High School STEM Course Options



Draft of 2020-21 Course List

Key Points

- HCS high school programs have traditionally offered many courses that support students' interests in science, technology, engineering, and math.
- Each school's course list consists of currently offered and newly selected STEM (science, technology, engineering, and math) courses. These courses will be available for students to request for 2020-21.
- Each school's course list may change based on the following:
 - Students' course requests
 - Teacher allocations and certification
 - Availability of online and dual-enrollment courses

AAST

Advanced Animation Advanced Web Page Design & Development 2 Algebra 2 Algebra 2 Honors Anatomy and Physiology Honors **AP Biology AP Biology Seminar Honors** AP Calculus BC AP Calculus AB Seminar AP Calculus AB AP Capstone Research AP AP Capstone Seminar AP **AP Chemistry AP Chemistry Seminar Honors AP Environmental Science AP Microeconomics AP Principles of Computer Science AP Psychology Biology 1 Honors** Biology 1 Calculus Honors Chemistry 1 **Chemistry Honors** Clean Energy Systems SREB Cr 1 Honors **Computer Programming 1 Computer Programming 2** Core Engineering 1

Core Engineering 2 Core Engineering 3 Core Engineering 4 Cyber Security Fundamentals Digital Media Marketing **Digital Multimedia** Economics **Economics Honors Emergency Medical Services 1 Forensic Science Forensic Science Honors** Fund of Web Page Design & Development 1 Fundamentals of Aerospace Technology Honors Fundamentals of Computing **Geometry Honors** GIS Technology 1 Health Science 1 Health Science 2 Health Science 3 Honors Health Science Clinic Study Image Editing 1 Image Editing 2 Introduction to Engineering Marine Science Honors Media Arts 1 Media Technology 1 Media Technology 2 Media Technology 3 Media Technology 4

Medical Terminology Networking Fundamentals 1 Physical Science Honors Physics Honors Precalculus Precalculus Honors Probability and Statistics Probability and Statistics Honors Science Research 1 Honors The Nature of Science and Tech (SREB) Honors

NEW 2020-21 Courses:

Informatics Logistics Second Course Fundamentals of Aerospace SREB Honors Second Course Nature of Science and Tech SREB Honors Second Course Clean Energy Systems SREB Honors Advanced Cybersecurity Advanced Networking Computer Forensics Game Design and Development GIS 2 IT Fundamentals AP Physics AP Statistics Biology 2 FMS 1

AHS

Agribusiness and Marketing Agriculture Sci Tech Agricultural Mechanics & Technology Algebra 1 Algebra 1 Honors Algebra 1 Seminar Algebra 2 Algebra 2 Honors Anatomy and Physiology Honors Animal Science AP Calculus AB Seminar AP Calculus(AB) **AP BC Calculus AP Environmental Science** Biology 1 Honors Biology 1 Biology 2 Biology 2 Honors Calculus Honors Chemistry 1 **Chemistry Honors** Computer Repair & Service Technology 1 **Digital Media Marketing Digital Multimedia Digital Publication Design**

Economics **Economics Honors** Environmental Science **Equine Science** Family and Consumer Sciences 1 Foods and Nutrition 1 Foods and Nutrition 2 Forestry Foundations in Algebra Foundations of Animation Fundamentals of Web Page Design & Development 1 Geometry **Geometry Honors Google Applications** IB Biology High Level-1 IB Biology High Level-2 **IB Biology Seminar-Honors** IB Info Technology in Global Society Standard Level IB Mathematics Applications and Interpretations Standard Level Image Editing 1 Image Editing 2 Intermediate Algebra Introduction to Veterinary Science **Physical Science**

Physical Science Honors PLTW Computer Science Principles Honors Precalculus Honors Probability and Statistics Probability and Statistics Honors Technical Scholars Welding Program Wildlife Management

New Course 2020-21: PLTW Principles of Biomedical Science Honors

ATA

Algebra 2 Algebra 3 Anatomy and Physiology Anatomy and Physiology Honors Architecture and Construction Work-based Art Audio-Vid, Technology Comm, Work-based Automotive Technology 1 Automotive Technology 2 Automotive Technology 3 Automotive Technology 4 Biology 1 **Building Construction Cluster 1 Building Construction Cluster 2 Building Construction Cluster 3** Carpentry 1 Chemistry 1 **Chemistry Honors** Digital Art and Design 1 Digital Art and Design 2

