



2020-2021 Catalog



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 VHSLearning.org

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SUMMER SCHOOL

We offer a variety of summer school courses for credit recovery and enrichment. Courses are offered in two four-week sections starting in June and July and one eight-week

session starting in June. All summer courses can be offered throughout the school year on customized schedules to meet your school's individual needs.

8 Week Courses

- | | |
|------------|-----------------------------|
| Algebra 1 | English 11 |
| Algebra 2 | English 12 |
| Biology | Geometry |
| Chemistry | Pre-Calculus |
| English 9 | World History: 1450-Present |
| English 10 | |

4 Week Courses

- | | |
|---|---|
| CAD Part 1 | Personal Finance |
| CAD Part 2 | Physical Education 1: Personal Fitness |
| ★ Creative Programming with Java Script | Physical Education 2: Personal Fitness |
| Criminology | Planning for College |
| Cryptography: The Math Behind Secret Messages | Pre-Algebra/Algebra Preparation |
| Cybersecurity | Pre-Calculus: Functions |
| Digital Photography | Solar Energy Design |
| Earth: Our Changing Planet | Study Skills+: Class Organization and Time Management |
| English Literacy Skills – Short Stories | Study Skills+: Organization of Information |
| English Literacy Skills – The Novel | U.S. History: 1754-1877 |
| Government | U.S. History: 1877-Present |
| Health | Your Brain: An Introduction to Neuroscience |
| Mission to the International Space Station | |

★ New Course

Available courses subject to change. For a complete list of course descriptions visit VHSLearning.org/catalog.



WHY VHS LEARNING

Qualified Teachers

- Each teacher participates in *Online Teaching Methodologies (OTM)*, a graduate-level online course that focuses on teaching strategies for building community, facilitating meaningful discussions, and providing insightful feedback in an online classroom. Teachers work collaboratively with one another and our dynamic curriculum and instruction coordinators.

86% of VHS Learning teachers have **7 or more years of teaching experience**

81% of VHS Learning teachers hold a **master's degree or higher** in their field of expertise

Interactive Learning

- VHS Learning classes include interactive lessons, group projects, hands-on labs, class discussions, and areas for students to connect directly with their teacher. Interaction between students, and student and teacher are critical to promoting deeper learning.

High-Touch Support

- Every VHS Learning student has a private, personal discussion thread to ask questions, and their teacher responds within 24 hours Monday-Friday. Each phone call to our office connects you to a person. Requests for technology support can be submitted at any time and receive a response within 24 hours Monday-Friday.

Small Class Sizes

21:1 VHS Learning averages a **21:1 student to teacher ratio** to encourage personal attention and substantive feedback. Teachers are responsive and timely and facilitate thoughtful discussions within their online classroom.

Flexible Paced Curriculum

- VHS Learning combines the benefits of a traditional teacher-led, small classroom, with the flexibility found in online learning. VHS Learning semester classes follow a weekly paced model that enables students to submit work on the days and times that work best for them, while still staying on task and pacing through their course with their teacher and peers in a meaningful group.

Nonprofit

- We do not operate as a school district, state-funded agency, or for-profit business. As a nonprofit we help all types of schools expand their course offerings, add scheduling flexibility, meet graduation requirements and innovate their programs with online learning.

MIDDLE SCHOOL

Introduce your middle school students to online learning through a unique selection of exciting elective courses from VHS Learning. Students as young as 10 years old can take classes with peers from around the world. In addition to the courses listed as

Middle School (MS), which are only for middle school students, several our high school courses can also be taken by gifted and talented middle schoolers. Refer to our online catalog for a complete list of gifted and talented course options.

- MS Business Foundations
- MS Creative Writing
- MS Engineering
- MS Number Theory
- MS Pre-Algebra

- MS The Teenage Brain
- MS World War II Through the Eyes of Dr. Seuss
- Science from Space

COURSE HIGHLIGHT

Science from Space

Students embark on a mission to the ISS where they investigate key concepts in Earth science, life science, physical science, and engineering.

Throughout their mission, students engage in curriculum developed and supported by astronauts, scientists, and educators.



ABOUT

VHS Learning (VHS, Inc.) is a nonprofit leader providing world-class online programs to students and schools everywhere. VHS Learning was the first in the nation to provide supplemental online classes for high school students and connect them to teachers and students around the world. VHS Learning partners with all types of schools to expand their catalogs and offer classes for which there may be limited demand since the school does not need to fill the classes. Students choose from more than 200 unique courses including 23 AP® options, core courses, engaging electives, credit recovery, and other formal and informal learning opportunities.

VHS Learning is accredited by both Middle States Association Commission on Elementary and Secondary Schools (MSA-CESS), and Cognia (formerly AdvancED). Courses are approved for initial eligibility by NCAA.

VHS Learning has more than 20 years of experience supporting schools, teachers, and students. We tailor solutions to meet your education needs for middle and high school students.

HOW IT WORKS

- Each class is led by a teacher and consists of a small group of students from across the United States and around the world, giving students the unique opportunity to work with a diverse group of their peers.
- Classes average 21 students to maximize student-to-student and teacher-to-student interaction.
- Classes are paced and have weekly due dates for assignments, group work and discussion posts.
- Students can access their course anywhere they have internet access and are not required to log in at a certain time each day.
- Classes include many different types of activities including group projects, interactive lessons, and group discussions and give every student a chance to participate and be heard in class.
- Participating schools grant credit to students who successfully complete VHS Learning classes.

