

BHS

Course Exploration Night!

January 17, 2024



*"You can get **THERE** from **HERE**!"*



Graduation Requirements

Additional Requirements:

*Work-based learning experience; Complete an AP course, Honors, or Dual-Enrollment, OR Earn a CTE credential

*Must earn sequential electives.

Advanced Studies Diploma

26 Credits

| | |
|------------------------------|---|
| 4 English | 2 |
| 4 Mathematics | 1 |
| 4 Science | 1 |
| 4 History | 1 |
| 3 World Language | |
| 1 Fine Arts or CTE | |
| 2 Health & PE | |
| 1 Econ & Personal Finance | |
| 3 Electives | |
| • First Aid/CPR/AED training | |
| 26 Total Credits | 5 |

5 Verified Credits

Standard Diploma

22 Credits

| | |
|---------------------------------------|---|
| 4 English | 2 |
| 3 Mathematics | 1 |
| 3 Science | 1 |
| 3 History | 1 |
| 1 World Language, Fine Arts or CTE | |
| 1 Fine Arts or CTE | |
| 2 Health & PE | |
| 1 Econ & Personal Finance | |
| 4 Electives | |
| • First Aid/CPR/AED training | |
| 22 Total Credits | 5 |

5 Verified Credits

Academic Career Plan

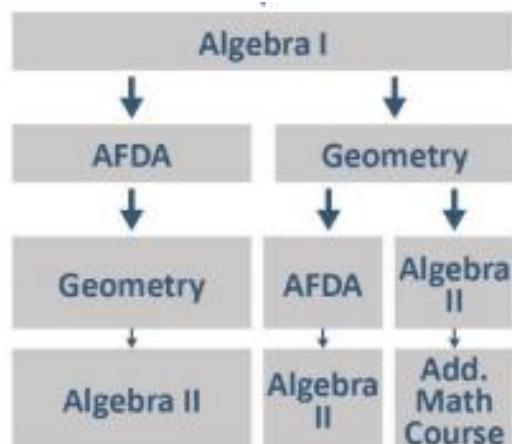




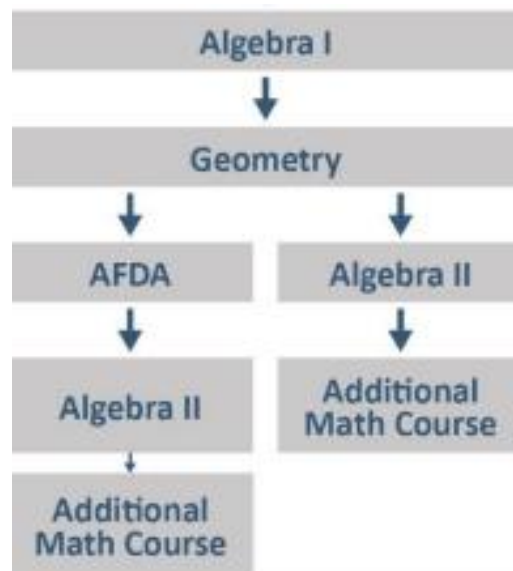
Math Options

3 credits for Standard Diploma
4 credits for Advanced Diploma

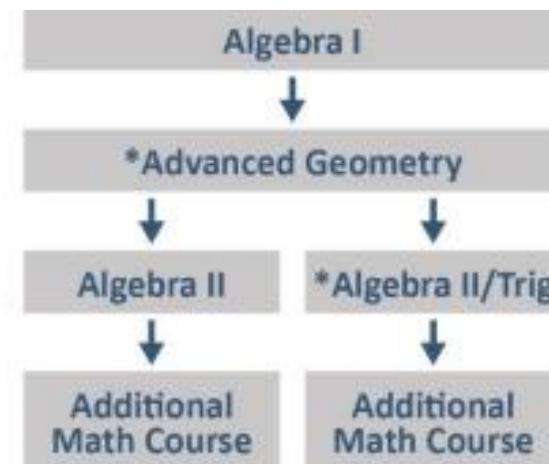
Path 1



Path 2



Path 3



Mathematics Additional Course Offerings (Grades 9-12)

