

ECHS Program of Studies

2026-27 School Year

Environmental Charter High School

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ECHS Program of Studies

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WHO WE ARE

Our Mission

The mission of ECS is to educate each student to high academic standards using innovative curricula that will foster knowledge, love of, and respect for the environment and preserve it for future generations. We grow citizens.

Our Vision

Every ECS graduate will be an actively engaged citizen driving thoughtful change in the world around them.

Our Guiding Principles

Catalyst: As a charter school, we are innovators in public education. We are a passionate and progressive group of educators who work to develop individuals into global thinkers with diverse perspectives

Character: We are dedicated to making the world a better place, socially and environmentally, for future generations. We engage students in character development through educational experiences that evaluate the impact of individual choices and that are born from collective discussion and the investigation of diverse perspectives.

Collaboration: We value collaboration with our community and recognize the power of systems thinking. We believe that respectful, transparent, and reflective dialogue among our constituents (students, families, faculty, neighbors, and regional partners) is necessary for elevating educational experiences for all learners.

Commitment: We are a dedicated community of passionate leaders who are committed to redefining ecological literacy. Our educational model endorses an interdisciplinary view of complex environmental systems.

Background Information

ECS operates a small high school facility that serves students and supports 25–35 full and part-time faculty. We aim to grow the complete individual through the development of connections, relationships, and experiences that unite us in a common humanity.

Environmental Charter High School (ECHS) transforms the notion of high school in the City of Pittsburgh to support the development of the whole person and to facilitate the

ability to use systems thinking to successfully approach navigating relationships, career endeavors, or personal journeys in the 21st century. The experience:

- Promotes active and independent learning
- Builds competencies and technological skills to search for, organize, and analyze information, and communicate and express ideas
- Creates collaborative, project or problem-based learning experiences that involve complex, extended, real world like problems
- Prioritizes individualized, and customized instruction
- Openly addresses key issues of equity—including gender, ethnic, geographic and/or socioeconomic
- Challenges the notion of “school happening in school” by ‘breaking down the walls’ of the classroom (e.g. time, space and participants in the teaching and learning process)
- Build greater understanding and connection to the world by working through problems in environments outside the classroom such as nature and the community.
- Develops the whole person through coaching, authentic relationships, and routines and habits that support longevity, health, and wellness
- Improves social cohesiveness and understanding for both the student and the larger community

How is ECHS Different from a Traditional High School?

ECHS aligns content within a greater context. This translates to a different type of course descriptor or syllabus to describe how each piece fits together. It is through these adopted practices that we are redefining what “content” is covered, what “skills” are addressed, and how “culture and being” are infused. We are working to challenge the notion that a subject area drives the learning, and subsequently, we are designing and refining a high school experience that evolves from a different framework.

ECHS emphasizes ecological literacy, thinking, and the elevation of culture in the learning process. As such, this program aims to fundamentally re-envision the traditional high school experience and uniquely address the needs of 21st century students. Our program is nestled in the following key areas:

Community is School.

The school cannot exist without community. Building on the power of “place-based education,” the ECHS program fosters rich and vibrant experiences and context learning opportunities in the community. Challenging the notion of “community” and “community engagement,” students in ECHS start curricular work in place-based problem solving with organizations, businesses, and individuals working alongside students. As students build



engagement with the local community during their high school career, they will scale to more global challenges. This area of innovation requires new types of collaborations, curricular evolution with educators and partners, and learning paths that engage all members of the community for student discovery. The ECHS approach to a “flipped community” requires learning to be seen as a “shared community asset, with many people creating, preserving, and protecting critical resources.” Students and educators build visual literacy, collaboration, networking, and flexibility to navigate the learning ecosystem of the community.

Not Just Graduates, Active, Engaged People.

ECHS is taking a stand about the graduates that emerge from its program. Students learn how to engage in community dialogue and decision-making by making the avenues to voice and activism transparent. As noted in the background, ECHS creates learning opportunities that unite us toward a common humanity.

Change Agent Persona.

Being able to negotiate the world of the future and managing complexity takes resilience, reflection, and understanding of one’s self—as a learner, as an agent of transformation, and as a global citizen. ECHS builds in mechanisms, structures, and opportunities for students to discover their authentic self, and then design conditions with students to build on their assets, while understanding personal areas for growth. Challenging the notion of compartmentalizing learning and being, ECHS facilitates experiences for students to discover the relationship between self and the world, and how this “marriage” is one that can foster resilience, understanding, and hope when faced with complexity.

Health and Well-Being.

Health and well-being are a cornerstone of the ECHS experience, and for all members of the community. Building on the focus of socio-emotional wellness as a foundation for active learning, ECHS places considerable focus on physical health and wellness. Partnering with experts in wellness and fitness advisors, ECHS community members aim to design different ways of achieving routines and schedules to promote health and well-being.

Innovation Conditioning.

As conditions for innovation continue to increase, ECHS’s ability to add additional hallmarks of innovative practices and endeavors will expand. ECHS is an organization that actively creates conditions, structures, and capacity for faculty and students to evolve our practices and programming. Conditioning includes spaces that encourage



collaboration/innovation, asset surveys to support best work, opportunities to experiment and fail, and continual attention to making “being” work visible to our community.

Educating for Sustainability.

As we work to prepare our students to be active, engaged, and empathetic citizens of the global community, our program at ECHS focuses on “educating for sustainability” in terms of both content and pedagogy. Our students focus on the United Nations’ 17 Sustainable Development Goals and the ways in which they manifest themselves in the natural world and in our social and economic fabric, and our pedagogy pushes students to think critically, creatively, and collaboratively so that they can become effective problem solvers whose decisions will help make life on Earth more sustainable for everyone.

Student Welcome

Dear Prospective and Current ECHS Students and Families,

Welcome to another school year! As we embark on another academic year filled with possibilities and opportunities, it brings me great pleasure to present to you our comprehensive Program of Studies for the upcoming school year.

At ECHS, we believe the classroom is one of many learning environments and are committed to out-the-door education whether it's learning in a local park, on a field trip, or working with a partner organization. ECHS is dedicated to not only preparing students for their post graduation lives, but also to empowering individuals to become thoughtful leaders, advocates for change, and global stewards. These beliefs are woven into the fabric of ECHS's school community and its Program of Studies.

Within these pages, you'll find a wide range of courses that reflect ECHS's dedication to academic excellence, innovation, inclusivity, and sustainability. From rigorous Dual Enrollment with Chatham University and Advanced Placement classes to hands-on electives and interest based sustainable pathway options, this program is designed to meet you where you are and help you chart a path forward.

We encourage you to take advantage of the opportunity to personalize your learning experience, challenge yourself, and pursue your interests with curiosity and determination. The ECHS team is here to guide and support you every step of the way, and they are deeply invested in your growth, not only as students but as leaders, creators, and engaged citizens. As you make your course selections, don't hesitate to reach out to teachers, counselors, or administrators for guidance and advice.

High school is your time to dream big, take action, and lay the foundation for a more sustainable future. Together, we can build a community that leads with empathy, character, honor, and scholarship (ECHS). Thank you for choosing ECHS for your high school career and being an essential part of our community. I look forward to fostering a year of growth, discovery, and meaningful impact.

Sincerely,

*Dr. Rodney Necciai
High School Principal*

INTRODUCTION TO THE ACADEMIC PROGRAM

The Program of Studies

This “Program of Studies” is a reference manual for students, parents/guardians, and ECHS school personnel. It is a comprehensive guide to possible course offerings at ECHS—with detailed explanations of various classes along with important requirements, policies, logistics, and dates that are key elements for students and families to consider in the course selection and registration process.

Planning a Program of Study

Planning an appropriate program of study involves a collaborative effort between home and school. A student’s selection of courses should be based on careful consideration of programmatic requirements along with the student’s personal interests, career aspirations, and skills and abilities. The following represent important considerations in this decision-making process:

- Fulfilling ECS graduation requirements
- Meeting or exceeding any prerequisites for a particular course
- Seeking courses that are personally enriching and intellectually stimulating
- Taking courses that are relevant to post-graduate plans
- Listening to advice from school professionals (teachers, counselors, paraprofessionals, etc.) who know the student well and can provide valuable insight
- Making good decisions about the overall course load by keeping in mind a wide array of factors (homework/independent work demands, involvement in sports and/or other extracurricular activities, personal and family commitments after school, and a balance between a rigorous schedule and personal well-being).

Students should make their initial choices carefully as once we have completed the final verification process, it is difficult for students to change their selections. Students should make their choice carefully. Any changes are subject to approval by administration and student services.

Course Levels

While all freshmen courses are heterogeneous in nature, students in grades 10–12 have the opportunity to take more advanced and challenging courses in the four core content areas (English, Math, Social Studies, and Science). As noted above in the section titled “Planning a Program of Study,” students should give careful consideration to this option—striving to appropriately challenge themselves (particularly in areas of academic strength and personal interest) while balancing their academic load with other commitments. Teachers and other school staff members may make recommendations about which course level is most appropriate for a student, but in the spirit of our ECS commitment to equity, there are no restrictions on who can enroll in these courses as students and their parents/guardians will make these decisions.

Four different types of advanced courses are offered:

- ***The Embedded Honors model*** – All core academic sophomore classes (including Humanities II, Environmental Science, Geometry, and Algebra II) offer this option, though students will not need to make this choice until after the school year has begun. Though this option is primarily available to 10th graders, a freshman who is enrolled in Geometry or Algebra II may opt into the Embedded Honors model. These courses are heterogeneous in nature, but students may elect for an honors option to complete more challenging work. Teachers of these courses will communicate clearly with students about these additional expectations, and students who decide to enter this program in late August will have a one-month trial period in order to make a final decision about staying with this model or reverting back to a normal enrollment. Students are welcome to select this honors option in one or more classes.
- ***The Separate Honors model*** – Some junior level classes have a separate honors section for students who have the requisite passion, interest, and skills for a more challenging and in-depth course of study. While these courses will not offer specific college credit, they will build important foundational and high-level skills, particularly with reading and writing, and when students apply to college, ECHS’s school profile will outline this challenging option that these students have chosen. Students interested in honors courses will engage in a course scheduling process with their teachers and a school counselor.
- ***Advanced Placement courses*** – A limited number of AP (Advanced Placement) courses are offered for juniors and seniors. Students who take an AP course will take the AP exam in May, and a successful score on this assessment will give

students the opportunity to earn college credit. ECS is committed to providing financial assistance for students enrolled in AP classes to pay for the national exam, and students with an IEP or 504 are eligible for their same documented accommodations on the AP exam. Students interested in AP courses will engage in a course scheduling process with their teachers and a school counselor.