MISSION STATEMENT

Our mission is to provide students and teachers with collaborative and engaging learning opportunities.

VISION STATEMENT

Our vision is to prepare students to be successful in college, careers, and life.

FLEXIBLE CREDIT RECOVERY

VHS Learning offers a unique program that provides students at risk of not earning course credit the opportunity to earn the credit they need to matriculate to the next grade level or graduate with their class. Motivated, independent learners have the option to enroll in one of our flexible courses to help them stay on track.

Enrollment in the Flexible Credit Recovery program is on a rolling basis, and students progress through the coursework at their own pace. As with all VHS Learning courses, these classes are taught by highly qualified teachers.

1 Credit Courses

Algebra 1 Flex
Algebra 2 Flex
Biology Flex
☀ Chemistry Flex
English 9 Flex
English 10 Flex

English 11 Flex
English 12 Flex
Geometry Flex
☀ Pre-Calculus Flex
World History: 1450- Present Flex

.5 Credit Courses

Health Flex
Personal Finance Flex
☀ Physical Education: Personal Fitness Flex
Study Skills+ Flex *.25 Credit Course

U.S. Government Flex
U.S. History: 1754-1877 Flex
U.S. History: 1877-Present Flex

☀ New Course



RESULTS

All students deserve equal access to quality education. For more than twenty years our program has given

students and schools more choices, and we have a strong track record of success.

Advanced Placement® Results

With 23 AP® course offerings preparing students for 26 AP® exams, VHS Learning offers one of the largest online catalogs of Advanced Placement® options.

For over 10 years, our student scores on AP® exams have surpassed national averages.

AP® Computer Science Principles
VHS Learning Students

91% 

National Average

73% 

AP® English Literature and Composition
VHS Learning Students

93% 

National Average

50% 

AP® Physics C
VHS Learning Students

88% 

National Average

71% 

Pass Rate

 **91%**

In 2018-2019, **91% of all VHS Learning students** who completed their course **earned a grade of 60 or higher**. The **three-year pass rate is also 91%**.

Retention Rate

 **93%**

93% of last year's participating schools continued to participate this year.

Administrator Satisfaction

 **88%**

Don't take our word for it. In our latest survey, **88% of superintendents and principals said they were satisfied or very satisfied** with their school's VHS Learning experience.



World Language

- American Sign Language 1
- American Sign Language 2
- ★ ○ American Sign Language 3
- AP® French Language & Culture
- ★ ○ AP® Latin
- AP® Spanish Language & Culture
- French Language & Culture
- German Language & Culture
- Italian Language & Culture
- Latin 1
- Latin 2
- Latin 3
- Mandarin Chinese Language & Culture
- Portuguese 1
- Russian Language & Culture
- Spanish 1
- Spanish 2
- Spanish 3
- Spanish 4
- Spanish Culture & 20th Century
- Hispanic Literature

COURSE HIGHLIGHT

○ American Sign Language 1

Sign languages are some of the most expressive and unique of all the World Languages. In this introductory course, you will embark on an exciting journey that will provide you with not only a basic

level of proficiency in the most widely used sign language, American Sign Language (ASL); this course will also open a profound window of understanding into the world of Deaf culture and history.

★ New Course ○ Full Year





Social Studies

- AP® Economics
- AP® European History
- AP® Human Geography
- AP® Psychology
- AP® U.S. Government & Politics
- AP® U.S. History
- AP® World History
 - Constitutional Law
 - Criminology
 - Economics
 - Modern Middle East
 - Peacebuilding
 - Philosophy I
 - Practical Law
- Psychology Honors
- Psychology I
- Psychology of Crime
- Sociology
- Sports and Society
- The Glory of Ancient Rome
- The Holocaust
- U.S. Government
- U.S. History: 1754-1877
- U.S. History: 1877-Present
- World History 1450-Present
- World History: Pre-History-1500
- World Religions

PARTNER WITH VHS LEARNING

Are you ready to join the hundreds of schools worldwide who are expanding opportunities for their students? This information will help you compare participation options and choose the right path for your school.

Individual Enrollments

Enroll students a la carte with no commitment. Schools are charged the full-price of \$450 per student per semester course.

Student-Only Partnership

Receive a discount when you commit 5 or more students to the program. Maximize your students' success by training a staff member as your on-site coordinator. Training is FREE to new and existing partners.

Teaching Partnership

Save dramatically on student tuition (up to 50 enrollments) in exchange for teaching a VHS Learning course online. New teachers must pass *Online Teaching Methodologies* (OTM), our graduate-level training course, to teach within our online classroom. VHS Learning teachers and schools gain access to our subject matter experts, mentors, and a community of experienced teachers. *Online Teaching Methodologies* and on-site coordinator training are FREE in the Teaching Partnership.

Customized Partnership

Courses in the VHS Learning catalog can be tailored to meet your school's specific schedule and needs. We work closely with your staff and provide the educational resources needed to make online and blended learning a reality in your community. A Customized Partnership with VHS Learning can help your school address scheduling issues, teacher shortages and do more with less.