Digital Art and Design 3 Digital Art and Design 4 **Digital Desktop Publishing Digital Media Marketing Digital Publication Design Economics Economics Honors** Engineer & Industry Technology Education Work-based **Environmental Science Forensic Science** Foundations in Algebra Fund of Web Page Design & Development 1 Fundamentals of Computing Geometry **Google Applications** Health Science 1 Health Science 2 Health Science 3 Health Science 3 Honors Health Science Clinic Study Intermediate Algebra

Medical Terminology Physical Science Physics PLTW Computer Science Principles Honors PLTW Digital Electronics PLTW Engineering Design and Dev Honors PLTW Environmental Sustainability Honors PLTW Intro to Engineering Design Honors PLTW Principles of Engineering Honors Precalculus Honors Probability and Statistics Transportation, Distribution & Logistics,Work-Based

<u>New Course 2020-21:</u> Drone Aviation Technology (Certification)

CFHS

Agriculture Science Technology Algebra 1 Algebra 1 Honors Algebra 1 Seminar Algebra 2 Algebra 2 Honors Algebra 3 Anatomy and Physiology Honors **AP Biology AP Biology Seminar Honors** AP Calculus (BC) AP Calculus AB Seminar AP Calculus(AB) AP Capstone Research (AP) AP Capstone Seminar (AP) **AP Chemistry AP Chemistry Seminar Honors AP** Computer Science **AP Environmental Science** AP Environmental Science Seminar Honors AP Microeconomics AP Physics I **AP Physics Seminar Honors** AP Psychology AP Statistics **Biology 1 Honors** Biology 1

Chemistry 1 **Chemistry Honors** Computer Programing with Java 1 **Computer Programming 1 Digital Photography Economics** Environmental Natural Resources Mgmt **Environmental Science** Foundations in Algebra Foundations in Algebra Seminar Foundations of Animation Fund of Web Page Design & Development 1 Fundamentals of Computing Game Design and Development Geometry **Geometry Honors** Image Editing 1 Intermediate Algebra Nursery Greenhouse & Garden Center Technology Personal Finance PLTW Civil Engineering and Architecture Honors PLTW Cybersecurity Honors PLTW Human Body Systems Honors PLTW Intro to Engineering Design Honors PLTW Medical Interventions Honors PLTW Principles of Biomedical Sciences Honors PLTW Principles of Engineering Honors Precalculus Honors

Probability and Statistics Sociology Technical Scholars Welding Program Turf and Lawn Management Wildlife Management

CHS

Advanced Web Page Design & Development 2 Agricultural, Food & Natural Resources Aariculture Sci Tech Agricultural Mechanics & Technology Algebra 1 Algebra 1 Honors Algebra 1 Seminar Algebra 2 Algebra 2 Honors Algebra 3 Anatomy and Physiology Honors AP Calculus (BC) AP Calculus(AB) **AP Chemistry AP Chemistry Seminar Honors** AP Environmental Science AP Environmental Science Seminar Honors AP Physics I **AP Statistics Biology 1 Honors** Biology 1 Chemistry 1 **Chemistry Honors** Civil Engineering and Architecture Digital Desktop Publishing

Digital Multimedia Digital Publication Design Economics **Economics Honors** Entrepreneurship **Environmental Science** Farm Animal Production Foundations in Algebra Foundations in Algebra Seminar Fund of Web Page Design & Development 1 Fundamentals of Computing Geometry **Geometry Honors Google Applications** Health Science 1 Health Science 2 Intermediate Algebra Introduction to Veterinary Science Image Editing 1 Image Editing 2 Marine Science Medical Billing and Coding Medical Terminology Pharmacology for Medical Careers **Physical Science Physical Science Honors Physics Honors** PLTW Civil Engineering and Arch Honors