- **Dual Enrollment Model**

Chatham University and ECHS have created a high school and college dual enrollment program that allows ECHS 11th and 12th-grade students to earn up to 12 college credits FREE at Chatham.

- ECHS students may enroll in up to four Chatham University college-level courses taught on Chatham’s Shadyside Campus. Students who pass four 3-credit courses will earn 12 college credits—the equivalent of an entire term of undergraduate study—that they can transfer to the college of their choice.
- Courses include general education courses that are mostly transferable to any college or university, including English, math, and social sciences.
- Classes will include both ECHS students and Chatham undergraduate students.
- ECHS 11th and 12th-grade students with a cumulative 3.0 GPA are eligible for the program.
- ECHS students may take one 3-credit course per term (fall and spring) during their junior and senior high school years.
- ECHS Chatham Scholars who maintain a cumulative 3.0 in both ECHS and Chatham courses are eligible to be reviewed for guaranteed admission at Chatham University.

Foundational Courses <i>These foundational courses, content, and professors are selected specifically for the ECS Dual Enrollment experience. These prerequisite courses are required prior to enrollment in additional Elective Courses.</i>			Elective Courses <i>ECS & Chatham recommends a selection of courses that fulfill Gen Ed Requirements and have easily transferable credits. Course selection varies and is based on student interest, cohort size, and availability.</i>
English	Math	Science	Intro to Psychology Intro to Anthropology Business Media Literacy Art Energy and the Environment
Eng 105: First Year Writing	Mth 104: Statistics for Everyday Life	Sus 102: Sustainability and Society	

Minimum Scheduling Requirements

All freshmen, sophomores, and juniors must register for a full schedule—including CREW, Global Citizenship, and 6 other courses (or the equivalent with two or more semester classes).

Seniors must register for a full schedule—including Crew, and 7 other courses (or the equivalent with two or more semester classes). One or more of the courses may be designated as internships or other opportunities such as work release for seniors who have met the graduation credit requirements.

Changing Selected Courses and Drop/Add Information

ECHS develops the master schedule and corollary student schedules after a comprehensive, complex, deliberative process on the part of students, parents/guardians, teachers, counselors, and administrators. Thus, we strongly discourage students from making changes after the master schedule is complete.

After the predetermined date, classes will only change for the following reasons:

- A student was scheduled for an incorrect class.
- A course level change is in order as a result of work/study in the summer.
- Elective changes are only possible if the new elective(s) is/are offered during the same class period.

Any other changes must adhere to the following guidelines:

- 1) No student is permitted to drop a course after the **8th school day of the semester** without the express written permission of the teacher, school counselors, and the principal (or his/her designee).
- 2) A student who withdraws from a course at any time up to and including the **8th school day of the semester** will be removed from the class roster. No record of this withdrawal will appear on the student's permanent record.
- 3) A student who is allowed to withdraw from a year or semester course after the deadline will be removed from the class roster. However, a record of "Withdraw Pass" (WP) or "Withdraw Fail" (WF) will be maintained throughout the remainder of the year and recorded on the student's permanent transcript.
- 4) Changing courses after the academic year has begun is often very disruptive to a student's schedule, and thus, elective course changes are not permitted if they interfere with academic courses already scheduled. No new electives may be added after **the first two weeks of the semester**.

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- 5) All schedule changes require a drop/add form that is provided by the school counselor or an administrator
 - 6) ECHS will announce a similar timeline for dropping/adding courses at the beginning of the second academic semester.

Graduation Requirements

To graduate and receive a diploma in the state of Pennsylvania, a student must obtain 21 specific credit requirements. Each high school in the Commonwealth adds requirements based on programmatic needs, the school's mission, and preparation towards college and career readiness. ***Thus, ECHS has adopted the following requirements for graduation for the classes of 2026 and beyond.***

Subject	Number of Credits	Years Available
English	4	9th, 10th, 11th, 12th
Mathematics	3	9th, 10th, 11th, 12th
Science	3	9th, 10th, 11th, 12th
Social Studies	4	9th, 10th, 11th, 12th
Additional credits/electives – excluding Crew and Global Citizenship	5	9th–12th
Wellness Education – including Health (0.5) and PE I (0.5)	1	9th–12th
PA Graduation Requirements - Personal Finance (0.5) Civics (0.5)	1	9th–12th
Global Citizenship <i>*including graduation project</i>	3	9th–11th
TOTAL REQUIRED at ECHS for Graduation	24	
State Assessments	Proficiency in Algebra 1, Biology, and Literature as measured by the Keystone exams or successful completion of an alternate pathway	
College and Career Readiness	Successful completion of a Career and Education Work Standards Portfolio as part of the Global Citizenship class sequence	

General Timeline for the Registration and Scheduling Process

- **Spring**
 - Course information is shared with students and families
 - Course selection/registration for all returning and incoming students
 - Parents review student course selections and return a signed verification form
- **Summer:**
 - Share final schedules with students
- **Fall:**
 - Drop/Add process as described above

College Athletic Participation Requirements

Students interested in participating in college athletic programs regulated by the National Collegiate Athletic Association (NCAA) must be certified through their Initial Eligibility Clearinghouse by demonstrating a certain level of academic achievement in high school in order to be eligible to participate in college athletics. Students can obtain more information by visiting the NCAA Clearinghouse Website: www.eligibilitycenter.org/

Prospective athletes and their parents/guardians should work closely with their coaches, the school counselors, and the ECHS administration on this process, and the initial application process needs to be completed during the summer before the senior year.

High School Athletic Participation Requirements

- All 9th Grade students are eligible for athletics at the beginning of the school year.
- 10th–12th Grade students are eligible for athletics in the fall if they have passed at least six courses during the previous school year.
- Eligibility for athletics for the latter half of the year is determined by first semester grades as students must be passing at least six courses at this juncture to be eligible.
- Please note that students who wish to play a winter sport may lose their eligibility based on semester grades.

State Assessments (updated 1/31/2023)

In accordance with PA Act 158, ECHS has aligned graduation pathways related to state assessments and proficiency in Algebra 1, Biology, and Literature standards. Aligned with Pennsylvania Department of Education (PDE) requirements and the Federal Every

Student Succeeds Act (ESSA), every student will attempt the Algebra 1, Biology, and Literature Keystone Exams upon completion of the aligned course for each exam. In the event a student does not earn a minimum proficient score on the first attempt, ECHS will offer supplemental instruction to prepare the student to retake the exam during a subsequent testing window. ***Please note that in order to earn a high school diploma, students who do not pass the three Keystone exams noted above must successfully complete one of the appropriate pathways outlined in the appendix for each subject in which the exam score does not meet the required level of proficiency. Additionally, a student with a disability who is unable to satisfy pathway requirements but who satisfactorily completes a special education program is granted a diploma under Title 22 §4.24.***

- **Keystone Proficiency Pathway:** Scoring proficient or advanced on each Keystone Exam- Algebra I, Literature, and Biology
- **Keystone Composite Pathway:** Earning a satisfactory composite score of 4452 on the Algebra I, Literature, and Biology Keystone Exams (achieving at least a proficient score on at least one of the three exams and no less than a basic score on the remaining two).

**Alternate Pathway information is in the Appendix.*

Career Readiness Indicators

The Career Education and Work Standards, Chapter 4 of Title 22, are part of the State Board of Education's regulations of required education for all students in Pennsylvania. The Career Education and Work Standards address four areas of knowledge:

- Career Awareness and Preparation (13.1)
- Career Acquisition (Getting a Job) (13.2)
- Career Retention and Advancement (13.3)
- Entrepreneurship (13.4)

Through a comprehensive approach, Career Education and Work Standards complement all disciplines and other academic standards. If Pennsylvania's students are to succeed in the workplace, there are certain skills that they need to obtain prior to graduation from high school. These skills have been identified in the [Career Education and Work Standards](https://www.education.pa.gov/K-12/PACareerStandards/Pages/default.aspx) (<https://www.education.pa.gov/K-12/PACareerStandards/Pages/default.aspx>).

Naviance Portfolio

The Naviance Program is a comprehensive toolset that helps schools assess and develop essential competencies students need for success after high school. In alignment with the goal of ensuring career and college readiness for every student,



ECHS provides students with experiences in Career Awareness and Preparation (13.1), Career Acquisition (13.2), Career Retention and Advancement (13.3), and Entrepreneurship (13.4). Throughout a student's years at ECHS, they will participate in multiple learning experiences designed to meet one or more of the Career Education & Work Standards. The culmination of these experiences will result in a comprehensive Career Education & Work Standards Portfolio that each student will finalize through their Global Citizenship courses by the end of their junior year.

By the end of 11th grade, students must:

- Have a minimum of eight (8) pieces of evidence.
- Address each career strand (13.1, 13.2, 13.3, 13.4) with at least one (1) piece of evidence.
- Include at least two (2) pieces of evidence that demonstrate implementation of the student's individualized career plan.

School sponsored events and classroom lessons, organized and facilitated by teachers and/or school counselors, are designed as a part of ECHS's comprehensive career education and work curriculum to aid students in developing these evidence pieces and building their unique portfolios.

Graduation Project (Grade 11)

The ECS Graduation Project is a requirement for graduation that students will complete through their Global Citizenship courses. This culminating experience will give students an opportunity to bring their learning to life. With support from their teacher, students will create/design a project which will allow them to authentically engage with their chosen ECS Sustainability Pathway (see below), connect to the pillars of sustainability, and showcase how they have grown into eco-literate citizens.