COURSE HIGHLIGHT

Criminology

How could a person commit unspeakable criminal acts? How could someone who seemingly has everything throw it all away doing something illegal? In this popular

course, students will delve into the minds of serial killers, thieves, drug dealers, and even corporate criminals to explore the reasons why people commit crimes.



Life Skills/Health

Digital Citizenship
 Employability Skills
 Health
 Kindergarten Apprentice Teacher
 Now What Will You Do?

Parenting in the 21st Century
 Physical Education: Personal Fitness
 Preparing for College
 Who Do I Want to Be When I
 Grow Up?

COURSE HIGHLIGHT

Digital Citizenship

Empower students to think critically, behave safely and participate responsibly in our digital world. Lessons address the nine elements of digital citizenship, so students foster a positive attitude toward technology that supports collaboration, learning and productivity. Most

students spend a significant amount of time online every day. Understanding ethical and safety-related concerns of the Internet, making good choices online, and being responsible digital citizens are crucial skills and behaviors that need to be practiced by today's students.

Benefits of Participation

	INDIVIDUAL ENROLLMENT	STUDENT-ONLY PARTNERSHIP	TEACHER PARTNERSHIP
ENROLLMENT			
Price per student per semester course <small>*Volume discounts available</small>	\$450	\$425*	\$160*
Enrollments [^]		5-29	5-50
Billing	Pay as you go	Invoiced July 1st	Invoiced July 1st
Refund Policy	Full refund prior to start date 75% refund during drop period No refund after drop period	Before end of drop period an enrollment can be moved to another student in the fall or spring	Before end of drop period an enrollment can be moved to another student in the fall or spring
PROGRAM MANAGEMENT			
Student orientation	✓	✓	✓
Extensive curriculum options	✓	✓	✓
Weekly grade reports	✓	✓	✓
Dedicated account manager	✓	✓	✓
Assistance with enrollment and student support	✓	✓	✓
View student progress in real time	✓	✓	✓
Direct access to student information system	✓	✓	✓
Direct access to learning management system	✓	✓	✓
TRAINING & SUPPORT			
24-Hour technical support, Monday-Friday	✓	✓	✓
Site Coordinator (SC) training for on-site support	✓	✓	✓
Access to SC resources and community	✓	✓	✓
Weekly announcements, tips, and resources	✓	✓	✓
Online Teaching Methodologies <small>Also available for professional development</small>	\$900	\$900	✓
New teacher mentorship			✓
Direct access to curriculum coordinators			✓

✓ Included

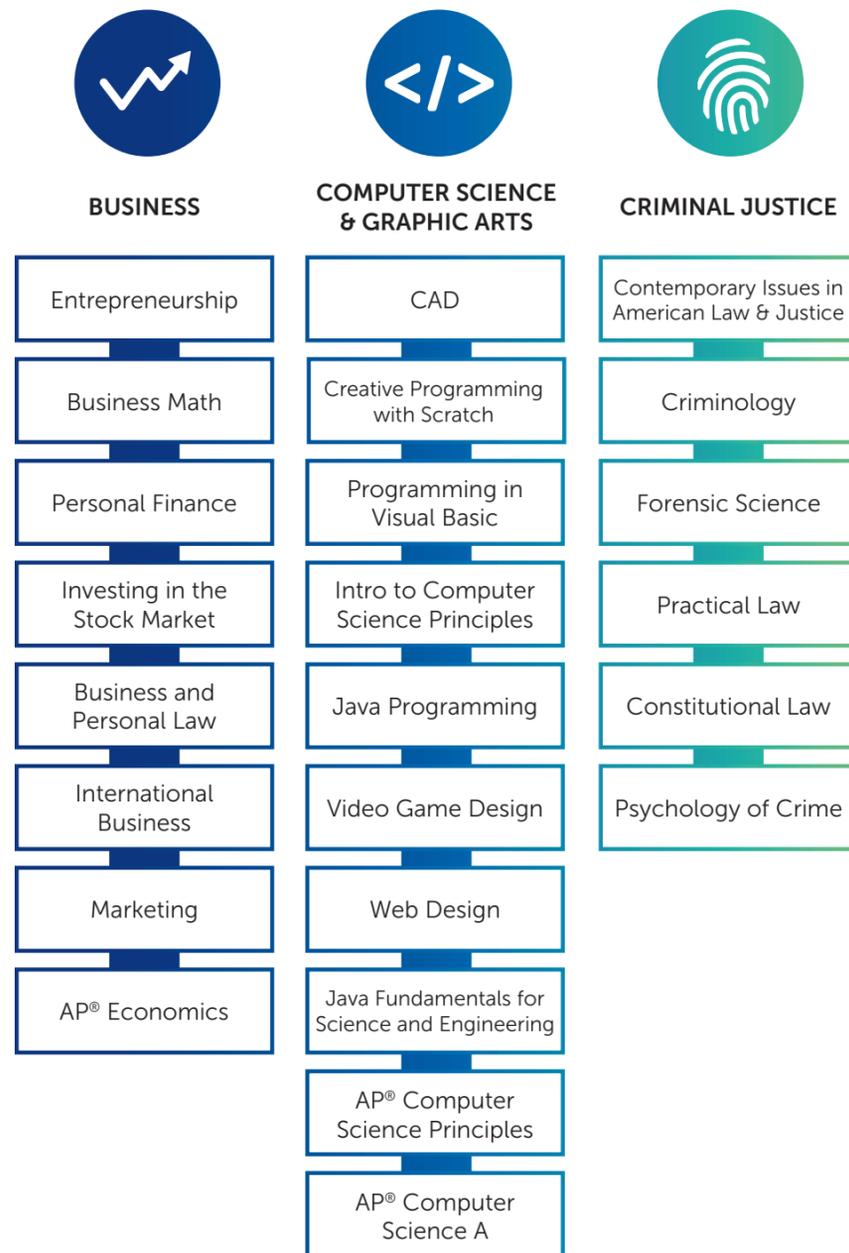
✓ Available if committed to 3+ enrollments by August.

