

COMPASS SCHOOL



CURRICULUM GUIDE

Compass School

Westminster, Vermont

Vision

Compass School provides a unique model for publicly accessible education, serving children in our region while making an impact on the larger educational world. We embody an inspiring learning community that balances personalized education with high expectations for all, leading each student to successful graduation and post-graduate experiences.

Mission

The Compass School inspires and educates students to gain the knowledge, skills, and personal qualities essential to pursuing their dreams and having a positive impact on the world.

Our Values

At Compass, we...

- Integrate rigorous academics with teaching to the whole person (intellectual, emotional, social, physical, and aesthetic).
- Live and teach our values, creating a community of respect, tolerance, democracy, healthy relationships, and service.
- Establish student responsibility, leadership and ownership.
- Recognize the importance of great teachers—skilled, committed, inspired, whole people.
- Ensure that all students experience a variety opportunities and approaches to learning.
- Personalize our approaches and attend to individual needs and passions so that every child can experience success.
- Hold high expectations for all.
- Combine classroom learning and real world experiences that extend education beyond the school walls.

Learning Results

The Compass program is thoughtfully designed to develop:

Knowledge and Academic Achievement through rigorous courses designed to address meaningful issues using a wide range of learning styles.

Citizenship and Leadership through involvement in school wide democracy, community service and interaction with diverse cultures near and far.

Self Awareness and Confidence through our rigorous portfolio evaluation process requiring all students to reflect deeply on their strengths and areas for growth.

Problem Solving and Critical Thinking Skills through diverse experiences that demand students apply their learning to real world challenges.

The Ability to Work with Others and Value Diversity by working closely with peers and adults to create a stronger community at Compass and in the larger world.

Compass School

Westminster, Vermont

Compass Middle School

The Middle School at Compass is an outstanding learning opportunity for students in the 7th and 8th grade whether they intend to remain at Compass or attend another educational institution for high school. The curriculum is specifically designed for meeting students where they are, both academically and socially. It is engaging and dynamic and takes into account the often-dramatic developmental differences between young people at this time in their lives. The curriculum enables graduating 8th graders to have a successful transition to high school on both an academic and personal level.

Compass Middle School has its own unique culture, and yet is integrated into the Compass High School community. This affords our students many excellent educational opportunities with older students and Compass High School Faculty. Some of these include: health and culture week, higher-level courses, student mentors and role models, exploratories and intensives, use of state-of-the-art technology and sports teams. Perhaps most important in this relationship is the constant exposure the 7th and 8th graders have to a larger culture of care and quality. They witness first hand that caring for each other and caring about their education continues through high school, so that once they graduate they are mature enough to remain authentic and honest within themselves.

Foundation of the Curriculum

The foundation of the Compass Middle School curriculum consists of interesting year-long courses including:

Science

Humanities

Mathematics

Spanish.

Each course is designed to develop the knowledge, skills and personal qualities essential for a middle school student to experience success in high school and life. Educators often collaborate on larger projects and units, allowing greater integration across disciplines. In general, there is more focus on depth rather than breadth and on quality instead of quantity. There is a strong commitment to students using their minds well instead of rote memorization. For more information and details regarding this year's classes please visit the Compass School website: www.compass-school.org.

Compass School

Westminster, Vermont

Faculty utilize a wide range of practices to accommodate the wide range of student learning styles. However, certain aspects remain consistent throughout the program. These include:

Small class size

Challenging academics

Emphasis on Critical Thinking

A culture of care and quality

Individualization

Meeting each student where they are academically to develop their personal best.

Design Principles

Personalized: Teaching and learning is personalized to the maximum feasible extent. Students have diverse needs, interests, goals, and learning styles. It is imperative that educators know students well and have excellent rapport with them, in order to be of greatest service. To accomplish this the student : teacher ratio is low, teachers work with the same group of students for extended lengths of time, and individual and group advisory meetings are part of every week.

Less is More: The school focuses on helping students gain depth and expertise in a limited number of essential qualities, skills, and understandings. Unlike typical “mile wide and inch deep” approaches to curriculum, learning is more about “*uncovering*” questions, “*discovering*” new understanding than it is about “*covering*” content.

