

Preservation and Transformation

As we move through periods of growth and change, we face important questions: What is valuable from our past to carry forward? What no longer serves us and should be changed? And how do we discern the difference? Our 2025-26 school year focuses on Preservation and Transformation. Food, water, shelter, and energy systems have changed over time, and there are opportunities to improve the way these systems work to sustain life right in our own backyard. Using our community and our field campus as learning laboratories, the school year offers project-based and purpose-driven lessons. We will measure and observe, construct shelters, build energy systems, track salmon, study weather, restore habitat, and discover how ancient, traditional, and emerging technologies can help us thrive in our home. Join us as we draw inspiration from the natural environment, amplify generational wisdom, and thrive in the world with simple, scaleable, accessible technologies.

This document is an overview of our Fall 2025 course offerings. The overview is listed by courses; however, the presentation of this curriculum will be experiential with students involved in activities, projects, and field experiences addressing several course areas at once. While these course descriptions are subject to modification as the curriculum is finalized, they should help students and parents know what to expect.

MIDDLE SCHOOL CURRICULUM OVERVIEW

SHELTER CLUSTER

This fall, our Shelter Cluster invites you to explore how a variety of shelters have changed over time to keep their inhabitants safe, warm, and dry. You'll ask "how can we use this space in a way that benefits everyone?" as you wander our 13-acre field campus, visit spots around Bellingham and beyond, and even peek into bird nests and burrows. That means thinking not just about comfort and safety, but about community, environment, and the generations who come next. Along the way, you'll step into a variety of roles as you develop the knowledge and skills to form answers to that question. As writer-explorers you will use journaling, interviews, and personal reflection to discover the stories the land holds, and the ones it might still tell. As a design detective you'll uncover the clues in buildings and public spaces that make life easier (or harder) for everyone. And as a scientist-engineer you'll build and test small shelter models out of sticks, clay, and other natural materials to provide shelter in wind, rain, sun, or cold.

Our weekly cluster lab brings these perspectives together. Working as a team, you'll investigate a special place on our field campus and dream up ways to help it thrive. That might mean designing a bridge over a stream, creating signs or path markers to welcome visitors, or imagining how the land could become an even better learning space for future students. Your ideas will take shape through sketches, models, field notes, and shared reflections. This is your chance to leave a lasting mark on a real place and a growing community.

Students will be placed into all of the following:

Place-Based Writing .50 ENG Quinn Wilson

What if a stream could tell a story? What might an old cabin or a quiet corner of our school reveal if you knew how to listen? How can you use writing to discover what's magical about a special place, and show others that it matters? In this class, you'll become an explorer, observer, writer, and expert communicator.

First, you'll use your journal to collect questions, observations, and ideas from the places we explore. Then you'll develop those notes into writing that helps readers see what you see, feel what you feel, and care about the things you've come to value. Along the way, you'll learn how to write clearly, organize your ideas, revise your work with purpose, and develop a strong and flexible writing voice. You'll use rhetorical tools to adapt your writing for different goals and audiences, from personal reflection to persuasive argument. Your final projects will include a shared Field Guide and a collaborative proposal that helps others imagine what the Kinney Creek property could become.

Human Ecology and Design Thinking .50 SS

Jason Quick

Have you ever entered a structure and felt an immediate sense of awe or wonder? Have you ever felt immediately uncomfortable when you walked into a building? How can a place change the way you feel—or even how you act? What are the relationships between environment, inspiration, and action? When do you feel most inspired to contribute to the complex social system in which you live? In this class, you'll explore how the constructions within our shared landscape shape our lives. Who designed them? What user experiences did they envision? How do their design choices affect you and the people around you? By considering the ways that shelters touch the lives of people, you will build upon your ability to empathize with others in the service of creating a more cohesive community. Taking inspiration from historical design achievements and failures, you will observe, measure, and research the spaces around you, uncovering both the good and the not-so-good sides of design. You will learn skills associated with design thinking, modeling, and engineering and take on three creative projects to better understand the hidden aspects of the shelters we rely on and consider ways we can create positive change in the future. For your final challenge, you'll redesign part of a real place in our community to inspire positive change. By the end, you'll see how thoughtful design can help everyone thrive.