[^]Semester course = 1 enrollment. Full-year course = 2 enrollments. Additional fees apply to AP[®] courses and select lab kits.

EXPLORING COLLEGE AND CAREER PATHWAYS

Explore and Identify

Career exploration is a focus of discussion in many VHS Learning classes, helping students discover and identify career paths that align with their interests. Our classes provide both breadth and depth of study. Students explore many subjects of interest before committing to a post-secondary degree program or job experience. Students can also get a head start on a future career by taking a string of specialized courses within a discipline, as displayed here. VHS Learning classes prepare students for life after high school through rigorous, engaging subject matter, unique topics, and an emphasis on real-world application.



Language Arts

- 101 Ways to Write a Short Story
- AP® English Language and Composition
- AP® English Literature and Composition
- Creative Writing
- English 9
- English 10
- English 11
- English 12
- Essay Writing
- Fantasy and Science Fiction Short Stories
- Film and Literature
- Folklore and Literature of Myth, Magic, and Ritual

- Ghosts and Haunting in Literature
- Horror Writers
- Journalism
- Literature of the World
- Mythology
- Poetry Writing
- Screenwriting Fundamentals
- Shakespeare in Film
- To Kill a Mockingbird
- Twentieth Century Women Authors
- Young Adult Literature

COURSE HIGHLIGHT

Shakespeare in Film

Students will read four of Shakespeare's plays - Romeo and Juliet, Much Ado About Nothing, Henry V, and Hamlet – and then view film scenes from these plays performed by popular

actors. How do the actors' portrayals change or deepen our understanding of Shakespeare's intentions? Students will become both theater and film critics in this engaging course.

○ Full Year

Judaic Studies

A Look at Contemporary Israel through the Eyes of Tanakh
 Ancient Jewish History
 Digital Citizenship and Jewish Values
 Experiencing Jewish Texts and Identity through the Arts
 History Makers of Israel
 In Search of a Better Future: The Jewish Immigrant Experience in the U.S.
 Introduction to Jewish History: 1700-Modern Israel
 Introduction to Jewish History: Second Temple-1700
 Introduction to Jewish Life
 Introduction to Jewish Texts

Making Prayer My Own: Finding Meaning in the Siddur
 Mishna
 Modern Jewish Short Stories
 Mussar: Practical Ethics for Living a Meaningful Life
 Pairs in the Tanakh
 Preparing for Life on Campus: The Complexities of Jewish Identity and Israel
 Religious Zionism
 Responsibility and Restitution: Perek HaChovel (Advanced Talmud)
 The Stories of Bereshit