- Computer Mathematics
- Algebra III
- Data Science
- Trigonometry
- Probability & Statistics
- Discrete Math
- Calculus
- *Math Analysis (Trigonometry prerequisite)
- *AP Calculus AB (Math Analysis prerequisite)
- *AP Calculus BC (Math Analysis prerequisite)
- *AP Statistics
- *AP Computer Science A
- Directed Study Mathematics
- Discrete Mathematics
- Governor's School for Science & Technology



English Options

4 credits for Standard and Advanced Diploma



English Electives

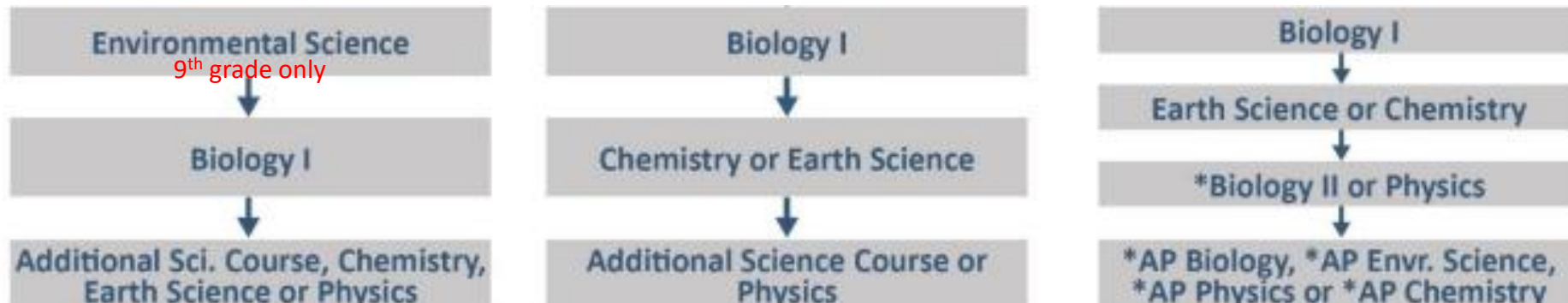
- Yearbook/Mass Media
- Newspaper/Mass Media
- Literary Magazine/Mass Media
- Public Speaking
- Film Studies (grades 11-12)
- Creative Writing (grades 10-12)
- Graphic Novel as Lit (grades 10-12)
- *Adv. Literary Arts Writing Practicum (SOA)



Science Options

3 credits (from 2 disciplines) for Standard Diploma

4 credits (from 3 disciplines) for Advanced Diploma



Science Additional Course Offerings (Grades 9-12)

- Directed Study Science
- Ecology
- *Biology II/Marine Science
- Atmospheric Science & Climatology
- *Biology II/Mammalian Anatomy & Physiology
- Governor's School for Science & Technology

Science Discipline Areas

Biology

- Environmental Science
- Biology
- Ecology
- *Biology II/Mammalian Anatomy & Physiology
- *Biology II/Marine Science
- *AP Biology
- *AP Environmental Science

Earth Science

- Environmental Science
- Earth Science
- Atmospheric Science & Climatology
- *AP Environmental Science

Chemistry

- Chemistry
- *AP Chemistry

Physics

- Physics
- *AP Physics I
- *AP Physics II

**Weighted Course*



Science

Thinking about a Career in STEM?