Nature's Architects .50 SCI Nicola Follis

What if the best architects on the planet weren't human at all? Bees, birds, and even burrowing animals have been designing shelters that are smart, efficient, and perfectly suited to their environments—no blueprints required. So what can we learn from them? How can nature's designs inspire the way we build our own homes, cities, and communities? By looking closely at the natural world, we can start to figure out what's worth keeping in our current shelter designs, and what might need a major upgrade. In Nature's Architects, you will become a scientist-engineer by exploring the art and science of building shelters and other purposeful structures. We'll do this through biomimicry: using ideas from nature to solve human problems. You'll check out real-world case studies to see how nature has inspired tools, buildings, and machines. At the same time, you'll keep a field journal with your sketches, observations, and creative ideas about how plants and animals build to survive, and how we might borrow their tricks. Then, you'll design and build simple shelters using natural materials like clay, mud, sticks, and rocks. You'll test them in wind, rain, and cold, collecting data to see how they hold up. Along the way, you'll practice teamwork, problem-solving, and design thinking – just like real engineers. In the end, your team will build a full-size shelter out on our field campus, putting nature's genius to the test! By the end of the course, you will help re-imagine how we care for our homes and communities by noticing, preserving, and transforming time-tested designs found in nature.

Legacy Projects .25 ELEC Nicola Follis

This year's 8th grade cohort will complete a legacy project that demonstrates vision, creativity, collaboration, and long-term planning towards a shared, community-oriented goal. Under the guidance of your project mentor, we will meet weekly to brainstorm project ideas and lay the groundwork for effective completion of your project(s) in spring.

Math in Action .50 MAT Nicola Follis

In what ways can math be used in design, art, and building projects? Math in Action is a hands-on math class where you'll work on real-world projects inspired by nature. You will use your creativity and critical thinking skills to explore math concepts like surface area of polygons, ratios and rates, percentages, and dividing fractions. You will start by designing your dream lay-out of the field campus using polygons and ratios after measuring and expressing those found near the school. Next, you will conduct a nature investigation by asking a question that uses percentages, collecting data, showing your data in tables and graphs, and turning it into a grid art mural. In the final project, you'll look and sketch examples of patterns and fractions in nature, design a blueprint for a shelter using fractions, figure out how much material you need, and use decimals to help calculate the cost. Along the way, you can expect classroom practice, mini-investigations, movement games, and problem solving tasks to help you better understand the math you are learning.

Math 2 .50 MAT Quinn Wilson

In this course, you'll deepen your number sense and explore how math connects to the real world through archery, motion, and design. We'll calculate arrow flight paths, analyze target data, and model simple energy equations, all while building fluency with fractions, ratios, geometry, and expressions. You'll interpret graphs, solve hands-on challenges, and use math to make informed decisions. Whether you're comparing accuracy, adjusting designs, or predicting outcomes, this class will help you think mathematically about how things move, work, and fit together.

Pre-algebra .50 MAT Jason Quick

In this class, you will review and expand your number sense and skill with mathematical operations and geometric relationships then use linear equations and functions to describe the world around you. Thinking about how our constructed environment is designed in three dimensional space you will apply this knowledge through the projects you are working on in other classes and explore how geometric relationships, scaling and functions offer a framework for finding solutions to the problems that arise when designing structures that are both beautiful and functional. This class will also look at the historical uses of algebraic thinking and examine the ways that societies changed along with the development of mathematical modeling.

<u>ELECTIVES</u> -- Students will select a *first* and *second* choice from the following options. Due to space limitations, we cannot guarantee that everyone will be placed in their first choice.

Watercolor Landscapes .25 ART Nicola Follis

What is it about a beautiful landscape that inspires awe and emotion? How can you capture that feeling through the use of watercolor paints? In this course, you will learn foundational skills and techniques such as wet-on-wet, wet-on-dry, color mixing, gradients, and textures. We will explore ways to paint skies, trees, mountains, rocks, and water, before putting it all together to create simple landscapes. You will then apply your learning by creating your own landscape watercolor paintings through plein-air watercolor or photo reference.

Circus Arts .25 ELEC Jason Quick

The Circus Arts include a wide range of performance arts intended to entertain and inspire audiences. In this P.E. class, we will explore a variety of activities inspired by circus artists from around the world: including juggling, acro-balance, unicycle, aerial arts, object manipulation, tight rope, slack rope, stilt-walking walking globe, and more. This class is meant to be playful and fun; however, through the study and practice of these circus arts, we will also build body awareness, strength, and flexibility. What impossible thing are you going to do today?

Backcountry Skills .25 ELEC Quinn Wilson

In this hands-on course, you will learn how to thrive in the wild by building shelters, tying knots, navigating with maps, identifying plants, and practicing first aid. We'll train both body and mind with fitness challenges and survival scenarios to be prepared for our all-school overnight backpacking trips (no experience needed!) and explore real trails as a team. Expect orienteering races, gear planning, trail crew work, and creative problem-solving in the dirt: this is where confidence, grit, and wilderness know-how begin.