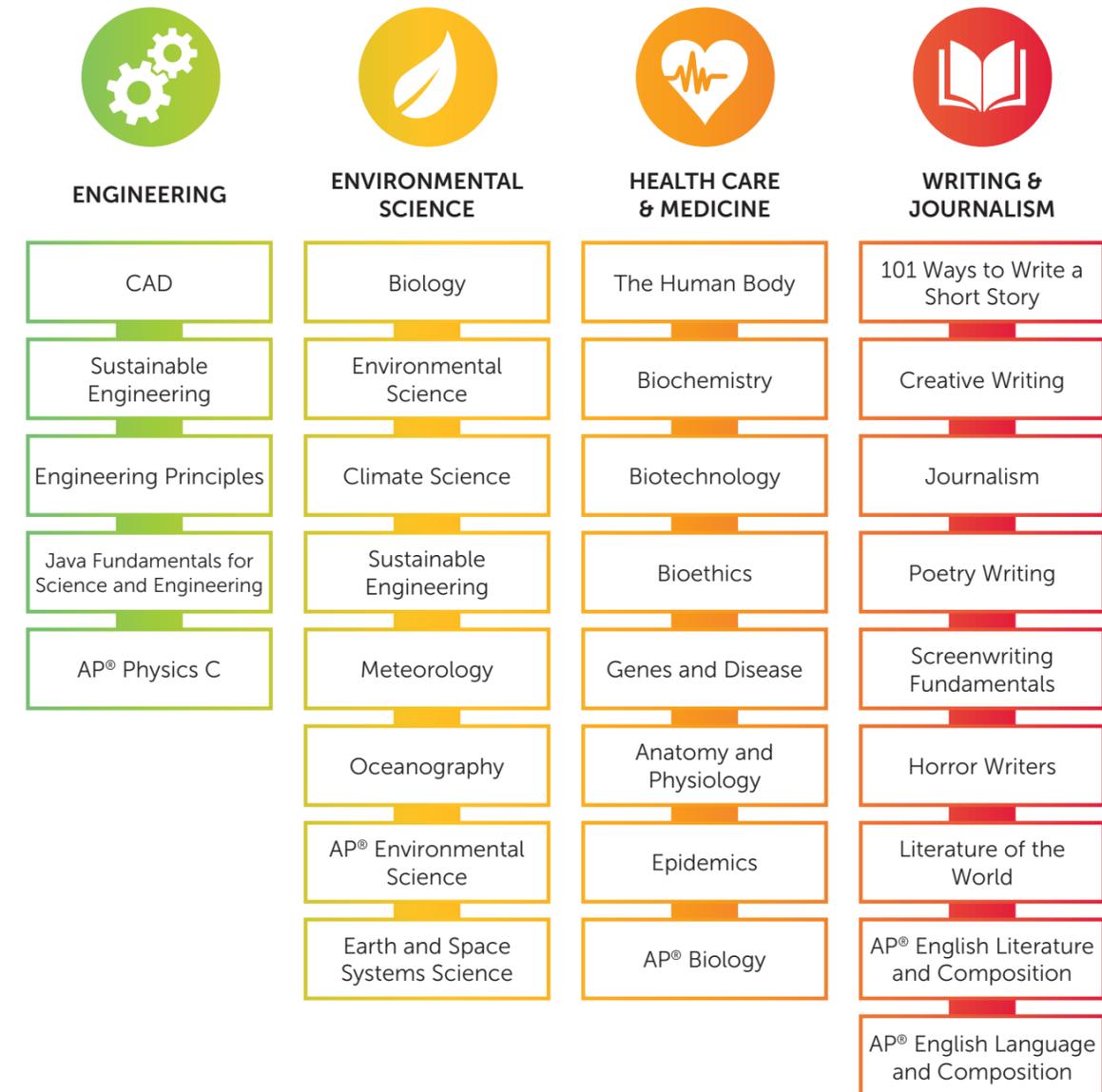
COURSE HIGHLIGHT

Preparing for Life on Campus: The Complexities of Jewish Identity and Israel

In this 9-week class, students will work together to learn about Israel-related challenges they may encounter on their future college campus and develop their own thoughts and strategies for how to deal with them.

Essential Questions:

- What are some of the ways Jewish students on college campuses might find themselves challenged around issues of Israel and Middle East politics?
- What are some of the differing viewpoints on some of the current issues around Israel and Middle East politics?
- What are some strategies and approaches Jewish students on college campuses might use to uphold their values and integrity--and stay safe--in such situations?
- How does one's identity, personal experiences and values affect one's views and actions in relation to these issues?



SCHOOL SUCCESS STORY: HOLLY HIGH SCHOOL

Custom online courses help to define student success at small Michigan high school

Exceptions can often become the rule, as demonstrated at Holly High School in Holly, Michigan, home to 1,200 students. In 2007, when an exceptional student decided she wanted to take an Advanced Placement® (AP®) course the high school didn't offer, it put into motion a program that soon had other students clamoring for access to more than just the five classroom AP® subjects offered by the school. Little did teachers or administrators know that it would spawn an educational revolution at Holly High that now has them earning high marks, including a silver medal award by U.S. News & World Report for "Best High School" and one of only 367 school districts nationwide to be recognized in the College Board's prestigious AP® Honor Roll.

Holly Area Schools spans hundreds of rural miles, making hour-long commutes to school down dirt roads, through farm land and postage stamp communities a common occurrence. With one-third of its population considered economically disadvantaged, a healthy number of sole proprietors and residents chasing jobs outside of the area, the district needed to compete with neighboring districts for students. One way that Holly has been able to survive and thrive is by offering students the courses they need and want online, as ushered in by one enthusiastic student, an entrepreneurial teacher and a school philosophy that caters to student interests.

During the fall, 2008 semester, Charlie Gragg, an AP® teacher at Holly High and the school's resident AP® guru, found himself researching online learning providers who could provide an AP® European History course for one of his high achieving students. Soon thereafter, his other AP® students started coming forward and he began working with a number of these providers to offer more AP® courses to his students.

During the Recession of 2008-2012, Holly Area Schools, like many across the nation, explored ways to stretch the educational dollar in the face of budget reductions. They began to see supplemental online

courses as a significant way to attract new students, to retain existing students and to provide a professional development path for interested teachers. Holly held on financially throughout the recession, while growing both the AP® face-to-face and the AP® online learning program. During this time, Holly students completed AP® exams in 23 different subjects (out of a possible 30 courses), despite offering only seven of these in a conventional, face-to-face classroom setting, and the number of AP® tests administered to students grew from 70 to nearly 300. By the end of the 2010/2011 school year, 36% of their graduating seniors had taken at least one AP® exam, far eclipsing the 25% Michigan state-wide average.

It wasn't until 2011 when Gragg happened upon VHS Learning, the nonprofit pioneer of K12 online learning, that he knew he had struck gold. "One of my students was interested in taking AP® Music Theory, which led me to VHS Learning because they were one of the only online learning providers that offered it." Soon thereafter, Gragg enrolled his students in VHS Learning AP® courses and was so impressed by the quality that he signed up for a VHS Learning partnership for the 2011/2012 school year so a broader range of AP® and elective courses could be offered to their students. "My students were fairly unanimous in identifying the independent learning style and the students-from-around-the-world class sections as the two key benefits of VHS Learning."