Careers in STEM
Found in all BHS
Science Canvas
courses

STEM Career Periodic Table

The U.S. Bureau of Labor and Statistics has posted this great tool in the form of a periodic table to help students investigate various STEM careers.

| | | | | | | | |
|--|--|--|---|---|--|---|--|
| Ch Chemists Bachelor's 4.7% \$79k | Cm Computer and information systems managers Bachelor's 10.4% \$151k | STEM GROUP Chemistry Computer Science Engineering Environmental Science Geosciences Life Sciences Mathematics Physics / Astronomy | | | | Cn Computer network architects Bachelor's 5.0% \$117k | Pp Physics teachers, postsecondary Doctoral or professional 4.4% \$90k |
| Cp Chemistry teachers, postsecondary Doctoral or professional 4.3% \$80k | Et Chemical technicians Associate's 2.8% \$50k | Ex Example occupation Typical education needed for entry Employment change, projected 2019-2029 Median annual wage, 2020 | | | | Is Information security analysts Bachelor's 31.2% \$104k | As Astronomers Doctoral or professional 2.4% \$120k |
| Ce Chemical engineers Bachelor's 4.4% \$109k | Me Mechanical engineers Bachelor's 3.9% \$90k | Ct Civil engineering technologists and technicians Associate's 2.5% \$54k | En Environmental scientists and specialists, including health Bachelor's 7.8% \$73k | Pt ES and protection technicians, including health Associate's 8.4% \$47k | Ep Environmental science teachers, postsecondary Doctoral or professional 3.7% \$85k | Ge Geoscientists, except hydrologists and geographers Bachelor's 4.9% \$94k | Ph Physicists Doctoral or professional 7.3% \$130k |
| So Soil and plant scientists Bachelor's 3.1% \$84k | Mi Microbiologists Bachelor's 3.1% \$84k | Ep Epidemiologists Master's 4.6% \$75k | Ac Actuaries Bachelor's 17.6% \$111k | Ma Mathematicians Master's 3.0% \$111k | Sa Statisticians Master's 34.6% \$92k | Gt Geological and hydrologic technicians Associate's 5.5% \$51k | Hy Hydrologists Bachelor's 5.3% \$84k |



Science

Thinking about a Career in STEM?

The 'Careers in STEM' Canvas module includes a course selection chart for STEM careers.

I am interested in STEM - what courses should I take?

x = should take these courses in High School

y = suggested to take one or more of these in High School

z = may be part of your high school science sequence

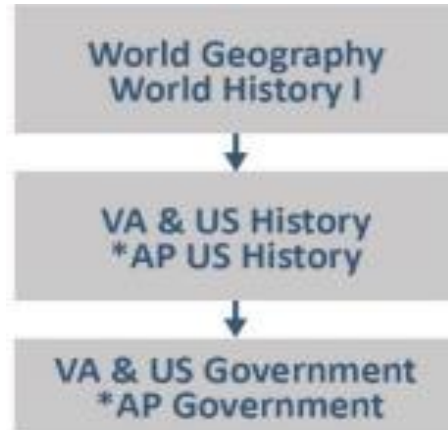
| | Aerospace Engineer | Analytics Manager | Applications Engineer | Astronomer | Big Data Analyst | Biochemist | Biologist | Biomedical Engineer | Chemical Engineer | Civil Engineer | Climatologist | Clinical Analyst | Clinical Informatics Analyst | Computer Hardware Engineer | Computer Network Architect | Computer Programmer | Computer Support Specialist | Computer Systems Administrator |
|---|--------------------|-------------------|-----------------------|------------|------------------|------------|-----------|---------------------|-------------------|----------------|---------------|------------------|------------------------------|----------------------------|----------------------------|---------------------|-----------------------------|--------------------------------|
| Earth Science | | | | z | | | | | | | z | | | | | | | |
| Biology I | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| Chemistry I | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| Physics I | z | x | x | z | x | x | x | x | z | z | x | x | x | z | x | x | x | x |
| Atmospheric Science and Climatology | | | | y | y | | | | | | y | | | | | | | |
| Ecology | | | | | | | | | | | | | | | | | | |
| Biology II Mammalian Anatomy and Physiology | | | | | | | z | | | | | | | | | | | |
| Biology II Marine Science | | | | | | | | | | | | | | | | | | |
| AP Environmental Science | | y | y | | y | | | | y | y | y | y | y | | y | y | y | y |
| AP Biology | | y | y | | y | y | z | y | y | y | y | y | y | | y | y | y | y |
| AP Chemistry | x | y | y | x | y | y | y | y | x | y | y | y | y | y | y | y | y | y |
| AP Physics I | x | y | y | x | y | y | y | y | x | x | y | y | y | y | y | y | y | y |
| AP Physics II (Virtual) | | | | | | | | | | | | | | | | | | |
| AP Statistics | y | y | y | y | x | x | y | x | y | y | y | y | y | y | y | y | y | y |
| AP Calculus | x | y | y | y | y | y | | y | x | y | | y | y | y | y | y | y | y |