Student Responsibility and Democracy:

Students are given responsibility for their education and for the creation of an inspiring democratic learning community. Every aspect of the school encourages students to become increasingly responsible for directing their learning and supporting others. Students set goals, help plan learning experiences, participate on staff committees, and participate in school-wide management and decision-making.

Culture of Quality: There are high expectations for all students regarding their development of knowledge, skills and personal qualities. Each student has unique strengths and great effort is made to enable all students to continually improve on their personal best. A culture of quality pays great attention to the work each student is doing to learn and improve, and less attention to which student has the greatest ability.

Compass School

Westminster, Vermont

Service, Leadership and Stewardship:

The Compass Middle School is based on the idea that all people, no matter what age, can make a difference in their life, in their community, and the world. The Compass School inspires and empowers students and educators to bring out each other's best, to contribute meaningfully, to be active leaders and to make a difference.

Real-world, Relevant Learning: The educational program is rooted in the "real world": its people, ecosystems, cultures, and its needs. The communities of the Connecticut River Valley and the World are our classrooms as students and staff engage in projects beyond the school walls. Rigorous academics are integrated with real-world projects and explorations.

Interest Drives Learning: Education at its best is an adventure full of wonder and discovery where questions and inquiry guide the process. An education that is responsive to student interests, staff expertise, and community needs must continuously reinvent itself.

Demonstration of Learning: Students present their learning before family, peers, local community members, and experts from relevant fields. Graduation from 8th grade is not based on "seat-time" but on the students' demonstration of their learning and readiness for their next major endeavor; high school.

Educator as Coach: School staff perceive themselves as generalists first and specialists second. Their role is closer to that of a "coach" than the familiar image of teacher-as-deliverer-of-information. The curriculum is dynamic in order to respond to real needs and learning opportunities as they arise.

Diversity and Multiculturalism: The school nurtures and supports every student by creating a community that values diversity and inclusiveness and that fosters a feeling of warmth, acceptance, unconditional respect, care, craftsmanship, and fun. The curriculum draws on the richness of the local community's diversity and that of other nations and cultures to provide all students with a deeper understanding of the world.

Wisdom and Insight: All students have innate wisdom and the ability to have profound insights. The Compass School inspires and educates students to become highly capable, healthy, wise, responsive, articulate, and engaged world citizens. Helping students understand and live from their innate wisdom and intelligence is vital to serving our students well.

Middle School Student Assessments

There are many unique aspects of the program designed to improve the quality of learning, assessment and culture in the Middle School. A few of these are described below.

Presentations of Learning

At the close of every trimester, each Middle School student gives a Presentation of Learning (PoL). The heart of their PoL is sharing their most significant learnings for that trimester. These may come in the form of insights, understanding or skill development, and often are not related to one particular assignment but instead represent a significant change that has taken place within them. In addition, the PoL addresses academic growth, personal growth, challenges and the student's plan for moving forward.

Portfolios

Each Trimester Middle School students complete an Academic Portfolio. The Portfolio provides an opportunity to collect, select, reflect on, and document learning that has taken place during the past trimester. In this way, students examine their work and experience for areas of strength, weakness, improvement and interest, and make connections to the Compass Learning Realms.

Reports Cards

Students receive a comprehensive Report of Learning for every class each Trimester. Student learning and development is assessed via a framework of Learning Realms that include:

- Knowledge

- Critical Thinking

- Personal Development

- Communication

- Community Involvement.

This in-depth report provides students and parents with much greater detail and perspective on the student's personal and academic development and trajectory.

8th Grade Roundtable

The Roundtable Gateway will still exist for students intending to graduate from the 8th grade and will include learning and growth from 7th and 8th grade.

Compass School

Westminster, Vermont

Middle School Student Community

Advisory

Advisory is a long-term commitment to the personal and academic growth of every Compass student. Advisory meets 2-3 times per week for 30-90 minutes. An advisory typically has between 6-8 students and one faculty advisor who remain together for two years.

Middle School Community Meetings

Community meeting occurs twice a week and includes: Current Event student presentations, designed to keep students connected to what is happening in the world today; student and community celebrations and issues; working on the Middle School Newsletter which, is produced by students near the end of each trimester, and more.