Students will need to apply the following competencies for success:

- Critical and Creative Questioning
- Research and Investigation
- Organization and Managing Timelines
- Incorporating Feedback
- Communicating for Various Audiences

GRADING AND STANDARDS

Structure of Grading and Standards

In line with our ECS mission and our commitment to equity in learning access, opportunities, and outcomes for all students, ECHS has adopted a “Standards-Based Grading” model that all teachers use when assessing students and providing timely and valuable feedback so that the students take ownership of their learning.

Standards based grading (SBG) is a system of education that focuses on what a student learns rather than what a teacher teaches. It is based on the following principles:

- Grades should have meaning and clearly communicate what students know and are able to do
- Students should be engaged and play an active role in their own learning and achievement
- Students should have varied and multiple opportunities to demonstrate learning based on teacher and peer feedback
- Practice and nonacademic work should be evaluated separately and not be included in a student’s final grade

Standards Based Grading (SBG):

- In SBG, every assessment is connected to an educational standard.
- Additionally, teachers will use a variety of assessments, major, minor, and ungraded, which are weighted as follows:

Type of Assessment	Description	Weight
Major Assessment	Major assessments are comprehensive and summative in nature and allow students to demonstrate their understanding of the entire or key portion(s) of an academic standard. <i>Examples include unit exams, projects, lab reports, composition papers, and presentations.</i>	60%
Minor Assessment	Minor assessments are more formative in nature and evaluate a student’s ability to demonstrate understanding of supporting standards and/or of academic skills and knowledge that will support them in reaching the standards. <i>Examples include quizzes and entrance or warm up and exit ticket activities. They may also include informal checks for understanding.</i>	40%

Ungraded Assessment	Ungraded assessments document important skills and behaviors that support and impact learning, but are not directly aligned to the academic standards. <i>Examples include homework, participation, completion, effort, growth, group work, preparedness, class discussions, guided lecture notes, graphic organizers, etc.</i>	0%
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Grading Scale

In the classroom, teachers and students evaluate and assess student learning using the performance levels and descriptors below. For ease of understanding and transcript purposes, however, ECHS will convert the scores to traditional GPA point values:

Level of Performance	GPA Point Value		
	Non Honors	Honors/ Embedded Honors	AP Classes/ Dual Enrollment
Exceeding Performance (EXP) The student performs with <i>distinction</i> and demonstrates a thorough conceptual understanding of content knowledge and the application of skills and processes related.	4.0	4.5	5.0
Mastering Performance (MAP) The student demonstrates a strong conceptual understanding of content knowledge and the application of skill and processes related	3.0	3.5	4.0
Meeting Performance (MEP) The student demonstrates a general conceptual understanding of content knowledge and the application of skills and processes related	2.0	2.5	3.0
Developing Performance (DVP) The student demonstrates a partial conceptual understanding of content knowledge and the application of skills and processes related and needs to improve in order to reach proficiency.	1.0	1.5	2.0
Emerging Performance (EMP) The student demonstrates a minimal conceptual understanding of content knowledge and the application of skills and processes related. If they remain at this level, they will not pass.	0	0	1.0

GPA Calculation, Weighting, and Class Rank

ECS will convert final course grades to a standard 4.0 GPA system for the purpose of helping colleges and employers better understand student learning and performance. We will share more information with students and parents at the appropriate time so that they understand the system and the conversion metric when thinking about plans beyond high school.

Enrollment in an “Embedded Honors” or “Separate Honors” course will result in an extra 0.5 weighting added to the GPA calculation for that class.

Enrollment in an AP (Advanced Placement) or Dual Enrollment course will result in an extra 1.0 weighting added to the GPA calculation for that class.

ECHS will share a student’s weighted and unweighted GPA on our transcript, but we will not calculate nor release any class rank that compares students to each other on these measures.

Attendance

In order to earn credit for a course, students must meet the attendance guidelines established by the state of Pennsylvania and ECS. Students and families will receive these updated expectations and guidelines at the beginning of the school year, and students who have excessive unexcused absences will not earn credit for the course.

Sustainable Pathways

The ECHS Sustainable Pathways play a significant role in students’ ECS academic career. The intent of these pathways is not for students to declare their career path, but rather to offer students an opportunity to personalize and explore ideas of sustainability through topics they feel most connected with. These interdisciplinary pathways invite students to approach their classes, work, and co-curricular experiences through a more concentrated lens. Regardless of their chosen pathways, students approach these experiences with a shared focus on sustainability, including big ideas around global citizenship, equity and justice, systems thinking, and environmental engineering/human-centered design.

During the second semester of their sophomore year, students will select one of the four pathways to focus on for the remainder of their high school career. The variety and

overlap of content, courses, and experiences within pathways show students firsthand how interconnected skills, disciplines, and dispositions are both depth and breadth of content. Opportunities for breadth may include college and career exposure, job readiness skills, college-level enrollment, community partnerships, and extracurriculars.

Students will select from the following pathways:

- Arts, Music, & Design
- Community Development (Business, Finance, & Entrepreneurship)
- Health & Wellness
- Science, Technology, Engineering & Math (STEM)

Students' chosen pathways will be the basis for their capstone graduation projects.

Arts, Music & Design (AMD)

This pathway explores artistic processes, music, and design principles through a sustainable lens. Students in this pathway will consider how art can have a positive impact on individuals, society, and the environment, while also considering the materials used in art and design projects. Working with colleges, universities, and community organizations, students can examine visual, musical, and design arts through a historical look at the interaction of systems & structures and their impact on humans and the environment.

Art, music, and design are ways for expression, creating bonds and empathy through communities. With this in mind, this pathway will prepare students to think critically and creatively while enhancing communication skills for varying audiences. Is the process to create equitably and sustainably? Does the art evoke social change or a call to action?

Community Development (Business, Finance, & Entrepreneurship) (CD)

This pathway will explore how communities, local governments, businesses, and nonprofits work together in the public interest. Students in this pathway will be pushed to move beyond traditional business thinking that focuses only on profit, or the bottom line, and be introduced to the triple bottom line— people, planet, and profit.

The ecoliterate business pathway centers on the reciprocal relationship between the health of humans and the health of the natural environment. Students will examine this pathway from a perspective of supporting communities and individuals to see the different business practices that embed ecoliterate principles.



Health & Wellness (HW)

This pathway will explore how environmental and social factors impact individual, community, and public health. Students in this pathway will consider health and wellness holistically, from learning about the relationships between physical, mental, spiritual, and social wellbeing to the understanding of biology, psychology, chemistry, etc. Students will be pushed to conduct and interpret scientific research through the lens of sustainability.

Holistic health is about caring for the whole person—providing for their physical, mental, spiritual, and social needs. It's rooted in the understanding that all these aspects affect a person's overall health, and being unwell in one aspect affects you in others. Students will examine this pathway from a perspective of supporting communities and individuals to see the different forms of health as a resource to be protected.

Science, Technology, Engineering & Math (STEM)

This pathway will explore the foundations and intersections of science, technology, engineering, and math. Students in this pathway will investigate STEM as a tool to benefit the environment and improve sustainability for people and the planet. They will apply their knowledge to real-world situations that push them to consider the social and ethical implications of STEM and how intentional and inclusive design techniques can positively impact systems and the world.

STEM combines ideas and methods from multiple disciplines, such as the sciences and social sciences and explores topics ranging from ecology and natural resources to landscape architecture and urban planning to economics, sociology, and anthropology. The STEM pathway also focuses on the sustainable, healthy, equitable design of the built environment. It will explore how the sciences, systems, and structures of design can protect and support earth's resources and adjust human impact on the planet.

COURSE INFORMATION

The academic program at ECHS includes a focus on core content (academic courses), electives (interests and skill development), and interdisciplinary pathways, and these components individually and collectively support the academic trajectory of students—including specialization in a student-chosen pathway and a capstone Graduation Project.

In the course descriptions that follow, elective courses will be identified with these corresponding notations:

- *STEM: Science, Technology, Engineering, Mathematics*
- *AMD: Art, Music, & Design*
- *HW: Health & Wellness*
- *CD: Community Development (Business, Finance, Entrepreneurship)*

Please note that final decisions regarding the actual offering of any particular course listed in this document will depend on enrollment, staffing levels, and budget constraints. Thus, not all courses listed in this catalog are guaranteed to run every school year nor are students guaranteed spots in any particular class.

Crew

CREW I, II, III, IV

Grades 9–12

No Credit

All students will enroll in Crew as one of their eight courses each year, and this class is designed to foster skills and competencies related to communication, planning, organizing, and using technology. Crew provides time and opportunities for students to learn and to practice the skills and techniques needed to build readiness for career, college, or community independence. Crew is also focused on cultivating relationships, monitoring academic progress, and developing character, and it affords students the opportunity to build positive connections with their peers and with their crew leader.

Crew is an important vehicle for developing and sustaining practices and traditions that bind our community together— emphasizing the concept of a “crew” in which all students are active members contributing to the journey rather than merely passengers.

Global Citizenship

Global Citizenship is a required course for grades 9–11 and is a part of the K–12 progression in growing eco-literate, global citizens. In Global Citizenship Courses, students will understand their identity, develop empathy for others, and take meaningful action on global challenges. These courses encourage introspection and the examination of cultural, social, and historical influences that shape each student's perspective.

Students will learn to listen and engage with diverse viewpoints, practicing empathy and understanding. They will also analyze real-world challenges and explore how these issues affect people differently. Finally, students will design and implement projects to address global issues, moving from awareness to action.

Global Citizenship I

Grade 9

1 Credit

In this course, students will build on the work they did in Environmental Citizenship in grades 6–8. To build global competencies, they will first explore their own identities and how the media can impact their values. Then students examine how their own communities have shaped their identities as they immerse themselves in the stories of diverse groups of people. Students analyze patterns in technology throughout history, then imagine how to shape a future where technology benefits everyone. Finally, students will explore how their voice, skills, and interests could help build a sustainable future through an introduction to the ECHS Sustainable Pathways.