History and Social Sciences

3 credits for Standard Diploma
4 credits for Advanced Diploma

Standard Diploma Track



Advanced Diploma Track



History & Social Science Electives

Sociology (grades 10-12)
Psychology
*AP Human Geography
*AP Psychology
*AP European History



Grade 9

PE 9 and
Health

Grade 10

PE 10 and
Driver
Education

Grades 11-12

Advanced PE

Grade 9 Equivalent

Naval Science I

Dance Arts I

Grade 10 Equivalent

Dance Arts II



World Languages

Requirements for Advanced Diploma

Spanish

Spanish 1

Spanish 2

Spanish 3

Spanish 4

French

French 1

French 2

French 3

French 4

Spanish & French

Spanish 1

French 1

Spanish 2

French 2

Level 4 Required only for Honors Program



Additional World Language Options

- 🐾 AP Spanish
- 🐾 AP French (Virtual Virginia)
- 🐾 Other Languages through Virtual Virginia or YCSD VHS:
 - German(I, II, III, IV, AP)
 - Latin (I, II, III, AP)
 - ASL (I, II, III)



Fine Arts



Art

Drama

Music

- Vocal
- Instrumental



Art

Grades 9-12

Ceramics

Crafts

Art 1

Grades 10-12

Photo 1

Computer Graphic Art

Art 2

3-D Design

Grades 11-12

Photo 2

AP Studio Art

AP Art History

Art 3

Art 4



Drama

Grades 9-12

Drama 1

Technical
Theatre

Grades 10-12

Drama 2

Grades 11-12

Drama 3

Grade 12

Drama 4



Vocal

Grades 9-12

Chorus 1

Music Appreciation

Small Vocal Ensemble 1

Grades 10-12

Chorus 2

Small Vocal Ensemble 2



BRUTON HIGH SCHOOL

Instrumental

Grades 9-12

Guitar (Beginning or Level 2)

Concert Band
(Brass and Woodwinds)

Symphonic Band
(Audition Required)

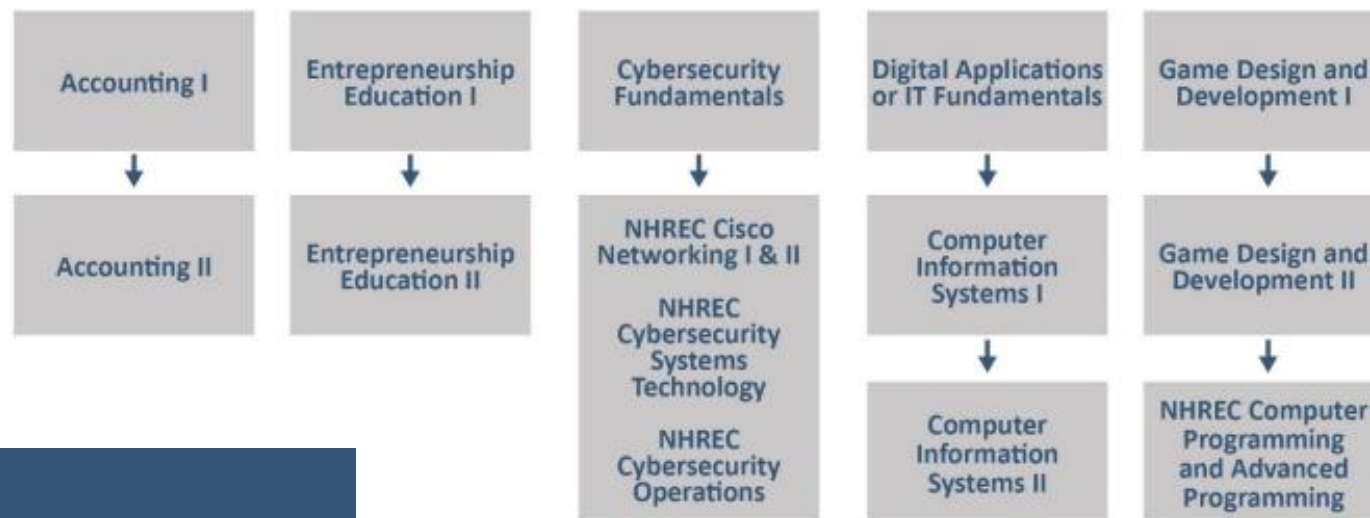
Stage Band (Jazz Band)
(Audition Required)