PLTW Computer Science Essentials Honors PLTW Computer Science Principles Honors PLTW Human Body Systems Honors PLTW Intro to Engineering Design Honors PLTW Principles of Biomedical Sciences Honors PLTW Principles of Engineering Honors Precalculus Honors Probability and Statistics Probability and Statistics Probability and Statistics Honors Small Animal Care Sports Medicine 1 Sports Medicine 1 Sports Medicine Work Based Sports Turf Management Technical Scholars Welding Program Turf and Lawn Management

New Course 2020-21: PLTW Cybersecurity Honors

ECHS

ACC 101 Accounting Principles I ACC 102 Accounting Principles II ACR 102 Tools and Service Techniques ACR 106 Basic Electricity for HVAC ACR 108 Refrigeration Fundamentals ACR 110 Heating Fundamentals ACR 118 Air Conditioning Fundamentals ACR 140 Automatic Controls ACR 160 Service Customer Relations ACR 206 Advanced Electricity for HVAC ACR 250 Duct Fabrication AET 101 Building Systems AHS 102 Medical Terminology Algebra 1 Algebra 2 Algebra 3 Anatomy and Physiology ANT 101 Anthropology ARC 210 Heat Pumps **ARV 110 Computer Graphics** ARV 121 Design ARV 162 Graphic Reproduction I ARV 210 Computer Graphics 2 ARV 212 Digital Photography AST 101 Solar System Astronomy AST 102 Stellular Astronomy

Beginning Algebra Remed (Mat 101) BIO 101 Biology I BIO 102 Biology II **Bio 105 Principles of Biology** BIO 112 Basic Anatomy and Physiology **BIO 210 Anatomy and Physiology** BIO 211 Anatomy and Physiology II Biology 1 CET 127 Building Construction & Print Reading Chemistry 1 CHM 110 College Chemistry I CHM 111 College Chemistry II **CPT 114 Computer Programming** CPT 168 Programming Logic & Design CPT 187 Object-Orientation Logic & Design CPT 209 Computer Systems Management **CPT 278 Computer Software Applications CRJ 201 Fingerprint Science** CRJ 202 Criminalists ECO 210 Macroeconomics ECO 211 Microeconomics **Economics Economics Honors** EET 113 Electrical Circuits I EGR 170 Engineering Materials EGR 260 Engineering Statics EGR 270 Introduction to Engineering EGR 275 Intro to Engineering Computer Graphics

EGR 285 Engineering Survey 1 EGR 295 Engineer Survey Lab I EGT 101 Basic Technical Drawing Introduction to Civil Engineering IST 166 Network Fundamentals IST 190 Linux Essentials Machine Tool Computer Applications MAT 102 Intermediate Algebra MAT 110 College Algebra MAT 111 College Trigonometry MAT 120 Probability and Statistics MAT 122 Finite College Mathematics MAT 130 Elementary Calculus MAT 155 Contemporary Mathematics MAT 175 Algebra & Trigonometry I MGT 101 Principles of Management MKT 101 Introduction to Marketing Probability and Statistics Technical Scholars Welding Program

New Courses 2020-21: Additional STEM courses available through HGTC and online.

GSFHS

Algebra 1 Algebra 1 Honors Algebra 1 Seminar Algebra 2 Algebra 2 Honors AP Calculus AB Seminar AP Calculus(AB) **AP Statistics** AP Statistics Seminar Honors **Biology 1 Honors** Biology 1 Chemistry 1 **Chemistry Honors Digital Desktop Publishing Digital Photography Digital Publication Design** Economics Economics Honors Foundations in Algebra Foundations in Algebra Seminar Fundamentals of Web Page Design & Development 1 Fundamentals of Computing Fundamentals of Computing Part 1

Fundamentals of Computing Part II Geometry Geometry Honors Intermediate Algebra Introduction to Horticulture Landscape Technology Nursery Greenhouse & Garden Center Tech Physical Science Physical Science Honors PLTW Introduction to Engineering Design Honors Precalculus Honors Probability and Statistics Soil and Soilless Research Technical Scholars Welding Program Turf and Lawn Management

New Courses 2020-21:

PLTW Principles of Biomedical Science Honors PLTW Principles of Engineering Honors