"The overall implementation was seamless because it was very much in line with what we were already doing. The primary area we had to really work on was scheduling because we run on a trimester schedule and VHS Learning runs on a traditional semester schedule. By communicating appropriately and making students aware of what was expected of them, we were able to easily overcome that challenge."

The online learning program at Holly took another interesting turn when Gragg found out that, using VHS Learning curriculum, Holly teachers could offer customized online classes or blended learning opportunities just for their students. Holly teachers,



Business

Business and Personal Law
Business Math
Entrepreneurship
International Business

Investing in the Stock Market
Marketing
Personal Finance

COURSE HIGHLIGHT

Personal Finance

One of the keys to a successful future is being able to manage money. In Personal Finance students learn the basics - the value of a dollar, how to develop a budget and how to live within

that budget. More complex concepts such as setting financial goals, comparing bank, loan and credit options, and how to use and not abuse credit are also explored.

English Language Learners (ELL)

Courses are suitable for ELL students and delivered as custom offerings for a group of students from

your school, according to your school's scheduling needs.

🕒 American Studies
🕒 English Foundations

🌟 English Foundations 2
🕒 Introduction to Natural Science

🌟 New Course

🕒 Full Year



HUMANITIES & MORE

VHS Learning courses in the arts, world languages, English, social studies, and more allow students to work collaboratively, express themselves creatively, and think critically, as they gain new insights into

topics of personal interest. From poetry writing to politics, students select courses that will broaden their understanding of the world and the human experience.

Arts

- American Popular Music
- 🕒 AP® Art History
- 🕒 AP® Music Theory
- Art History

- Creating Art History
- History of Photography
- Music: Fundamentals of Composition
- Music: Listening & Critique

COURSE HIGHLIGHT

Music: Listening & Critique

This course takes students into the world of music as a listener and a writer. Students explore how to listen to music, how to write about what they are hearing, and how to analyze and appreciate different styles of music. Students are given the opportunity to listen to a wide variety

of music from four stylistic areas: World Music, Jazz, Classical, and Popular Music. They will listen to many examples each week, to compare the different styles they hear. Critique takes place in formal essays, and in class discussions with the support of peers.

passionate about certain subject areas, are now able to offer VHS Learning to students on their own time.

In December 2011, Holly first piloted a customized offering of the VHS Learning Young Adult Literature course, with three English teachers and 11 students. They first edited the course to bring it up to a grade 11/12 level, and each teacher was assigned a group of 3 or 4 students. "All the teachers told me the experience resulted in the unexpected benefit of making them better classroom teachers and students identified improved communication skills as their biggest gain. In fact, one of these pilot students, on a return visit from her first semester in college, told me the online class taught her the critical communication skills she uses in her face-to-face college classes," said Gragg.

Since then, the school has developed an individualized learning path and individualized teaching path approach to online education. Students are tested for subject-area and online comprehension and skills, and then encouraged to pursue online opportunities in selected subject areas. Similarly, teachers immerse themselves in VHS Learning professional development classes to learn about online teaching, and then participate in a collaborative team to modify the customized offering curriculum. Students participating in these customized offerings are scheduled in the online media center, where groups of 10-12 are paired with the Holly online teacher. "This helps us focus curriculum on particular student needs, match teacher subject matter expertise with online teaching skills, lower overall class sizes, and maintain budget discipline. Everybody gains in this scenario-student, teacher, parent, and taxpayer."

Holly is entering its 10th year as a VHS Learning partner. The school enrolled over 618 student seats in the 2018/2019 school year. During the current school year, Holly students are taking over 50 different VHS Learning

classes. In addition, about 20% of the staff will be instructing online this year.

Due in large part to their expanded college prep and elective face-to-face and online courses over the last few years, the focus of conversations with students have shifted more predominantly to college and career readiness. Said Gragg, "I really believe that Holly High's success is due in large part to our longstanding philosophy of designing our master teacher schedule around student interests and needs. VHS Learning catapulted our students in directions neither we nor they imagined possible. One of our first and most prolific

"VHS Learning catapulted our students in directions neither we nor they imagined possible. One of our students believes her VHS Learning experience was pivotal in earning a full academic scholarship to a top Michigan university."

VHS Learning students, for example, believes her VHS Learning experience was pivotal in earning a full academic scholarship to a top Michigan university. Another student, the daughter of a state police officer, aspired to serve in military intelligence. She enrolled in Criminology and was recently accepted into the ROTC program."

Gragg feels VHS Learning has also enabled the school to use their resources better by dynamically mixing online and face-to-face classes into the master schedule, following the ebb and flow of student interests. "For example, as our

AP® offerings have ballooned, interest in one of those original five AP® classes from 2007, AP® English Literature, has declined. We've been able to put the handful of interested AP® English Literature kids into the online equivalent, while we focus our classroom resources in other areas of higher student demand, such as the new AP® Biology and AP® Government classes we are kicking off this year. Conversely, the burgeoning interest in the VHS Learning Psychology of Crime elective is leading us to consider a customized offering of that course."