Cultural Immersion and Exchange

Experiences that take students outside of their cultural framework are vital for their development and give them greater perspective on their own lives, ways and relationships. We address this in a number of ways and recently have developed an immersive exchange program with an innovative “sister” school, the *ConneXions Community Leadership Academy* in Baltimore. Each year our school and families will host 8th graders from urban Baltimore, and their school and families will host us as we explore each other’s culture, schools, and lives.

In addition each year the entire Middle School student body has a Learning Expedition exploring a city or natural area. Destinations have included Boston and Cape Cod. We also have a variety of visiting educators and exchange students that join our community and add to its richness and diversity.

College Day

Each year the entire Middle School student body and staff visit one or two University Campuses in the region to give the students a glimpse of college life and some of the opportunities available to them.

High School at Compass

The High School Program at Compass helps students develop the knowledge, skills, and attitudes to be ready for life beyond high school. We aim to encourage and prepare every student to be ready for college while also developing the traits to succeed in the world outside school. The high school curriculum is designed to ready you for this transition to independent adulthood. Small class size led by exceptional teachers create learning experiences that are personalized, challenging, and interesting for all students as you expand your horizons.

9th and 10th grade: Building a Foundation

The 9th and 10th grade years set the framework for students to develop as good learners and good community members. Students are expected to develop competency in all the learning realms—Knowledge, Critical Thinking, Communication, Personal Development, and Community Involvement. Students are led to reflect deeply on their individual strengths and areas for growth, and through the portfolio process, support of their advisor, and work in classes, exploratories, and other programs, are challenged and supported to progress in all these areas essential to success in school and beyond.

Compared to Middle School, expectations in all classes are ramped up considerably. While part of this increased challenge is a matter of workload—students are asked to read and write more, move at a faster pace in math and Spanish, think independently as scientists—much of the challenge is the increasing complexity of thought demanded in classes. The 9th and 10th grade years are a time when students begin to develop independent ideas, to think more critically about issues, to connect concepts they learn in class to their own lives and life in the world around them.

Students have numerous opportunities in 9th and 10th grade to test their wings in this more independent thinking. In Humanities, focusing on American Studies, a unit on Arts for Social Change asks students to extend their academic learning about the American Dream and American Culture and make a difference with a social issue of importance to them. Students are asked to create plays, make personal connections to literature, interpret historical events, and present their thinking in writing and presentations in a wide range of formats. In Science, students use Biology, Physics, Earth Science, and Chemistry to study critical scientific problems facing our society—how to promote environmental and personal well being, what are the best and most promising uses of technology, how do we know what is true?

Compass School

Westminster, Vermont

In Spanish and Math, students are grouped by ability to progressively develop skills of fluency and comfort with the languages of these essential disciplines.

Outside these regular classes, students are led to develop through a diverse range of learning experiences.

Exploratories allow students to explore in the arts, music, and athletics, pursue individual interests through independent study, or even perhaps teach a class to others. An all school mountain trip in October brings the whole school together outdoors in a shared pursuit. Community Service Winter Term asks each student to join a group that applies their knowledge and skills to addressing a real problem in our surrounding community. Leadership opportunities abound, as students are elected to the Student Judiciary or Student Council, manage the computer network in Tech Club, maintain buildings and grounds, or serve the school and community through other service opportunities. Each Spring, the whole school goes on a college visitation trip, helping students see themselves as college students while learning what they value in different college settings. In May, the 9th and 10th grade class undertakes a 3 day trip that connects their course curriculum to the world outside Compass. These trips have taken us to New York City, Montreal, and the Maine woods as students learn more about their world through direct experience. The school year culminates with Project Week, when all students are expected to pursue in depth an area of interest through an individual or group project. From work internships to making films to conducting scientific research, this is an exciting time around school as students develop as learners and thinkers.

11th Grade

The 11th and 12th grade curriculum follows the theme of “The World Beyond.” Academically, this relates to studying the world beyond our US borders. More personally, this focuses on students readying themselves for the world beyond high school.

In Humanities, part of the year is devoted to core classes by grade level. 11th graders study World Culture, Geography, and Current Events, complete an overview of World History, work in Writer’s Workshop, and practice for SATs. When not in Junior seminars, 11th and 12th graders have a choice of electives that explore significant topics in greater depth. Some past offerings include: Shakespeare, Religions and Culture, Utopias, China—The New Power?, World War II, and Who is Crazy? In the Spring, the electives combine Science and Humanities in courses such as Filmmaking, Oceans, The Human Brain, and Fast Food and Sustainability.