LHS

Agribusiness and Marketing Agriculture Science Technology Algebra 1 Algebra 2 Algebra 2 Honors AP Calculus(AB) **AP Environmental Science** AP Environmental Science Seminar Honors **AP** Statistics **Biology 1 Honors** Biology 1 **Calculus Honors** Chemistry 1 **Chemistry Honors Computer Forensics Digital Media Marketing** Digital Photography **Digital Photography 2 Economics Economics Honors** Entrepreneurship

Environmental Science Forestry Foundations in Algebra Foundations in Algebra Seminar Fund of Web Page Design & Development 1 Fundamentals of Computing Game Design and Development Geometry **Geometry Honors** Health Science 1 Health Science 2 Health Science 3 Intermediate Algebra Medical Terminology **Physical Science Physical Science Honors** PLTW Principles of Biomedical Science Honors Precalculus Honors Probability and Statistics Sports Turf Management Technical Scholars Welding Program

Turf and Lawn Management Virtual Enterprise 1 Virtual Enterprise 2 Virtual Enterprise 3 Honors Virtual Enterprise 4 Honors Wildlife Management

New Course 2020-21:

PLTW Introduction to Engineering and Design Honors

MBHS

Accounting 1 Accounting 2 Algebra 1 Algebra 1 Honors Algebra 1 Seminar Algebra 2 Algebra 2 Honors Algebra 3 Anatomy and Physiology Honors AP Biology AP Calculus (BC) AP Calculus(AB) AP Capstone Seminar (AP) **AP Capstone Seminar Honors AP Macroeconomics AP Microeconomics** AP Physics I AP Psychology **Biology 1 Honors** Biology 1 **Biology 2 Honors** Calculus Honors Chemistry 1 **Chemistry Honors** Economics **Economics Honors**

Entrepreneurship **Environmental Science** Essentials of Technology **Forensic Science Forensic Science Honors** Foundations in Algebra Fundamentals of Web Page Design & Development 1 Fundamentals of Computing Geometrv **Geometry Honors** Health Science 1 Health Science 2 Health Science 3 Honors Health Science, Work-based Intermediate Algebra Marine Science Marine Science Honors Medical Terminology Personal Finance **Physical Science Physical Science Honors Physics Honors** PLTW Introduction to Engineering Design Honors Precalculus Honors **Probability and Statistics Probability and Statistics Honors** Psychology

Social Media in Business Sports Medicine 1 Sports Medicine 2 Sports Medicine 3 Sports Medicine Work-based Technical Scholars Welding Program

New Courses 2020-21:

AP Statistics PLTW Computer Science Principles Honors PLTW Principles of Engineering Honors

NMBHS

Algebra 1 Algebra 1 Honors Algebra 2 Algebra 2 Honors Anatomy and Physiology AP Calculus (AB) **AP Statistics Biology 1 Honors** Biology 1 **Biology 2 Honors** Calculus Honors Chemistry 1 Chemistry Honors **Digital Media Marketing** Digital Multimedia **Economics Economics Honors** Entrepreneurship **Environmental Science** Foods and Nutrition Fundamentals of Web Page Design & Development 1 Fundamentals of Computing Geometry Geometry Honors Google Applications Marine Science

Physical Science Physical Science Honors Physics Honors PLTW Intro to Engineering Design Honors Precalculus Precalculus Honors Probability and Statistics Probability and Statistics Honors Psychology Science Research 1 Sports & Entertainment and Marketing 1 Technical Scholars Welding Program

New Courses 2020-21:

AP Environmental Science PLTW Principles of Biomedical Science H PLTW Computer Science Principles H PLTW Principles of Engineering Honors Foundations in Algebra Intermediate Algebra Medical Terminology Health Science 1

Algebra 2 Honors Algebra 3 Honors AP Biology **AP Biology Seminar Honors** AP Calculus BC AP Calculus AB Seminar AP Calculus AB AP Capstone Research AP **AP Capstone Research Honors** AP Capstone Seminar AP **AP Capstone Seminar Honors** AP Chemistry **AP Chemistry Seminar Honors AP Environmental Science** AP Environmental Science Seminar Honors AP Statistics AP Statistics Seminar Honors BIOL 242 Anatomy and Physiology II **Biology 1 Honors** Chemistry Honors