Percussion



Business and Information Technology

Business & IT Course Offerings & Suggested Sequences



Related Electives (Grades 9-12)

- Career Internship
- Career Mentorship
- Service Learning
- Student Technology Internship
- Credit for Work Experience
- Business Management

Requirements for Career/Technical Program

Completer in Business & Information Technology:

- *Any two occupational Business & Information Technology courses (or semester equivalents that equal two 36-week courses)*

NOTE: Career/Technical Education courses prepare students to take industry certification exams.

Marketing Course Offerings & Suggested Sequences



Related Electives (Grades 9-12)

- Career Mentorship
- Career Internship
- Service Learning
- Credit for Work Experience
- Student Technology Internship

Requirements for Career/Technical Program

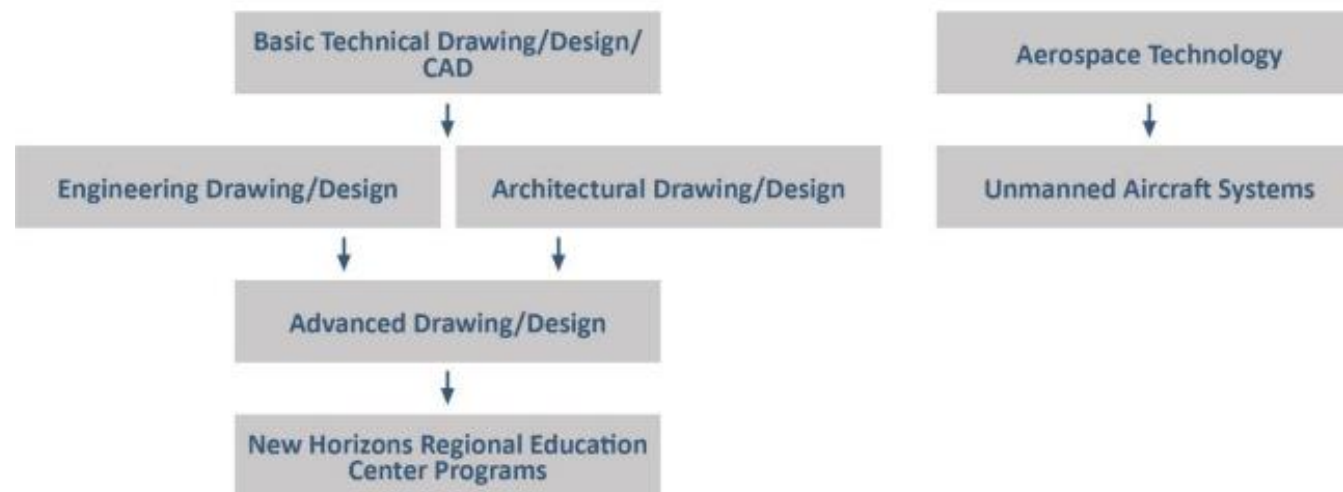
Completer in Marketing:

- *Two 36-week sequential Marketing courses*

NOTE: Career/Technical Education courses prepare students to take industry certification exams.