Compass School

Westminster, Vermont

Science courses in 11th and 12th grade ask students to think and act as scientists— designing their own experiments to pursue scientific questions of importance to them. Core curriculum in 11th and 12th grade science covers the fundamentals of Chemistry and Physics, with electives offered throughout the year including Ornithology, Forensic Science, Psychology, and Zoology.

In Mathematics, students are required to complete Algebra 2 and most students work through Calculus by their senior year. In Spanish, students work towards greater fluency in readiness for the 11th grade Global Connections trip to Mexico for cultural immersion, language development, and increased global understanding.

Our Spanish language focus allowed us to develop a partnership with a school in Carbo, Mexico that involves our entire junior class traveling there for over two weeks in Winter each year and bringing their students here for a week in the Spring. During this exchange, students live with families and use their language skills in authentic settings.

As part of this Mexico program, we're able to dedicate curricular time in Humanities and Spanish classes for trip preparation and reflection. For two months before the trip, the 11th grade Humanities class is dedicated to studying issues along the US/Mexico border related to immigration, economic and foreign policy, and human rights from multiple perspectives. In Spanish, students learn about Mexican culture and language to be ready to immerse themselves when they get to Sonora.

In May, 11th graders work on Junior Projects— independent research projects to pursue a personal interest while applying academic skills. These projects help student prepare for the much more demanding Senior Project required for graduation.

Juniors can personalize their learning through independent study, proposing or leading exploratories and intensives, and choosing high honors projects that expand horizons and reward individual initiative.

Compass supports its students to continue their learning with special summer opportunities supported by scholarships for the Governor's Institute, Experiment for International Living Programs in Asia, and Windsor Mountain International's trip throughout the globe.

12th Grade

We aim to have every Compass graduate prepared with the knowledge, skills, and personal qualities to be ready for life beyond high school—knowledgeable about the world around them, able to communicate well in varied forms, think deeply, have high self awareness, and to lead in making the world a better place. In concrete terms, this means each student must successfully complete all required courses, an independently designed Senior Project and their Graduation Roundtable. Senior year is designed to help students complete these requirements with a sense of direction and confidence.

12th grade Humanities begins the year with Senior Seminar, where students work closely with their teacher and the Transition Counselor on beginning the college application process and exploring ideas for Senior Project. After electives with juniors in October, seniors again have seminar in November and December when they are expected to finish college applications, flesh out senior project proposals, and plan for portfolio completion by May.

By their senior year, we hope students are developing verbal and written fluency in Spanish, comfortable interacting with the language and open to the global experiences this fluency allows. Seniors are expected to write their Spanish portfolio in Spanish—an authentic task requiring high level language proficiency, in addition to passing a comprehensive Spanish oral and written exam reflecting mastery of the material in each division.

Most seniors will be taking Calculus, with appropriate math offerings for students not yet at this level.

We encourage students to undertake independent options in their senior year. Many take college courses or work internships or travel experiences that extend their learning opportunities.

While in many schools the second half of the senior year students can begin to cruise towards leaving high school, at Compass this may be the most exciting learning for our students. 12th graders actively work towards their senior project that is scheduled for April, when seniors have classes suspended to focus exclusively on their research. Students who have met other course requirements and have a clear sense of direction for this project are encouraged to pursue a more extended project that may begin in the winter.

Compass School

Westminster, Vermont

The senior project is a chance for students to demonstrate their learning skills and interests by pursuing an extensive learning project of their own design. Each student must undertake a significant study of their choosing, writing a formal proposal before January that outlines the topic of study and the methodology. Each student is required to present their learning to the community and complete a written component of some type.

This experience helps students develop self-confidence and accountability, through identifying a personal passion and following through on all the elements of planning, organizing, and carrying out this project. This project can be transformative for the graduating student in viewing themselves as independent young adults ready to pursue their path forward.

Some recent projects include:

What is Right with America?—A month long road trip across the US to produce a video documentary on America today.