"I tell schools, look at your own environment first – students, teachers, and administrators – and see what will work for you. Each school has different needs and philosophies so it's about finding something that will work for your specific school culture."

🕒 Full Year



Science

- Anatomy and Physiology
- Animal Behavior and Zoology
- 🕒 AP® Biology
- 🕒 AP® Chemistry
- 🕒 AP® Environmental Science
- 🕒 AP® Physics 1
- 🕒 AP® Physics C
- Astronomy Principles
- Biochemistry
- Bioethics
- 🕒 Biology
- Biotechnology
- 🕒 Chemistry
- Climate Science
- 🕒 Earth and Space Systems Science
- Environmental Science
- Environmental Science Honors
- Epidemics
- Evolution and the Nature of Science
- Forensic Science
- Genes and Disease
- Meteorology
- Nuclear Science
- Oceanography
- 🌟🕒 Physics
- Pre-Veterinary Medicine
- Science from Space
- The Human Body

COURSE HIGHLIGHT

🕒 Earth and Space Systems Science

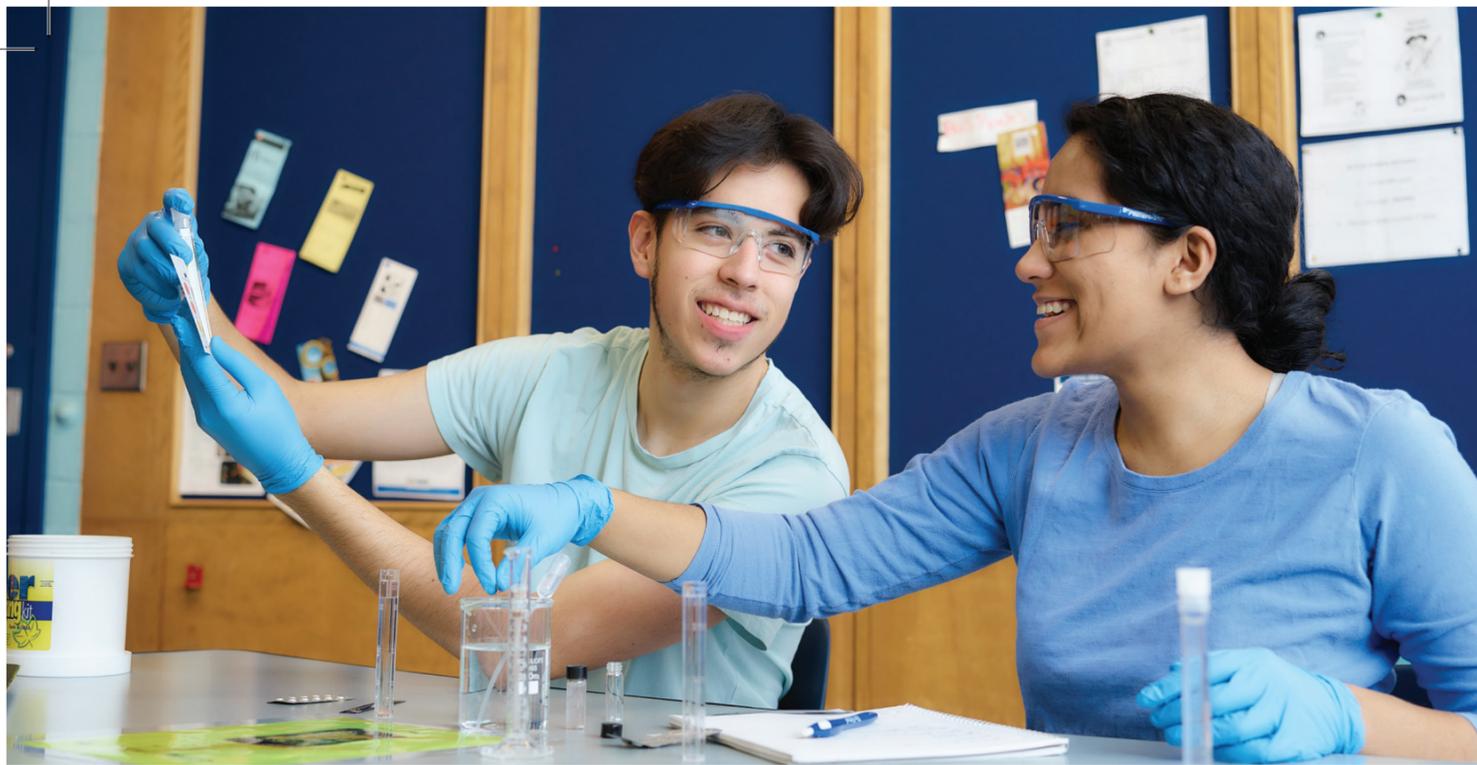
The days of engaging students in science by having them read hundreds of static textbook pages have passed. Ushering Earth science education into the 21st century requires that we make use of the rich and varied resources available to bring the exciting and ever-changing dynamic

events occurring on our planet into focus for students. Using the technology tools used by scientists, learning from practicing Earth scientists through multimedia resources, and engaging in citizen-science projects, all offer students fresh perspective as a participant in the science process.

🌟 New Course

🕒 Full Year

Advanced Placement and AP are registered trademarks of the College Board. Available courses subject to change. For a complete list of course descriptions visit VHSLearning.org/catalog.