CSCI 120 Introduction to Web Interface Development CSCI 130 Introduction to Computer Science CSCI 211 Computer Infrastructure Earth Science Honors ECON 110 Consumer Economics **Economics Honors** ENGR 101 Introduction to Engineering ENGR 201 Engineering Problem Solving INTEL 200 Intro to Intel & Nat Sec. MATH 220 Proofs and Problem Solving MATH 320 Elem Differential Equations MATH 344 Linear Algebra 1 MSCI 111 Introduction to Marine Science PHYS 211 Essentials of Physics I Precalculus Honors STAT 317 Nonparametric Statistics Methods

New Courses 2020-21:

Additional STEM courses available through CCU and online.

SHS

Agriculture Science Technology Algebra 1 Algebra 1 Honors Algebra 1 Seminar Algebra 2 Algebra 2 Honors Algebra 3 Anatomy and Physiology AP Biology AP Calculus (BC) AP Calculus AB Seminar AP Calculus(AB) **AP Chemistry** AP Physics I AP Psychology **AP Statistics Biology 1 Honors** Biology 1 Biology 2 **Building Construction Cluster 1 Building Construction Cluster 2 Building Construction Cluster 3 Building Construction Cluster 4** Calculus Honors Chemistry 1 **Chemistry Honors Computer Programming 1**

Economics Economics Honors Environmental Science Forensic Science Foundations in Algebra Foundations in Algebra Seminar Fund of Web Page Design & Development 1 Fundamentals of Computing Game Design and Development Geometrv Geometry Honors Golf Course Technology Health Science 1 IB Biology High Level-1 IB Mathematical Studies Standard Level **IB Physics Standard Level** IB Psychology Standard Level Intermediate Algebra Introduction to Horticulture Landscape Technology Marine Science Medical Terminology Personal Finance **Physical Science Physical Science Honors** Physics Physics Honors PLTW Principles of Biomedical Sciences Honors Precalculus

Precalculus Honors Probability and Statistics Probability and Statistics Honors Psychology Sports & Entertainment and Marketing 1 Sports and Entertainment Management Sports Medicine 1 Sports Medicine 2 Sports Turf Management Sociology Technical Scholars Welding Program Turf and Lawn Management

<u>New Course 2020-21:</u> PLTW Introduction to Engineering and Design Honors

SJHS

Accounting 1 Algebra 1 Algebra 1 Honors Algebra 1 Seminar Algebra 2 Algebra 2 Honors Algebra 3 Anatomy and Physiology Anatomy and Physiology Honors **AP Biology** AP Calculus(AB) **AP Environmental Science** AP Environmental Science Seminar Honors **AP Macroeconomics** AP Physics I AP Principles of Computer Science **AP Psychology AP Statistics** Architect Design 1 Architect Design 2 **Banking Services Biology 1 Honors** Biology 1 Biology 2 Honors **Business Finance Calculus Honors** Carpentry 1

Carpentry 2 Chemistry 1 **Chemistry Honors Computer Forensics Computer Programming 1 Computer Programming 2** Digital Desktop Publishing **Digital Publication Design** Economics **Economics Honors Emergency Medical Services 1 Emergency Medical Services 2 Emergency Medical Services 3** Essentials of Technology **Forensic Science** Forensic Science Honors Foundations in Algebra Foundations in Algebra Seminar Foundations of Animation Fund of Web Page Design & Development 1 Fundamentals of Computing Game Design and Development Geometry **Geometry Honors** Health Science 1 Health Science 2 Health Science 3 Health Science, Work-based Credit Image Editing 1

Intermediate Algebra Marine Science Marine Science Honors Mechanical Design 1 Mechanical Design 2 Medical Terminology Personal Finance **Physical Science Physics Honors PLTW Computer Science Essentials Honors** Precalculus Honors **Probability and Statistics Probability and Statistics Honors** Psychology **Psychology Honors** Sports & Entertainment and Marketing 1 Sports Medicine 1 Sports Medicine 2 Sports Medicine Work Based Technical Scholars Welding Program Virtual Enterprise 1 Virtual Enterprise 2 Virtual Enterprise 3 Honors

New Course 2020-21: PLTW Introduction to Engineering and Design Honors