American Civil Liberties Union Work Study—Volunteering with the ACLU office in Boston to learn more about civil rights and the legal system.

Octopus Research—working with a marine biologist at the Seattle Aquarium to study cephalopods and making an I-movie about this research.

The World Bank and its Power—interviewing at the World Bank in Washington to learn about the culture of the organization and their goals in international development.

Wilderness Challenge—a solo experience in the woods to learn about oneself and our relationship to the natural world.

Midwifery Internship—Working with a midwife with immigrant families in Texas to explore this field and gain great Spanish fluency.

The other major responsibility for seniors is to prepare for their graduation portfolio roundtable with a panel made up of teachers, parents, a student peer, and outside community members. This group determines the student's readiness to graduate based on the student's presentation of their portfolio reflecting upon their mastery of the core subjects of Science, Humanities, Spanish, and Math, as well as the realms of Personal Development, Communication, Critical Thinking, and Community Involvement. The graduation portfolio experience has proven to be a powerful and moving rite of passage for our students, as they are led to reflect deeply on their learning and growth and to demonstrate their

Compass School

Westminster, Vermont

readiness to graduate. Through their portfolio, our seniors show their self-awareness, knowledge, confidence, and sense of purpose that will lead them on to success in life beyond high school.

The tradition at Compass has been for the senior class to make a gift to the school before graduation—building a Japanese rock garden, making a beautiful wood podium, landscaping outside spaces. After all these accomplishments, the seniors celebrate at a graduation ceremony honoring each individual, with handmade, personalized diplomas reflecting each person’s unique qualities and contributions to the Compass community.

Curriculum Extensions

Compass has ambitious goals for all its students. We expect every child to develop not only as a good student but also as a good person. For us, this means being knowledgeable and skillful academically, and community minded, culturally aware, responsible, healthy, self aware and self directed. This doesn't happen by chance nor can it happen only through the academic curriculum. We know that students need diverse, purpose driven experiences to achieve these lofty goals. In addition to academic requirements, all Compass students are required to participate in the extended curriculum that we feel educates the whole person and readies our graduates for life in the world beyond the school walls.

Travel

Our goals for cultural education are subsumed in our mission statement. We truly believe learning occurs beyond the classroom walls and that we want our students to feel connected to the community from within our school to the world at large. And we believe that our students benefit from seeing themselves as global citizens, connected to people throughout the world, and members of a global community where they may find themselves everywhere at home. Thus our goals have two distinct threads:

1. To expose all of our students in as many ways as possible to different cultures and places.
2. To provide our students with direct experience with other cultures, and particularly with direct immersion as the most powerful experience we can provide.

Achieving our goals requires using every means possible to connect students to cultural diversity. For our students, we know we must build interest and awareness in the world through a range of programmatic efforts, not simply disjointed events that pay lip service to the larger world. We've made a school wide commitment to international education that pervades not only the specific programs we offer relating to foreign countries, but also underlies every part of a student's education at Compass aimed to expand their perspective, peak their curiosity, and inspire their confidence to be strong and productive community members who are committed to creating a better world.

Every graduate of Compass has traveled internationally, and many have done so more than once. This is the result of a developmental approach that bring students to see the value and have the skills, confidence, and interest to engage in international travel. From the smallest commendation in all school meeting for a student who went outside his bounds in a weekend trip to the city to our kids presenting on life in India to 200 adults at Keene State University, our students continually hear and see the message of our valuing connecting to the larger world.

Compass School

Westminster, Vermont

The whole school climbs a peak on Mountain Day and experiences college life on College Visit Day, everyone goes on three day Spring trips, everyone sees Senior Project presentations, is invited to participate in summer program scholarships and offerings, sets personal goals in the portfolio roundtable process, is exposed to a curriculum that expands from the local to the international, participates in community service, engages in Culture Week, pursues personal interests in our annual Project Week, shares our community with our school partners from Baltimore and Mexico, admires our exchange students who are away from home for a whole year, and hears and experiences countless other messages that support the value of cross cultural learning that help them develop the dreams and the skills to be ready for this learning. It is the combination of all these experiences that show how Compass lives it values and brings **all its students** to see themselves as global citizens interested in and ready for participation in international travel and learning.