Technology Education



Related Electives (Grades 9-12)

- Career Internship
- Career Mentorship
- Service Learning
- Technology Foundations
- Credit for Work Experience
- Engineering Exploration

Requirements for Career/Technical Program

Completer in Technology Education:

- *Two 36-week Technology Education courses in a concentration sequence*

NOTE: Career/Technical Education courses prepare students to take industry certification exams.



Family and Consumer Science (YCSD Virtual High School)

Life Planning (grades 9-12)

Nutrition and Wellness (grades 9-12)

Virginia Teachers for Tomorrow I (grades 11-12)

Virginia Teachers for Tomorrow II (grade 12)



YCSD Specialty Programs

YCSD Honors Program

Governor's Health Sciences Academy

School of the Arts

Naval Sciences (YHS)

Early College

Dual Enrollment (VPCC and BHS)

Governor's School for Science and Technology

New Horizons Career and Technical Education

**International Baccalaureate Diploma*

**York River Academy*



Governor's Health Science Academy

Program Criteria

Take a mathematics and science course each year in high school

Maintain a minimum of a 2.5 GPA

Earn an industry certification or at least nine (9) transferrable college credits.

Take a minimum of three (3) sequential health science courses within a pathway

GHSA completers will earn the Governor's Health Sciences Academy seal on their diploma

Courses

Intro to Health and Medical Sci (Grades 9-12)

Medical Terminology (grades 10-12)

Sports Medicine I (grades 11-12)

Sports Medicine II (grade 12)

Leadership Development (grade 11-12)

New Horizons Courses

Dental Careers

Emergency Medical Technician (also offered at VPCC)

Medical Assistant

Nurse Aid

Pharmacy Technician

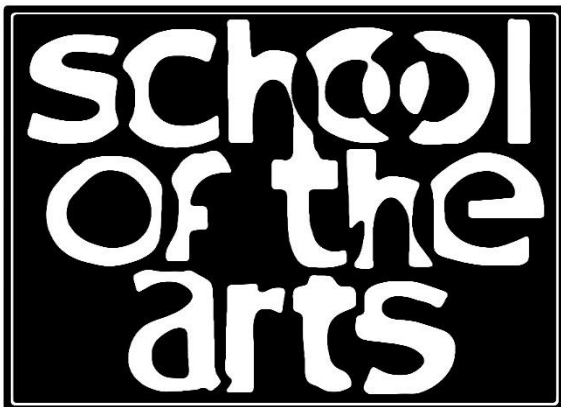
Physical/Occupational Therapy

Sports Medicine

Veterinary Science



**OPEN TO
ALL YCSD
HIGH SCHOOL
STUDENTS!
APPLICATION
REQUIRED**



Literary Arts Track

Grade 9



- Advanced Literary Arts 9
- Advanced Arts Link and Writer Workshop 9

Grade 10



- Advanced Literary Arts 10
- Advanced Arts Link and Writer Workshop 10

Grade 11



- AP English 11
- Advanced Arts Link and Writer Workshop 11

Grade 12



- AP English 12
- Advanced Arts Link and Writer Workshop 12
- Advanced Literary Arts Writing Practicum (Optional)

Dance Arts & Theatre Track

Grade 9



- Advanced Theatre Arts Level I
- Dance Arts Level I
- Advanced Technical Theatre Level I

Grade 10



- Advanced Technical Theatre Level II-IV
- Advanced Theatre Arts Level I or II
- Dance Arts Level II

Grade 11



- Advanced Technical Theatre Level II-IV
- Advanced Theatre Arts Level II, III, or IV
- Dance Arts Level III-IV

Grade 12



- Advanced Technical Theatre Level II-IV
- Advanced Theatre Arts Level I, II, III, or IV
- Dance Arts Level III-IV
- Advanced Practicum (Optional)