ADVANCED PLACEMENT®

VHS Learning offers 23 College Board-approved, teacher-led AP® courses - one of the largest Advanced Placement® (AP®) catalogs of any online education provider. Students can take AP® classes to pursue their interests, improve their chances of earning

scholarships, and strengthen their college admissions applications. AP® classes can help high school students earn college credit while still in high school, resulting in savings in tuition and associated class fees.

- AP® Art History
- AP® Biology
- AP® Calculus AB
- AP® Calculus BC
- AP® Chemistry
- AP® Computer Science A
- AP® Computer Science Principles
- AP® Economics (Micro & Macro)
- AP® English Language and Composition
- AP® English Literature and Composition
- AP® Environmental Science
- AP® European History
- AP® French Language & Culture
- AP® Human Geography
- ★ ○ AP® Latin
- AP® Music Theory
- AP® Physics 1
- AP® Physics C
- AP® Psychology
- AP® Spanish Language and Culture
- AP® Statistics
- AP® U.S. Government & Politics
- AP® U.S. History
- AP® World History

Mathematics

- Algebra 1
- Algebra 2
- AP® Calculus AB
- AP® Calculus BC
- AP® Statistics
- Business Math
- Differential Calculus
- Essential Math for College and Careers
- Geometry
- Math and Modern Logic
- Number Theory
- Pre-Calculus
- Pre-Calculus:
 - Advanced Trigonometry
- Pre-Calculus:
 - Functions
- Statistics
- Statistics Honors

COURSE HIGHLIGHT

Math and Modern Logic

This course helps students develop sound reasoning abilities through the study and application of the tools of logical analysis. They learn the tools of logical argument analysis, how to mathematically model and evaluate syllogistic forms of arguments, and how to represent arguments in symbolic form. The course will interest students who enjoy mathematics with a philosophical twist and are planning on pursuing careers in mathematics, the sciences, or engineering.

COURSE HIGHLIGHT

○ AP® Computer Science Principles

This exciting course, suitable for all students, guides students into the world of networked devices, documents, data points, and – most importantly – people. Students explore the big ideas of computer science through vibrant discussions, activities and collaborative projects that incorporate videos, tutorials and readings. Using the latest edition of the “New Perspectives on Computer Concepts” text by Parsons, students explore concepts and

demonstrate skills in:

- Collaborative problem solving
- Algorithmic reasoning and sketching
- Creative design of unique programming artifacts and solutions
- Data representation through modeling and simulations
- Two AP® “Performance Tasks,” submitted digitally to the College Board

○ Full Year

★ New Course

○ Full Year



Computer Science & Technology

- AP® Computer Science A
- AP® Computer Science Principles
- CAD
- Creative Programming with Scratch
- Cybersecurity
- Introduction to Computer Science Principles
- Java Fundamentals for Science and Engineering
- Java Programming
- Programming in Visual Basic
- Video Game Design
- Web Design

COURSE HIGHLIGHT

Introduction to Computer Science Principles

This course provides students with a survey exploration of the world of computer science and its technologies. Students will investigate the structure and function of computational systems and explore the domains and applications of the computer science field, from programming to

digital media, the internet, networking, big data and cybersecurity. Throughout the course, students will be presented with a variety of challenges to address, and uncover different approaches and use of technology to solve problems.

STEM Science Technology Engineering Math

VHS Learning STEM courses enable students to explore real world issues as they work to identify problems, think critically to address questions, and are challenged to propose solutions. Students work in small groups and engage in substantive learning

experiences that provide deeper exploration of content with an emphasis on supporting claims with evidence, as outlined in the Common Core and Next Generation Science Standards*.

Innovative Partnerships

By collaborating with STEM industry leaders, we provide access to cutting edge research and technology. In association with TERC, a research-based nonprofit focused on math and science, we have developed a state-of-the-art Earth and Space Systems Science high school course. In partnership with the International Space Station U.S. National Laboratory (ISS National Lab) we created a course that teaches STEM concepts through the International Space Station. In collaboration with the Center for Translational Science Education at Tufts University School of Medicine we offer the Neurological Disorders portion of their Great Diseases curriculum to middle and high school students worldwide.

Carefully Designed Lab Programs

Students analyze histology using NIH Image J imaging software in Anatomy and Physiology, calculate the rate of seafloor spreading using Google Earth in Earth and Space Systems Science, investigate Newton's Laws using Vernier Go! Motion probes in AP® Physics 1 and investigate AP® Chemistry concepts by completing a comprehensive set of experiments that use safe chemicals in small quantities. Courses incorporate a combination of hands-on and technology-based lab experiences that support the development of key science practices.

Engineering

- CAD
- Engineering Principles
- Java Fundamentals for Science and Engineering
- Sustainable Engineering

COURSE HIGHLIGHT

Sustainable Engineering

Global energy use is projected to increase greatly over the next few years, and will continue to have major impacts on the environment and the economy around the world. How can science and engineering be harnessed to better manage energy use in our society? Students will look at this problem using

a variety of skills and concepts from the worlds of engineering, math and science. This course explores concepts of sustainability, thermodynamics, design, statistics, public opinion, and much more on a journey to better understand the nature of the problem, and how to go about solving it.

○ Full Year