Fermentation and Food Chemistry

.25 SCI:L

Suzanne Glick

Through Adventures in Chemistry you will begin a journey to uncover and discover clues to how the world is shaped by atoms, molecules, compounds, and their reactions. The main focus will be to produce recipes that include a reactive process. You will undertake cooperative experiments and study through scientific method and hands-on projects what can happen with chemical reactions in the kitchen environment. You will be encouraged to use replicable outcomes to make edible products that can be enjoyed as a class, used as a product line in a marketplace, and included in a recipe book with the results. You will be able to expand the product line, if time permits, to include other products that can be made in the kitchen using food grade ingredients, such as soaps, candles, salves and body care products. Other projects may include a weekly or monthly fundraiser with food products like leavened breads, subscription ordered soup-to-go, ferments that can be observed over time until they are ready, and fruit preserves. The course will also include a biography study of important figures in history, the global salt and sugar trade, simple chemistry terminology, use of PH testing as well as an overview of the Periodic table and how to understand it.

Fall 2025 High School Curriculum Overview

SHELTER CLUSTER

What if you had the power to redesign the world around you? How do people come up with smart solutions to big, messy problems—and who gets to decide what's most important? This fall, you'll take on the roles of critical thinker, storyteller, tour guide, urban planner, and engineer as you explore how design thinking helps individuals and entire communities meet their needs. Using stories, history, science, and case studies from cities around the world, we'll look at how humans interact with their environment, other species, and each other. Each class in this cluster will give you a new lens to see the big picture. You'll take on real design challenges at our field campus, in Bellingham, and beyond: build a durable bridge at the field campus, redesign parking spaces to fill a more urgent need. In a mix of teacher- and student-directed projects, you'll master the design process that effective creators use every day, building confidence in your ability to positively impact both your own life and the world around us. What should we carry with us into the future—and what needs to change to create a world that works better for humans, animals, and the natural world?

Survival Stories .50 ENG Marley Simmons-Abril

Teacher-directed

Imagine you wake up and society as you know it is gone. How do you find food, shelter, and safety? When we are stripped of modern comforts-or when we leave them willingly-what do we hold onto and what do we let go of? This class will explore the topic of *shelter* (and other human needs) through the lens of people trying to survive without them. You'll read survival stories where characters face intense challenges – against the environment, against others, and even against themselves. We'll prioritize time for deep reading to build strong comprehension, and you will have plenty of choice in your book selection and pacing as we proceed through the reading list. We'll focus on smart strategies for analysis and writing, with skills workshops that target important skills like summarizing, reflecting, and backing up your ideas with solid evidence. You'll choose a theme that interests you most-like finding food, surviving harsh weather, or the need for friendship-and follow it through every text we read. We will complement our books with movies, stories, and articles that touch on your chosen theme, comparing the quick thinking of survival characters with industrial-age systems and hyper-modern solutions like Smart Rings and AI chatbots. Hone your discussion and writing skills through a series of structured workshops, and express your ideas using music, visual art, and recorded audio. By the end of the course, you'll bring everything together-design thinking, what you've read, and your own ideas-to create a powerful, original response to the big question: How do we use design to transform challenges into opportunities?

Urban Design for the Future

.50 SS:US/ SS:CV

Marley Simmons-Abril

Teacher-directed

What happens when a basic need like housing becomes scarce, unaffordable, or unsafe? What events, policies, and trends in our past led to the current state of our cities? As people around the world move into cities, housing has emerged as one of the toughest challenges cities face today, impacted by economics, planning decisions, climate changes, and social demographics. In this class we will look at some of the crucial choices that city planners must make about land use, infrastructure, and resource allocation, and we will contribute to housing solutions right here in Bellingham through participation in the Adaptive Housing Competition. First, you will explore your own land use priorities and develop them into a pitch for the classic "parking spot challenge." Next we'll look at ways that historic policies like redlining and restrictive covenants shaped the housing patterns of our cities. Finally, we will use real city

data and the UN's Sustainable Development Goals to evaluate a modern American city, researching its past to better understand its present. The class culminates in a report or proposal that shares an informed, vision-oriented, and sustainable pathway for current and future housing solutions right here at home. This class can be taken for civics or history credit, depending on student need and interest.

Engineering .50 SCI:L Marley Simmons-Abril

Student-directed with teacher support

What's the best size and shape of trusses to make a strong bridge? Using that knowledge, what is the most durable design for a bridge over Kinney Creek so we can access the back half of the field campus? In this class we will use our shared space at the field campus to build, test, refine, and display a variety of useful, durable structures. We will start each week with a guiding question posed by the teacher or by yourselves. You will then have freedom to tackle each challenge your own way-in small groups, or as a whole cohort. Analyze forces to build a bridge, devise waste-water treatment for our hand-washing station, and design pumps to move excess water on the property. Hone your leadership, vision, and sense of efficacy as you take charge of your learning process. Reflection and synthesis are essential to experiential learning, so you will be responsible for documenting your learning process and sharing the results at the end of the term. With access to the field campus and a variety of complete projects aligned with Next Generation Science Standards, this student-directed engineering class gives you the freedom to independently explore, experiment, and build. Check out teachengineering.org or pblworks.org to preview potential projects.