Global Citizenship II

Grade 10

1 Credit

This course pushes students to explore global problems and design creative solutions that reflect our interconnected world. Students will examine local and global issues by thinking critically, collaborating, and using design thinking to make a positive impact. Learning is guided by in-depth exploration of the ECHS Sustainable Pathways:

- **Arts, Music and Design:** Students design and create prototypes of accessible artwork
- **Health and Wellness:** Students research and propose changes to the ECS Wellness policy
- **STEM:** Students take on a biomimicry design challenge and create a field guide for birds in Heth's Run
- **Community Development:** Students plan and implement a pop-up business

At the end of this course, students will select their individual ECHS Sustainable Pathway.

Global Citizenship III**Grade 11****1 Credit**

This course is the culmination of the Global Citizenship journey, in which students complete their ECHS Graduation Project. Students begin their project by selecting a global issue that connects to their individual ECHS Sustainable Pathway. Then students exercise their skills in creative questioning, research, and design thinking to deepen their understanding of this issue. From their research, students design a project or product that addresses the issue on a local scale. They learn fundamental college-level research skills such as presenting a research proposal, compiling an annotated bibliography, writing a research-based paper, and engaging in metacognitive reflection. The project culminates in a presentation of learning to an authentic audience in which they display the Global Citizenship skills and mindset they have gained throughout their time in ECHS.

Mathematics

Mathematics follows a progression of course content from Algebra 1 through Calculus. Students engage with Core Content Standards and Mathematical Practice Standards in a coherent, useful, and logical way to enable them to learn how to make sense of mathematical problems. Students will have the opportunity to progress through to a college level math course (Calculus and/or Statistics) taken in 12th grade.

Students must earn 3 credits of math coursework by graduation. Each year-long course is the equivalent of 1 credit.

8th Grade	9th Grade	10th Grade	11th Grade		12th Grade	
8th Grade Math	Algebra I	Geometry <i>With Embedded Honors Option</i>	Algebra II <i>With Embedded Honors Option</i>		Pre-Calculus	
					Statistics at Chatham	
			Personal Finance	Data Science	Personal Finance	Data Science
			Personal Finance		Personal Finance	
Algebra I	Geometry <i>With Embedded Honors Option</i>	Algebra II <i>With Embedded Honors Option</i>	Pre-Calculus		Calculus	
			Statistics at Chatham		Personal Finance	Data Science
			Personal Finance	Data Science	Statistics at Chatham	
			Personal Finance		Personal Finance	

MATH COURSE PROGRESSION

Algebra I **Grade 9** **1 Credit**

In Algebra I, students deepen and extend their understanding of linear equations and inequalities. Topics include patterns, operations with real numbers and expressions, linear equations and inequalities, functions, and data analysis. The course concludes with an exploration of quadratic functions. Students will take the Keystone Algebra 1 exam in May.

Geometry **Grades 9–10** **1 Credit**

**Embedded Honors Option*

Students explore complex geometric situations and deepen their understanding of geometric relationships moving toward justifying solutions and mathematical proofs. Topics are studied using both inductive and deductive approaches and include: angle relationships, transformations, congruence, proof, similarity, trigonometry, measures of 2D and 3D shapes, connecting Algebra and Geometry through coordinates, and properties of circles.

*Note: Students may take Geometry in the same year as Algebra 1 **or** Algebra II. To follow this course progression, students must discuss their plans with a parent or guardian, a counselor, and the Associate Director of Curriculum and Professional Development for Math.*

Algebra II

Grades 10–12

1 Credit

**Embedded Honors Option*

Algebra II builds off the work done in Algebra I with linear functions. Students extend their thinking in this detailed study of functions to include polynomial, rational, radical and exponential functions. Students also learn the expressions that define functions and model situations to solve equations. Topics include solving quadratic equations over the set of complex numbers, polynomial, rational, and radical relationships, exponential functions, and inferences and conclusions from data.

Note: Students may take Algebra II in the same year as Geometry. To follow this course progression, students must discuss their plans with a parent or guardian, a counselor, and the Associate Director of Curriculum and Professional Development for Math.

Precalculus

Grades 11–12

1 Credit

**STEM Pathway*

Precalculus is intended to prepare students to take higher level math courses including Calculus or a Dual Enrollment course through a local University. Students extend their understanding of families of functions to include trigonometric functions. The course begins with describing functions then explores rational, inverse, exponential, and logarithmic functions before introducing trigonometric functions.

Calculus**Grades 11–12****1 Credit****STEM Pathway*

Coursework in Calculus is intended to provide an overview of the study of limits, the derivative, and the integral. Students will gain a foundation for a first year college calculus course during their studies. Topics include evaluating limits, methods of differentiation, applications of the derivative, the definite and indefinite integral, techniques of integration, and applications of the integral.

Personal Finance (half year)**Grades 11–12****0.5 Credit**

This course will help students learn and implement decision-making skills necessary to become wise and knowledgeable consumers, savers, investors, users of credit, money managers, citizens, and members of a global workforce and society. In addition, the course will emphasize the important skills underpinning interpreting statistics and probability related to financial situations.

Personal Finance (full year)**Grades 11–12****1 Credit**

This course will help students learn and implement decision-making skills necessary to become wise and knowledgeable consumers, savers, investors, users of credit, money managers, citizens, and members of a global workforce and society. In addition, the course will emphasize the important skills underpinning interpreting statistics and probability related to financial situations. This course covers all of the topics in the semester long personal finance course and then extends to cover additional material for the second semester.

MATH ELECTIVES**Data Science****Grades 11–12****0.5 Credit****STEM Pathway*

Data science is a blend of quantitative reasoning, statistics and computer science used to gain meaningful insights from data. Part computer scientist, mathematician, and trend spotter, data scientists are responsible for interacting with data in these areas to support informed industry decisions. As such, there is a growing need for up-and-coming generations of students to learn how to effectively interact with data. Students will use and analyze data to better understand a problem, measure the scope of a problem, or understand how people are affected by the problem.

Math Plus (Intervention)**Grades 9–10****0.5 Credit**

The math intervention period offers selected students additional support for their work in Algebra I, Geometry, and Algebra II by reinforcing key skills and providing opportunities for extra practice and intervention. The purpose of this course is to provide students the necessary support for them to achieve their potential by improving skill development and increasing access to their coursework. This is a semester class, though students can repeat it as needed during any portion of 9th, 10th, 11th and 12th grades.

English

The English program at ECHS is a comprehensive curriculum that develops students' critical reading, analytical writing, and effective communication skills while fostering creativity and cultural awareness. Through a progression of core courses, students engage with complex texts, refine their writing abilities, and participate in discussions and projects that emphasize critical thinking and rhetorical analysis. These foundational experiences prepare students to navigate academic, professional, and civic challenges with confidence and insight.

Complementing the core curriculum, a diverse array of electives allows students to explore specialized areas of interest such as creative writing, journalism, and film studies. These courses encourage students to think deeply, express themselves creatively, and examine the intersection of literature and society. The ELA program inspires students to become thoughtful readers, skilled writers, and engaged participants in the world around them.

Students must earn 4 credits of ELA coursework by graduation. Each year-long course is the equivalent of 1 credit.

ELA COURSE PROGRESSION

English I	Grade 9	1 Credit
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As the students enter high school, they will need to acquire a firm foundation in literacy in order to be successful with the increasing academic rigor throughout each grade level. This course guides the students as they gain proficiency in their reading comprehension and analysis, learn to write with clarity and detail, and determine the most powerful way to express their thoughts aloud with their peers. Students will demonstrate progress toward mastering the Pennsylvania Common Core Standards through formal and informal writing assignments, various assessments, performance tasks, formal and informal presentations and discussions.

English II	Grade 10	1 Credit
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This course emphasizes reading, writing, speaking, and critical thinking skills in alignment with state standards and Keystone Literature assessment anchors. Students will engage these foundational literacy skills across the curriculum here at ECHS and beyond, from post-secondary education and the workplace to their role as community members. In

particular, we focus on building our capacity for independent reading, comparative analysis, and analytical writing. Minor assessments will allow students to collaborate in showing their understanding of literary form and author's purpose through text analysis, inquiry discussions, and design projects. Major assessments will ask students to demonstrate their learning through extended comparative analysis, long-term research projects, and creative writing applications. Students will take the Literature Keystone Exam in the spring.

English III

Grade 11

1 Credit

This course includes reading selections representing all forms of American literature. Content-aligned vocabulary and grammar skills are studied throughout the year. Writing assignments will encourage students to develop their critical literacy through varied compositions that employ original thinking, logical analysis, and specific details from course texts. This course pays significant attention to encouraging writing style and voice, offering communication tools to support students in approaching the ECS Senior Project in their defined pathways.

English IV

Grade 12

1 Credit

This course is the capstone of the ECS Literacy program as it cultivates the reading and writing skills that students need for college/career success and for intellectually responsible civic engagement. The course guides students in becoming curious, critical, and responsive readers of diverse texts, and becoming flexible, reflective writers of texts addressed to diverse audiences for diverse purposes. The reading and writing students do in the course should deepen and expand their understanding of how written language functions rhetorically to communicate writers' intentions and elicit readers' responses in particular situations. Reading and writing activities in the course also deepen students' knowledge and control of formal conventions of written language (e.g., vocabulary, diction, syntax, spelling, punctuation, paragraphing, genre). The course helps students understand that formal conventions of the English language in its many written and spoken dialects are historically, culturally, and socially produced.

Note: Students who take Eng 105: First Year Writing at Chatham may choose to have that course count as their 4th credit of English required for graduation rather than taking English IV.

