



Health Sciences Academy

CURRICULUM

GRADE 9

Academy Honors English 9
Geometry or Algebra II/Trigonometry
AP Human Geography*
Academy Biology
Health Occupations
Modern Foreign Language or Latin
Health and Physical Education

GRADE 10

Academy Honors English 10
Academy Algebra II/Trigonometry or Math Analysis
AP European History*
Academy Chemistry
Human Anatomy*
Modern Foreign Language or Latin
Health and Physical Education
Economics / Personal Finance

GRADE 11

Honors English 11 or AP English Language*
Math Analysis or AP Calculus AB* or BC*
U.S. History or AP U.S. History*
AP Biology*, AP Chemistry*, AP Physics*, or HSA Physics
Physiology and Pathophysiology I*
Medical Science Elective
AP Foreign Language* or Latin
Fine or Practical Arts (2 semesters)

GRADE 12

Dual Enrollment English or AP English Literature*
AP Calculus AB*, AP Calculus BC*, AP Statistics*, or Medical & Biological Applications in Adv.
Mathematics* (post calculus)
VA/U.S. Government or AP Government*
AP Biology*, AP Chemistry*, AP Physics*, or HSA Physics
Physiology and Pathophysiology II *
Medical Science Elective

Medical Science Elective Courses:

Medical Microbiology*
Hereditary Medicine*
Comparative Anatomy
Medicinal Chemistry
Forensic Medicine I and II
Scientific Research and Writing
Medical & Biological Applications in Advanced Mathematics*
Biomedical Technology
Anatomical Architecture
Medical Illustration
AP Psychology*
Dual Enrollment Emergency Medical Technician
Anatomy and Sports Injury

*denotes weighted credit

Health Sciences Academy students receive a solid foundation in the core subjects as they pursue an Advanced Studies Diploma. All Students in the Health Sciences Academy take Health Occupations, Human Anatomy, Physiology & Pathophysiology I, and Physiology & Pathophysiology II. In addition, all HSA students are required to take a core science course and a math course each year.

We offer several strands to meet the needs of our students:

Pre-Med and Pre-Vet Strand:

For students intending on pursuing a college program in pre-med, pre-vet, pre-dental, health sciences (public health), medical research, pre-pharmacy

Required: AP Biology

Required: Physics or AP Physics

Highly Recommend: AP Chemistry (especially for pre-pharmacy)

Highly Recommend: Scientific Research and Writing

Recommend: AP Psychology

Highly Recommend for pre-med, pre-dental: Medical Microbiology, Hereditary Medicine, Medicinal Chemistry (especially for Pharm)

Highly Recommend for Pre-Vet: Medical Microbiology, Comparative Anatomy

Optional Pre-Med & Pre-Vet Strand: Dual-Enrollment EMT (for clinical experience), Anatomy and Sports Injury (special interest in orthopedics, sports medicine)

Nursing Strand:

For students intending on pursuing a college program in Nursing

Required: AP Biology

Required: Physics or AP Physics

Required: Medical Microbiology, Medicinal Chemistry

Recommend: AP Chemistry

Recommend: Forensic Medicine I and II

Recommend: AP Psychology

Allied Health Strand:

*For students intending on pursuing a college program in the allied health fields:
Basic Health Sciences, PT, OT, Medical Technology, Nuclear Medicine, Speech Pathology,
Athletic Training, Exercise Science, etc.*

Required: AP Biology

Required: Physics or AP Physics

Required: Medical Microbiology, Medicinal Chemistry

Recommend: AP Chemistry

Highly Recommend: Forensic Medicine I and II (for Med Tech and Lab Oriented career paths)

Highly recommend: Anatomy and Sports Injury (for Athletic Training, Exercise Science, PT, and OT or special interest in orthopedics)