Math Club .50 MAT Frank Kuhl/ Ben Rathkamp

Independent study with teacher support

Working side-by-side with your cohort, but at your own level and pacing, you will pursue math learning in a course of your choosing. Younger students will study algebra 1 or geometry, while older students can fulfill their third math credit through a variety of courses. Options for study include algebra 2, statistics and probability, consumer finance, pre-calculus, and calculus. Math tutors will be available to support you in your courses, help you understand and apply new concepts, and present interesting puzzles for shared solving. Learning together allows for collaborative solution-finding, as you naturally share what you're working on and talk through challenges together. Despite different levels of learning and independent pathways, you will be engaged in the subject together and with instructor support. You will earn credit in the specific math course you study, with course titles reflected on your official transcripts.

World Languages .50 WL Marley Simmons-Abril

Independent study with teacher support

Choose from over a dozen foreign languages to study, including American Sign Language, Farsi, Mandarin, and Arabic. World Languages combines student choice and interests with in-person language practice and a multi-media final project in the language you choose. In this class, you will identify a language of study from the online courses, supplementing your study with Duolingo and conversation programs. Your final project will be a multi-lingual video that introduces viewers to a local place that holds a lot of meaning for you. This video will combine storytelling, images, music, and learning from your social studies class to capture and share something essential about your world.

Floral Design .50 ART Laura Wheeler

Teacher-led

Work with business-owner and floral designer, Laura (Humble Bouquet) as you explore the artistic and botanical art of floral design. This course includes artistic instruction for nature-inspired floral design, cut flower and plant identification & care, sustainable mechanics and practices for arranging flowers and floral crafting, community service, and fundraising for the school while emphasizing sustainability and artistic expression.

Fermentation and Food Chemistry

.25 SCI:L

Suzanne Glick

Teacher-led

Through Adventures in Chemistry you will begin a journey to uncover and discover clues to how the world is shaped by atoms, molecules, compounds, and their reactions. The main focus will be to produce recipes that include a reactive process. You will undertake cooperative experiments and study through scientific method and hands-on projects what can happen with chemical reactions in the kitchen environment. You will be encouraged to use replicable outcomes to make edible products that can be enjoyed as a class, used as a product line in a marketplace, and included in a recipe book with the results. You will be able to expand the product line, if time permits, to include other products that can be made in the kitchen using food grade ingredients, such as soaps, candles, salves and body care products. Other projects may include a weekly or monthly fundraiser with food products like leavened breads, subscription ordered soup-to-go, ferments that can be observed over time until they are ready, and fruit preserves. The course will also include a biography study of important figures in history, the global salt and sugar trade, simple chemistry terminology, use of PH testing as well as an overview of the Periodic table and how to understand it.

Senior Capstone -- Seniors will be automatically enrolled in:

Capstone I .25 CTE

Marley Simmons-Abril

The Capstone is a student-led project focused on spring term. The fall term sets the foundation for spring, maximizing your time. You will build a plan to address a pressing need or challenge observed in the world. Whether your response takes an artistic, mechanical, or practical form, creativity is not just encouraged – it's expected. The Capstone experience is a harmonious blend of personal meaning and community significance, shaped by your unique vision. Draw inspiration from varied fields like biology, literature, and engineering, and immerse yourself in field learning, internships, or work experiences within our vibrant community. As part of this fall course you will prepare for your post-graduation plans. You will end the term with a resume and cover letter specific to your personal goals, recommendations from teachers or other mentors, and volunteer experience that will help bridge the gap from high school to early adulthood.

Guide to course formats

Guide to course formuts		
Teacher-led	Independent Study	Student-led
-Course designed and led by a teacher in subject of their expertise -Most familiar in a school context	-Pre-planned course that uses an existing curriculum (Greenways Academy) or a curriculum created jointly by the student and advisor -Self-paced -Supported by an advisor or teacher	-Adapts the Sudbury Model for collaborative, student-led experiences and study opportunities -Students set the weekly goals and agenda, following curiosities as they naturally emerge -Structured and moderated by a teacher
Credit-earning options offered outside of EA: -Running Start at BTC or WCC -Service learning, job shadow, internship, volunteer position, or paid position		

Department codes: ART - Art; ENG - English; WL - World Language; H/PE - Health/Physical Education; MAT - Mathematics; CTE - Career and Technical Ed; SCI - Science; SCI:L Lab Science; SS:CV - Civics; SS:US - United States History; SS:WA - Washington State History, SS:WX - World History/ Contemporary World Problems; SS:EL - Social Studies Elective; ELEC - Elective