ENGLISH ELECTIVES

English Plus (Intervention)

Grades 9–10

0.5 Credit

The English intervention period offers selected students additional support for their work in their English Course by reinforcing reading comprehension, vocabulary development, and writing skills. The purpose of this course is to provide students with intervention and reinforcement of key skills for them to achieve their potential by improving skill development and increasing access to their coursework. This is a semester class, though students can repeat it as needed during any portion of 9th, 10th, 11th and 12th grades.

Film Studies

Grades 10–12

0.5 Credit

**AMD Pathway*

This elective course offers students a space to watch films while developing skills to recognize, analyze, describe, and enjoy it as art and entertainment. The class will introduce students to the basics of film analysis including cinematic formal elements, genre, and narrative structure. We will discuss the film industry itself, as well as the history of film, and how the different genres have changed over time. Our class will also focus on how film fits into the context of culture and society.

Yearbook

Grades 10–12

0.5 Credit

**CD Pathway*

This course is an elective where students create the annual high school yearbook. This course will engage students in the basics of yearbook production including graphic design, copywriting, photography, interviewing techniques, and organizational and management skills. Students will work collaboratively, taking on roles such as writers, photographers, editors, and designers to manage real deadlines and produce a finished, published product.

Literature & Social Justice

Grades 10–12

0.5 Credit

**AMD Pathway*

This course will use literature to examine the elusive search for harmony – focusing on texts that explore human suffering and triumph over that suffering. Using a variety of literature, students will grapple with questions surrounding social justice and how they can be agents of change in pursuit of harmony in a discordant world.

Creative Writing**Grades 10–12****0.5 Credit****AMD Pathway*

This elective course offers a laboratory approach to writing so that students have the time and freedom to explore many different forms of writing and to experience all stages of the composition process. The class will serve as an immediate audience as well as a support group in a relaxed, productive setting, and the nature of the course centers on the writer's own personal process rather than on rigid forms and conventions. Students who choose to take this class should have a genuine interest in writing, a willingness to share their work with peers, and a willingness to keep a journal.

AP English Literature and Composition**Grade 12****1 Credit****AMD Pathway*

The AP English Literature and Composition course focuses on reading, analyzing, and writing about imaginative literature (fiction, poetry, drama) from various periods. Students engage in close reading and critical analysis of imaginative literature to deepen their understanding of the ways writers use language to provide both meaning and pleasure. As they read, students consider a work's structure, style, and themes, as well as its use of figurative language, imagery, and symbolism. Writing assignments include expository, analytical, and argumentative essays that require students to analyze and interpret literary works. Like all AP courses, it is academically challenging and work intensive, and students who enroll in this class must be prepared to complete substantial homework and to take the AP exam in May.

Social Studies

The Social Studies program at ECHS is a comprehensive curriculum designed to develop students' understanding of historical, social, political, and economic systems while fostering critical thinking and active citizenship. Through a progression of core courses, students explore global and American history, analyzing the causes and effects of key events, historical patterns, and their relevance to contemporary issues. These courses emphasize the importance of primary source analysis, research, and thematic study, helping students connect the past to the present and preparing them to navigate complex societal challenges.

In addition to the core curriculum, a diverse range of electives allows students to delve deeper into specialized topics such as economics, psychology, sociology, and social justice. These courses encourage students to critically examine issues of inequity, cultural diversity, and systemic change while developing empathy and advocacy skills. The Social Studies program inspires students to think deeply about the world around them and empowers them to contribute meaningfully to their communities and the broader global society.

Students must earn 4 credits of social studies coursework by graduation. Each year-long course is the equivalent of 1 credit.

SOCIAL STUDIES COURSE PROGRESSION

Global Studies I

Grade 9

1 Credit

This required course will focus on global studies and issues from ancient civilizations through the end of World War I— with particular attention to the non-western areas of the globe. This class will devote particular attention to political, economic, religious, artistic, scientific, technological, and cultural ideas and developments— including interactions between different civilizations – and students will analyze major themes, cause & effect, historical patterns, and the myriad ways in which events, trends, and conflicts from the past can inform our understanding of the world today. This course will also provide opportunities for students to read and analyze primary source documents and conduct historical research.

Global Studies II**Grade 10****1 Credit**

This required course will focus on global studies and issues spanning from the end of World War I in 1919 through the contemporary world— with particular attention to issues of inequity, conflict, and injustice that permeate the globe. The class will devote particular attention to the United Nations and its 17 Sustainability Goals as well as other multinational organizations and initiatives that promote peace and the greater welfare of all people, and students will analyze major themes, cause & effect, historical patterns, and the myriad ways in which events, trends, and conflicts from the past can inform our understanding of the world today. This course will also provide opportunities for students to read and analyze primary source documents and conduct historical research.

American Studies I**Grade 11****1 Credit**

This required course will focus on American history and society from the Native Americans in the pre-Columbian era through the end of World War I, challenging students to understand the plethora of ways in which the reality of the American experience has so often fallen short of the lofty ideals enshrined in this nation's founding documents. This class will devote particular attention to political, economic, religious, artistic, scientific, technological, and cultural ideas and developments, including instances of oppression and the experiences of marginalized groups, and students will analyze major themes, cause & effect, historical patterns, and the myriad ways in which events, trends, and conflicts from the past can inform our understanding of the world today. This course will also provide opportunities for students to read and analyze primary source documents and conduct historical research.

American Studies II**Grade 12****1 Credit**

This required course will focus on American history and society from the end of World War I in 1919 through the contemporary world, challenging students to understand the plethora of ways in which the reality of the American experience has so often fallen short of the lofty ideals enshrined in this nation's founding documents. This class will devote particular attention to political, economic, religious, artistic, scientific, technological, and cultural ideas and developments, including the struggle for racial, gender, and economic equality and the ways in which American society still falls short on those measures, and students will analyze major themes, cause & effect, historical patterns, and the myriad ways in which events, trends, and conflicts from the past can inform our understanding of the world today. This course will also provide opportunities for students to read and analyze primary source documents and conduct historical research.

SOCIAL STUDIES ELECTIVES

Civics

Grade 10–12

0.5 Credit

**The assessment for this course is a graduation requirement*

This course is centered around 3 key pillars: Knowledge, Skills, and Actions. The Knowledge pillar emphasizes understanding government structures and processes, focusing on principles, rights, responsibilities, and international relations. Skills development involves active civic engagement through participation in school governance, extracurricular activities, and civil discourse, fostering tolerance and acceptance. Finally, Actions encompass diverse citizen activities such as voting, community involvement, military and government service, and political attentiveness. By integrating these pillars, students grasp the essence of citizenship and actively contribute to their communities, perpetuating the values of democracy for future generations. Near the end of this course – in accordance with Pennsylvania Act 35 – students will take a Civics exam based on America’s values, founding documents, and institutions.

African-American Studies

Grades 10–12

0.5 Credit

**CD Pathway*

This elective course moves beyond the traditional history class by examining the African American experience in depth – analyzing the ongoing impacts of slavery, struggles for racial equality, and the rich and immense contributions of African-Americans to community, country, and the world. Special attention will be focused on the ways in which the past has shaped the realities of our contemporary society as well as the ongoing systemic racism that still permeates American life today. This course is a wonderful precursor for students interested in pursuing AP African-American Studies.

AP African-American Studies

Grades 11–12

1 Credit

**CD Pathway*

This elective course moves beyond the traditional history class by examining the African-American experience in depth, analyzing the ongoing impacts of slavery, struggles for racial equality, and the rich and immense contributions of African-Americans to community, country, and the world. Special attention will be focused on the ways in which the past has shaped the realities of our contemporary society as well as the ongoing systemic racism that still permeates American life today. Like all AP courses, it is academically challenging and work intensive, and students who enroll in this class must be prepared to complete substantial homework and to take the AP exam in May.

Economics & Equity**Grades 10–12****0.5 Credit****CD Pathway*

This elective course has two main objectives: 1) to introduce students to supply and demand while also providing an overview of key economic concepts like GDP, inflation, unemployment, and taxes, and 2) to analyze economic systems and the realities of life in America through a lens of equity, seeking to help students understand inequality and injustice and to equip them to be advocates for progressive policies that will foster lasting change. Students will use the city of Pittsburgh as a touchstone and a laboratory for their exploration of these issues, identifying and investigating key ideas to address urban problems and inequities.

Psychology**Grades 10–12****0.5 Credit****HW Pathway*

This course focuses on the scientific study of individual human behavior – including a focus on psychological principles, terminology, major theories, careers, methods of experimentation, and practical applications. Special topics include personality development, sensory processes, perception, emotion, intelligence, learning, problem-solving, group dynamics, and motivation.

Racial Literacy & Social Justice**Grades 10–12****0.5 Credit****CD Pathway*

This semester course will equip students with the knowledge and skills for understanding race and the issues of race in the United States today. It will serve as an interactive, informative, discussion and project-based class; it will allow students to critically analyze primary sources from current and historical events through different forms of media, literature and art. Gaining a new perspective on the cultural divide in America, students will be prepared for handling racially influenced experiences with communication and passion.

Sociology**Grades 10–12****0.5 Credit****CD Pathway*

Sociology focuses on the systematic understanding of social interaction, social organization, social institutions, and social change with particular emphasis on the interplay between the individual and society, the social construction of human life, the causes and consequences of social inequality, and the juxtaposition between stability and change. This elective course will help students discover and explain social patterns



while simultaneously developing critical thinking skills and a deeper sense of empathy for the great diversity of societies, traditions, and norms in our world.

Science and Technology

Science content and the application of science across disciplines is a hallmark of the ECS experience. The science program at ECS uses the Science, Technology, Engineering, Environmental Literacy and Sustainability (STEELS) Standards to engage in successful science instruction through content, practices, and crosscutting concepts. Content drives the experience whether it is life science, earth science, physical science, engineering, or a combination of several of these topics. Students use scientific practices, such as asking questions and carrying out investigations, to actively engage in the content. Students act like scientists by taking risks, making mistakes, problem-solving through struggles, and persevering to create evidence-based arguments and solutions.

