, the Commonwealth of Virginia EMS Emergency Medical Responder (EMR) curriculum will be taught in this class. Lectures, group-work, projects, practical lab work and other activities will prepare students to sit for two exams; students who successfully complete the course and pass these exams will be awarded national and state level certification in EMR.

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