Each year, students should be able to demonstrate greater capacity for connecting knowledge across, and between, the life sciences, physical sciences, earth sciences, and engineering design. During grades 9–12, students begin to form deeper connections between concepts and skills learned in grades 6–8, such as applying statistics to scientific questions, evaluating limitations of models, and creating algorithms to solve problems.

Students must earn 3 credits of science coursework by graduation. Each year-long course is the equivalent of 1 credit.

9th Grade	10th Grade	11th Grade	12th Grade
Environmental Science*	Biology <i>With Embedded Honors Option*</i>	Chemistry or Honors Chemistry	AP Chemistry
	Chemistry or Honors Chemistry	AP Chemistry	Physics
		Physics	Sus 102 @ Chatham

Note: All 10th grade students must take Biology. Students can choose to take Chemistry or Honors Chemistry as an additional science elective.

SCIENCE COURSE PROGRESSION for Class of 2030 and beyond

Environmental Science

Grade 9

1 Credit

This course examines the human impact on our environment and how this affects health and social justice issues. Students will study the mutual relationship between organisms and their environment. Through the study of the interrelationships among plants, animals, and humans-this course covers recycling and regeneration, ecosystems,

pollution and conservation of natural resources. Students will also describe sustainable processes and evaluate the impact of those processes on social, environmental and/or economic systems.

Note: Students in the class of 2029 will take Environmental Science in 10th Grade. An Embedded Honors Option will be offered for 10th grade students.

Biology

Grade 10

1 Credit

**Embedded Honors Option*

Building on 9th grade Environmental Science, this course examines living systems from molecules and cells to organisms and populations. Students investigate cell structure and function, cellular energy, genetics and heredity, evolution, and the diversity of life through inquiry-based labs, data analysis, and evidence-based argumentation aligned to Pennsylvania STEELS Standards. Connections to ecology and environmental systems are woven throughout. Students will take the Biology Keystone Exam in May.

Chemistry

Grade 10 - 12

1 Credit

This inquiry-based course is designed to provide a thorough and challenging introduction to the topics of chemistry, the study of matter and the changes it undergoes. The course will follow STEELS standards that focus on “cross-cutting” skills, science and engineering practices, and disciplinary core ideas.

Note: 10th Grade students may take Chemistry in the same year as Biology. To follow this course progression, students must discuss their plans with a parent or guardian, a counselor, and the Associate Director of Curriculum and Professional Development for Math.

Honors Chemistry

Grade 10 - 12

1 Credit

This chemistry class is designed for students who are interested in STEM careers. The course material will build a strong foundation on intermolecular and intramolecular bonding and its effects on the macroscopic properties. Students will develop inquiry based skills problem solving while making connection of the science with practical applications.

Note: 10th Grade students may take Honors Chemistry in the same year as Biology. To follow this course progression, students must discuss their plans with a parent or

guardian, a counselor, and the Associate Director of Curriculum and Professional Development for Math.

Physics

Grades 11–12

1 Credit

**STEM Pathway*

This course will provide significant laboratory and hands-on experiences for students enabling them to connect theoretical concepts to real life situations. This course is devoted to learning and practicing problem-solving techniques and relating these concepts to the mathematics of physics. This course involves the study of the forces and laws of nature affecting matters, such as equilibrium, motion, momentum, and the relationships between matter and energy.

AP Chemistry

Grades 11 - 12

1 Credit

Prerequisite: Chemistry

**STEM Pathway*

This college-level course is designed to provide a thorough and challenging introduction to the topics of chemistry in line with the curriculum and standards established by the College Board. Like all AP courses, it is academically challenging and work intensive, and students who enroll in this class must be prepared to complete substantial homework and to take the AP exam in May. The AP Chemistry curriculum focuses on a wide range of topics – including atomic structure, analytical and descriptive chemistry, gas laws, thermodynamics, kinetics, bonding, and equilibrium. Students will learn to express ideas with logic and clarity, to design and conduct laboratory experiments, to arrive at cogent, rational conclusions, and to manipulate equations and solve problems.

SCIENCE AND TECHNOLOGY ELECTIVES

Anatomy and Physiology

Grades 10–12

0.5 Credit

**HW Pathway*

This course is designed for students who have a continued interest in the biological sciences, providing information about the human body and its processes and examining the concepts of structure and function. Students will participate in dissections regularly.

Food, Farming, & Sustainability

Grades 10–12

0.5 Credit

**HW Pathway*



Perhaps the greatest challenge of our lifetime will be how to feed an ever growing population without further destroying the planet, and we need to do so under the growing pressure of climate change and scarce resources. This course seeks to shed light on this predicament by seeing what lessons can be learned from the past but even more so by exploring the possibilities of alternative ways of food production and consumption. We will discuss and analyze solutions that recognize and address the environmental and social impacts of food and which seek to reshape our connection to food. To extend their learning, moreover, students will engage with community partners to gain a deeper understanding of classroom content.

Introduction to Engineering

Grades 10–12

0.5 Credit

**STEM Pathway*

This is a foundational course designed to provide students with an overview of the principles, practices, and applications of engineering. This course typically covers a broad range of topics, including the various disciplines within engineering (e.g., civil, mechanical, electrical), fundamental concepts such as problem-solving, design thinking, and engineering design process. Additionally, students may explore the historical and societal impacts of engineering, as well as the ethical considerations and responsibilities of engineers. Through hands-on projects, case studies, and interactive learning experiences, students will develop critical thinking skills, technical knowledge, and an appreciation for the role of engineering in shaping our world.

Wicked Problems in Medical Ethics

Grades 10–12

0.5 Credit

**HW Pathway*

A “wicked problem” is an issue or dilemma that is so complex that a solution is extremely difficult or even impossible. This elective course will explore the *wicked-ness* of complex ethical issues in medicine and biomedical science including abortion, euthanasia, genetics, cloning, and healthcare access. Through videos, discussion, debate, case studies, legal perspectives, and presenters, students analyze opposing arguments and examine potential solutions with an equity lens.

Physics

Grades 11–12

1 Credit

**STEM Pathway*

This course will provide significant laboratory and hands-on experiences for students enabling them to connect theoretical concepts to real life situations. This course is devoted to learning and practicing problem-solving techniques and relating these concepts to the mathematics of physics. This course involves the study of the forces and



laws of nature affecting matters, such as equilibrium, motion, momentum, and the relationships between matter and energy.

Honors Aviation Part 107

Grades 11–12

0.5 Credit

**STEM Pathway*

This rigorous course prepares learners with little or no drone experience to confidently pass the FAA Part 107 Remote Pilot exam and become proficient, safe drone operators. The program blends fundamental aviation knowledge with practical flight training. It is tailored for rigorous learning – focusing on real-world applications, professional development, and efficient learning strategies – all delivered in an engaging, interactive format. By the end of the course, students will be exam-ready and skilled in planning and executing drone missions relevant to their personal or career interests.

Bike Maintenance

Grades 10–12

0.5 Credit

**STEM Pathway*

This elective course builds foundational skills in bicycle mechanics and shop operations while introducing students to career pathways in the bicycle industry. Students develop technical proficiency through hands-on training in maintenance and repair, including brakes, drivetrains, and wheel systems. Additional areas of study include customer service, sales, inventory management, and basic business operations. The course integrates STEAM concepts and emphasizes problem-solving, teamwork, and real-world application.

Health & Physical Education

ECHS believes in the importance of holistic wellness, including both health and physical education, and through both required and elective courses, our students will learn important content, skills, and perspectives to promote a healthy lifestyle as they grow into adulthood. Students must complete two semester classes (1.0 total credits) in this department in order to graduate— including both Physical Education I and Health.

REQUIRED HEALTH & PE COURSES

Physical Education I	Grades 9–12	0.5 Credit
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The focus is largely on the growth and development of students through the medium of total body activities. The principal objectives include the development of motor skills and physical fitness, the development of desirable social attitudes and emotional traits, and the development of an appreciation for a wide variety of physical activities that would result in continued participation for the enjoyment of leisure time activities.

Health	Grades 9–12	0.5 Credit
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This required course offers students an opportunity to explore physical, mental and social wellness. Focusing on disease prevention, nutrition and healthy lifestyle choices, the students will evaluate their own health and understand the importance of cultivating and maintaining positive health habits.

HEALTH & PE ELECTIVES

Personal Fitness	Grades 10–12	0.5 Credit
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**HW Pathway*

This elective course offers interested students the opportunity to develop their speed, strength, flexibility, endurance, and agility through individual exercise experiences developed in conjunction with the teacher. Students will focus on proper technique and whole-body fitness through a varied and well-balanced program.

Sports & Society	Grades 10–12	0.5 Credit
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**CD Pathway*

This semester elective will engage students in a discussion and analysis of issues related to sports and society – including the ways in which athletics mirrors society but also drives social change. The curriculum will focus on issues as diverse as kneeling for the



National Anthem – to – steroids and doping – to – the disparity in salaries for men and women – to – the lack of minority coaches in professional sports.

Team Sports

Grades 10–12

0.5 Credit

**HW Pathway*

Students in this elective course will enjoy opportunities to engage in team sports with their classmates throughout the semester— including basketball, football, soccer, volleyball, and dodgeball. This is a semester course, but students can take it up to two times (in different years) throughout their high school career.

World Languages

The World Language program at ECHS teaches students to communicate in a language other than English and to understand the perspectives of different cultures. The sequential courses are designed to help students build language proficiency and fluency in reading, writing, and listening, and speaking. All students will begin with the first level of their chosen language, unless they arrange to take a placement exam with the appropriate teacher.

MANDARIN

Mandarin courses follow the World-Readiness Standards for Learning Languages with standards organized around the “5 C’s” of learning languages; communication, cultures, connections, comparisons and communities. Students progress through coursework each year beginning with the required Mandarin I course which provides students with the opportunity to become proficient at the novice level in all skill areas: speaking, listening, reading, and writing. Students acquire skills from reinforcement through practice, conversation, games and authentic tasks.

Mandarin I

Grades 9–12

1 Credit

**CD Pathway*

This course is designed for students with no or minimal previous background in spoken or written Mandarin, and it will focus on the basics of the language – including sound systems, vocabulary, and foundational grammar skills. Students in this course will practice listening and speaking in real-life situations, learn to read and write Chinese characters, and examine how culture and language interact in China. This knowledge will prepare students to effectively communicate in Mandarin on a limited range of topics related to everyday situations.

Mandarin II

Grades 10–12

1 Credit

**CD Pathway*

The second year expands the basic listening, speaking, reading, and writing skills so that the students can begin to create with the language. Students will feel more at ease with simple conversations and brief written descriptions on familiar topics and gain a deeper appreciation of and understanding of Chinese culture and customs. The course is accelerated. Students are expected to accept responsibility for more independent practice.

Honors Mandarin III**Grades 11–12****1 Credit****CD Pathway*

Mandarin III builds upon the foundation laid in Mandarin II, accelerating students' proficiency in listening, speaking, reading, and writing. Through more complex conversations and extended written compositions, students gain fluency and creativity in expressing themselves in Mandarin. They delve deeper into Chinese culture and customs, fostering a richer understanding and appreciation. With an emphasis on independent practice, students take ownership of their learning journey, further honing their skills and confidently navigating real-world scenarios.

Honors Mandarin IV**Grade 12****1 Credit****CD Pathway*

Mandarin IV is an advanced-level course designed to further develop students' proficiency in listening, speaking, reading, and writing in Mandarin Chinese. Building on skills acquired in Mandarin I–III, students will engage in more complex communication using extended sentences and paragraph-level discourse. The course emphasizes real-world communication and cultural understanding through authentic materials such as videos, films, short readings, and multimedia resources. Students will explore topics such as travel, technology, daily life, and contemporary Chinese culture while expressing opinions, narrating experiences, and participating in discussions. Students will continue to expand their vocabulary and refine their use of grammatical structures to improve accuracy and fluency. Instruction is conducted primarily in Mandarin, with increasing expectations for students to communicate in the target language.

SPANISH

Spanish courses follow the World-Readiness Standards for Learning Languages with standards organized around the “5 C’s” of learning languages; communication, cultures, connections, comparisons and communities. Students progress through coursework each year, beginning with the required Spanish I course which provides students with the opportunity to become proficient at the novice level in all skill areas: speaking, listening, reading, and writing. Students acquire skills from reinforcement through practice, conversation, games and authentic tasks.

Spanish I**Grades 9–12****1 Credit****CD Pathway*

This is an introductory level course focusing on the basics of Spanish language including sound systems, vocabulary, and foundational grammar skills. Students will develop their Spanish language abilities across the four skill areas of reading, writing, listening, and speaking. Students will also develop cultural competency through examining products, practices, and perspectives and making comparisons between their native cultures and the cultures of the Spanish-speaking world.

Spanish II**Grades 10–12****1 Credit****CD Pathway*

This course builds on the foundational skills learned in Spanish I. Students will continue to expand their vocabulary and demonstrate mastery of more advanced grammar structures across the four domains of reading, writing, listening, and speaking. Students will also develop cultural competency through more in-depth analysis of products, practices, and perspectives and making comparisons between their native cultures and the cultures of the Spanish-speaking world.

Honors Spanish III**Grades 11–12****1 Credit****CD Pathway*

Spanish III students will work towards developing intermediate mid to high Spanish proficiency. Students will continue expanding their vocabulary and acquiring essential grammar skills to read, write, listen, and speak about more complex topics in greater detail. Students will deepen their knowledge of Spanish-speaking cultures and demonstrate their awareness in their communication patterns and cultural comparison and analysis skills.

AP Spanish IV**Grades 11–12****1 Credit****CD Pathway*

This course is designed to prepare students for the AP Spanish Language and Culture exam. Students will work towards developing Intermediate to Advanced proficiency in their interpretive, interpersonal, and presentational communication skills, as well as cultural competency, while exploring the 6 AP themes: family and communities, personal and public identities, beauty and aesthetics, science and technology, contemporary life, and global challenges. Like all AP courses, it is academically challenging and work intensive, and students who enroll in this class must be prepared to complete substantial homework and to take the AP exam in May.

Visual and Performing Arts

The Visual and Performing Arts program at ECHS seeks to enrich students' lives and to provide them with an important vehicle to communicate their human experience, and build an artistic practice. We believe that the visual and performing arts prepare students to be successful, engaged, and empathetic citizens who think in innovative and creative ways.

PERFORMING ARTS COURSES

Music Theory (Fundamentals of Music) Grades 10–12 0.5 Credit

**AMD Pathway*

This semester-long course introduces students to the fundamental building blocks of music, including pitch, rhythm, notation, counterpoint, and harmony. Students utilize the keyboard as a tool for understanding and employing these fundamentals. Students will consistently practice applying course concepts through performance and drills to become proficient. Students may register for AP Music Theory after successfully completing this course.

AP Music Theory Grades 11–12 1 Credit

**AMD Pathway*

This year-long course is intended for highly motivated musicians with a serious interest in music. AP Music Theory focuses on concepts and skills emphasized within introductory college music theory courses to help students become sophisticated and thoughtful music listeners, performers, and composers. AP Music Theory students learn to recognize, understand, describe, and produce the basic elements and processes of performed and notated music. To become proficient with these skills, students must consistently practice applying course concepts through aural analysis, score analysis, sight-singing, dictation, and composition. Students will be required to take the AP Music Theory Exam after completing the course. With an exemplary score, colleges may grant credit or waive introductory music theory requirements. Students who successfully complete the introductory Music Theory course may enroll in AP Music Theory.

Ensemble**Grades 9–12****.5 or 1 Credit****AMD Pathway*

This course emphasizes artistic performance commensurate with advanced performance literature. Students become acquainted with various solo, chamber, and ensemble literature and receive individual and group instruction on their instruments. Performances are required of all students. Membership is based on ability, interest, and experience and requires the director's approval. Content in this course changes annually; therefore, this course may be repeated.

Music, Society, & Activism**Grades 10–12****0.5 Credit****AMD Pathway*

This semester-long course utilizes Pittsburgh as a laboratory to understand how music has shaped the politics and neighborhoods that comprise our city. Students will research and learn the musical history of neighborhoods with deep ties to musical history, such as the Hill District, East Liberty, Homestead, and Oakland. Through field recordings, sound mapping, site visits, journaling, and discussion, students will examine the current state of each site and its history, reflecting on *how* music has shaped the space. Using the framework of musical politics from Jacques Attali (sacrificing - representing - repeating - post-repeating), students will identify and politically locate music from antiquity - present. Students will serve as activists through community service projects which take a deeper look into material learned from site visits and Attali's framework.

Music Technology**Grades 10–12****0.5 Credit****AMD Pathway*

This semester-long course will introduce students to the theory and fundamentals of using software and hardware tools for producing music (including digital music editing, multi-track recording, MIDI note entry, signal processing plugins, computer music notation software, sound design, electronic music history, and microphone technique). The class will stress application and creative content, using project-based learning activities, including student exposure to performing with electronic instruments and live recording, multi-track recording (both MIDI sequencing and live instruments), music arranging, and music history. Although no prior musical experiences are required, this course will include heavy recording, describing and reading about sound, and small composition exercises. All are welcome.

VISUAL ARTS COURSES

Introduction to Art

Grades 9–12

0.5 Credit

**AMD Pathway*

In this introductory visual arts course, students will explore a variety of mediums, artistic processes and various forms of expression through the Elements & Principles of Design. Throughout this semester-long course various movements and genres in art will be viewed through the lens of Design Elements and Principles. Each student will have the opportunity to explore a variety of mediums ranging from two dimensional techniques such as drawing and painting to three dimensional techniques such as sculpting and casting. Technical ability is not a necessary prerequisite for this expressive, creative, and fun class for all levels of artists from beginner to experienced.

Ceramics I

Grades 9–12

0.5 Credit

Prerequisite: Introduction to Art

**AMD Pathway*

This course provides students with the opportunity to develop a basic knowledge of ceramic forms and sculpture using handbuilding techniques, such as: pinching, coiling, and slab. The course encompasses all ceramics related skills including glazing and staining. Students of all ability levels are encouraged to take the course and will be supported according to their individual needs as they explore creativity.

Ceramics II

Grades 10–12

0.5 Credit

Prerequisite: Ceramics I

**AMD Pathway*

This course will extend the learning from Ceramics I for students who have a true passion for and interest in this medium. This class will challenge students to think creatively, to further develop their technique (including pinching, coiling, and slab), and to continue refining key ceramic skills (including glazing and staining).

Drawing/Painting/Printmaking I

Grades 9–12

0.5 Credit

Prerequisite: Introduction to Art

**AMD Pathway*

This course introduces students to classic and contemporary techniques. Students of all skill levels are encouraged to explore various mediums and materials with an emphasis on expression and creativity. Projects will include various printing techniques such as mono prints and linoleum cuts, non-objective painting, and perspective drawing.

Drawing/Painting/Printmaking II**Grades 10–12****0.5 Credit***Prerequisite: Drawing, Painting, & Printmaking I***AMD Pathway*

This course will extend the learning from Drawing/Painting/Printmaking I for students who have a true passion for an interest in this medium. This class will challenge students to think creatively, to further develop classical and contemporary techniques, and to complete several diverse and sophisticated projects that will build their skills and understanding.

Sculpture & 3D Design**Grades 9–12****0.5 Credit***Prerequisite: Introduction to Art***AMD Pathway*

This course will be an exploration of techniques with an appreciation of sculptural three-dimensional forms using found objects and new materials. Historical and contemporary concepts ranging from representational to abstract forms are investigated. Some of the materials used may include clay, wood, metal, cloth, paper, and plaster. Students will be required to keep a sketchbook; hand drawing is required but students will not be evaluated on their drawings or their skill level. Emphasis will be placed on creative design concepts, craftsmanship, and skillful and imaginative use of materials.

Fiber Arts**Grades 9–12****0.5 Credit***Prerequisite: Introduction to Art***AMD Pathway*

This course will give students an overview introduction of fiber work using natural and man-made materials. Areas of weaving, surface design, beadwork, and felting will be explored. Some of the techniques used may include batik, tie dye, coiling, knotting, stitchery, and applique. Many of the techniques can be applicable to wearable art and 3-D forms. Emphasis will be placed on creative design concepts, craftsmanship, and skillful and imaginative use of materials.

Art, Society, & Activism**Grades 10–12****0.5 Credit****AMD Pathway*

This elective course will explore the visual arts – both historically and today – in terms of the ways in which they reflect and represent society and culture while also driving substantial and meaningful change.

Non-Traditional Academic Experiences

Internship

Grade 12

0.5 Credit

Environmental Charter High School is committed to partnering with local organizations and companies to help close the education to employment gap, and develop career pathways through the senior year internship program. The program pairs students in the high school workforce track with Pittsburgh employers to work on-site. This work experience reinforces the future-ready skills introduced in the classroom, including communication, complex thinking, and decision making. Sponsoring companies, in turn, are developing Pittsburgh's skilled workforce, while creating a diverse pool of future applicants for themselves. Students interested in this program should register for it in the spring, but they will still have to complete a registration process and other paperwork that ECHS will provide.

Dual Enrollment

Grades 11–12

1 Credit

ECHS strives to provide opportunities for students to take classes with local institutions of higher education through dual enrollment programs in which courses would count for both high school and college credit. Our counselors and administration will provide the relevant information for interested students at the appropriate time.

Dual Enrollment Support

Grades 11–12

No Credit

If students are enrolled in courses through external programs, they can choose to enroll in Dual Enrollment Support which would provide a dedicated period for students to pursue coursework with a dedicated staff member to support them.

Special Education

This section of the program of studies describes courses which are specifically designed for students receiving support through an IEP and are in need of small-group support

Resource	Grades 9–12	0.5 or 1 Credit
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Small group, credited course designed to provide individualized academic support to students, focusing on enhancing their strengths and addressing specific learning challenges. During this time, students receive personalized instruction, targeted interventions, and assistance with class assignments, projects, and executive functioning skills. The course aims to foster academic growth, build self-confidence, and promote independent learning skills in a supportive, inclusive environment. Students will work closely with resource teachers to develop strategies for success in various subjects. Content in this course changes annually based on enrolled students; therefore, this course may be repeated.

FLEX English 9, 10, 11, 12	Grades 9–12	1 Credit
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Small group course designed for students with IEPs that will challenge students to further develop critical reading and thinking skills, as well as strong argumentative writing skills, by reading and working with complex pieces of fiction and nonfiction. Students will demonstrate progress towards mastering the Pennsylvania Common Core Standards and Keystone Literature assessment anchors through formal and informal writing assignments, various assessments, performance tasks, formal and informal presentations, and class discussions in a small group setting with rigorous expectations. 10th grade students will take the Literature Keystone exam in May.

FLEX Algebra I	Grade 9	1 Credit
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This course is designed for students with an IEP who need small-group support for mathematics instruction, including specific strategies to help students succeed with concepts covered in the general education setting. In Algebra I, students deepen and extend their understanding of linear equations and inequalities. Topics include patterns, operations with real numbers and expressions, linear equations and inequalities, functions, and data analysis. The course concludes with an exploration of quadratic functions. Students will take the Keystone Algebra 1 exam in May.

FLEX Geometry	Grades 9–10	1 Credit
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This course is designed for students with an IEP who need small-group support for mathematics instruction, including specific strategies to help students succeed with concepts covered in the general education setting. Students explore complex geometric situations and deepen their understanding of geometric relationships moving toward justifying solutions and mathematical proofs. Topics are studied using both inductive and deductive approaches and include: angle relationships, transformations, congruence, proof, similarity, trigonometry, measures of 2D and 3D shapes, connecting Algebra and Geometry through coordinates, and properties of circles.

FLEX Personal Finance I and II

Grades 11–12

1 Credit

These courses are designed for students with an IEP who need small-group support for mathematics instruction, including specific strategies to help students succeed with concepts covered in the general education setting. These year-long courses will take a deep dive in order to help students learn and implement decision-making skills necessary to become wise and knowledgeable consumers, savers, investors, users of credit, money managers, citizens, and members of a global workforce and society. In addition, the course will emphasize the important skills underpinning interpreting statistics and probability related to financial situations. The course content will be adjusted to meet students' specific needs each year.

Adulting 101

Grades 9–12

1 Credit

Small group, practical, hands-on course designed to help students develop essential life skills for independent living. Topics include managing personal finances, cooking simple meals, maintaining a clean living space, understanding workplace etiquette, basic communication, self-care routines, and navigating public transportation. Students will engage in real-life scenarios and projects to build confidence and prepare for successful transitions into adulthood. This course emphasizes responsibility, problem-solving, and self-advocacy, empowering students to thrive in everyday life.

Internship Preparation

Grade 10–12

0.5 or 1 Credit

This course is designed to help prepare students to successfully engage in the internship course during the 2nd semester of their senior year. Students will develop a variety of career-readiness skills while researching post-secondary options.

Sustainable Pathway Electives Matrix

One unique graduation requirement for ECHS involves the completion of a “pathway” that will provide a concentrated lens for a student to examine the world. Students will select from one of the following four pathways at the end of their sophomore year, and their chosen area will be the basis for their capstone graduation project.

There is no guarantee that all of these classes will have sufficient enrollment each year so students may have to wait for another school year for their preferred class and/or take an alternate course in their chosen pathway.

STEM Sustainability Pathway <i>Science, Technology, Engineering, & Math</i>		HW Sustainability Pathway <i>Health & Wellness</i>	
Science & Technology	● AP Chemistry ● Bike Maintenance ● Honors Aviation Part 107 ● Introduction to Engineering ● Physics	Science & Technology	● Anatomy & Physiology ● Food, Farming, & Sustainability ● Wicked Problems in Medical Ethics
Math	● Calculus ● Data Science ● Precalculus	Health & Physical Education	● Team Sports ● Personal Fitness
		Humanities	● Psychology
AMD Sustainability Pathway <i>Art, Music, & Design</i>		CD Sustainability Pathway <i>Community Development</i>	
Visual & Performing Arts	● AP Music Theory ● Ceramics ● Drawing, Painting, & Printmaking ● Introduction to Art ● Music, Society, & Activism ● Music Technology ● Music Theory ● Sculpture & 3D Design	Humanities	● Racial Literacy & Social Justice ● Yearbook ● Sociology ● Economics & Equity ● African-American Studies ● AP African-American Studies
Humanities	● AP English Literature and Composition ● Film Studies ● Literature & Social Justice ● Creative Writing	Health & Physical Education	● Sports & Society
		World Language	● All Spanish and Mandarin Courses

Glossary of Terms

Knowing(s): Students will demonstrate continual growth in content and conceptual understanding of common content strands dictated in the Common Core State Standards.

Being(s): When students build a systems thinking approach to their world and their own being, they will have a strong sense of how stewardship for self and environment are interconnected.

Doing(s): Students will understand and explore the skills related to mindset, to personal capacity, and to examine the deep roots of beliefs, connections, relationships and the psychology of working with people.

Place-based Education: The ECHS program will foster rich and vibrant experiences and context learning opportunities in the community in which it actively exists. Challenging the notion of “community” and “community engagement,” students in ECHS will start curricular work in place-based problem solving with organizations, businesses, and individuals working alongside students. As engagement with the local community builds, students will scale to more global challenges.

Ecological Literacy: Ecological Literacy is the ability to understand the natural system that is related to our life. It is a way of thinking about the world in terms of interaction within natural systems including a consideration of the consequences of human actions. (Jiwa & Esa, 2013)

Culture: Culture is a word we use to describe the ‘way of life’ of groups of people or communities, meaning the way they do things. Our students will embrace their own culture as well as the culture of others to integrate patterns of knowledge, beliefs, and behaviors. We look through the lens of multiple perspectives seeking to understand various outlooks, attitudes, values, morals, goals, and customs shared in our greater society.

Community is School: The school cannot exist without community. Building on the power of “place-based education,” the Environmental Charter High School program will foster rich and vibrant experiences and context learning opportunities in the community in which it actively exists. Challenging the notion of “community” and “community engagement,” students in ECHS will start curricular work in place-based problem solving with organizations, businesses, and individuals working alongside students. As engagement with the local community builds, students will scale to more global challenges.



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Appendix: Act 158 Alternatives to Keystone Proficiency

Alternate Assessment Pathway: Successful completion of aligned coursework with a minimum grade of a DVP for each academic content area associated with each Keystone Exam on which the student did not achieve proficiency and **one** of the following:

- Attainment of an established score on an approved alternate assessment: SAT (1010), PSAT/NMSQT (970), ACT (21), ASVAB (31)
- A score of 3 or higher on two AP exams
- Successful completion of concurrent enrollment course
- Successful completion of a pre-apprenticeship program
- Acceptance into accredited, non-profit Institution of Higher Education (IHE) 4 year program for college-level coursework

Evidence-Based Pathway: Minimum grade of a DVP for the completion of aligned coursework for academic content areas associated with each Keystone Exam on which the student did not achieve proficiency and demonstration of **three** pieces of evidence that reflect readiness for meaningful postsecondary engagement consistent with the student's goals and career plan, including:

One of the following:

- Attainment of 630 or better on any SAT subject test
- A score of 3 or higher on AP exam
- Successful completion of concurrent enrollment course
- Successful completion of postsecondary course
- Industry-recognized credentialization
- Acceptance into accredited, non-profit Institution of Higher Education (IHE)
- 4 year program for college-level coursework

Two of the following:

- Satisfactory completion of a service-learning project
- Attainment of proficient or advanced on a Keystone Exam
- Letter guaranteeing full-time employment or military enlistment
- Completion of an internship, externship or cooperative education program
- Compliance with [NCAA Division II academic requirements](#)