Below are some programs reflecting our focus on international education. There is a cohesive spirit that connects these efforts that is greater than the sum of the parts.

Program Highlights

- * Required foreign language for all students
- * Junior Year Study in Mexico
- * Baltimore Urban Exchange
- * 11th-12th Grade Global Studies Curriculum
- * Junior/Senior Projects
- * International Exchange students
- * Summer Travel Scholarships
- * Art for Social Change Project
- * Healthy Culture Week
- * Exploratories
- * All School Spring trips

Much above may look like “special” programs. By design, our school schedule includes such specialness—about 140 days of our year follows a traditional schedule with the other 40 devoted to other learning structures. This reflects our recognition that not all learning occurs in the classroom or in 90-minute chunks. These 40 days include Culture Week,

Compass School

Westminster, Vermont

First Friday Trips (all school events, such as Mountain Day or College Day), Community Service Winter Term, Spring Trips (3 day **all-school** trips that have gone to Montreal, Boston, New York, and Maine), and Project Week. While not all these days are dedicated to International Education, we believe these extra-ordinary learning experiences open students' eyes to the world beyond the classroom and help them see the value of direct experience in the larger community.

Exploratories

Exploratories are intended to develop well-rounded individuals by exposing students to the wealth of learning beyond traditional academic core subjects. Students are required to successfully complete exploratory courses in physical education, visual arts, and performing arts. Other exploratory offerings may include computer technology, cooking, video production, holistic health, creative writing, woodworking, yearbook, gardening and other appropriate topics suggested by students and faculty.

Students are required to participate in exploratory activities three afternoons each week. Each student must minimally receive 2 exploratory credits in physical education, and two in the arts, for a total of 12 credits, in the course of the school year.

It is our hope that students will go far beyond these minimums in exploring the wide range of experiences that make our lives whole and rewarding. Students engaged in similar activities outside the school program can apply for credit in the exploratory requirement. There is a process for students to propose, and lead, individual or group exploratories or to do exploratory activities outside school.

Community Service

The Wednesday schedule differs from the rest of the week. Every other week all students participate in Community Service in the afternoon. On opposite weeks, the afternoon is dedicated to special school events that might include guest presenters, portfolio worktime, school governance town meeting, or other all school events. Community Service offerings occur in the school or in the larger community. In-school service includes School Council, Student Judiciary, Building and Grounds, Admissions Committee, and Technology Club. All students are expected to participate in at least 90 minutes of community service every other week through this Wednesday afternoon program or the equivalent outside school.

Compass School

Westminster, Vermont

Community Service Winter Term

As part of our belief in connecting students to the community, and in an effort to apply academic learning in the "real world," Compass students participate in a "Winter term" in February dedicated to Community Service Learning. This break in the regular schedule allows students to work in across grade level teams to use their academic skills to address real community needs. We solicit "problem statements" from community partners that define a particular need for which they seek a solution. A team of students, working with a teacher, determine a plan to study this problem and produce a report, solution, or service to address the community need. From Winterterm, students learn about working in uncertainty, exercising self-direction, aiming for quality and effectiveness, and making their very best effort to move things forward even if you are not always sure where it is leading. This has proven a great opportunity to allow students to be involved in real learning for the real world while seeking to make a real difference for our community.

Healthy Culture Week

Health Week is an intensive period of time dedicated to general issues of health and wellness of individuals and the community. Organized thematically and encompassing a wide range of activities from presentations to hands-on activities, the Compass community works together to support healthy lifestyles for all students. Some topics that may be addressed are nutrition, safety, first aid, mental health, consumer health, human growth and development, human sexuality, issues of substance use, diversity, environmental sustainability, and healthy living on a personal, community, and global level. The focus of our work is raising awareness and helping students develop the ability to make informed, responsible, and healthy choices.

Project Week

Project week is the culminating event for the Compass school year. This is a chance for students to synthesize their learning throughout the year in self-directed, student or faculty-initiated projects under faculty supervision. Students are asked to develop projects that relate to course learning goals while allowing each student to pursue areas of particular interest. For example, a 9th grader may choose to demonstrate her understanding of US history and environmental science and the skill of being a clear and effective communicator by developing a web site detailing the debate over oil drilling in the Alaskan wilderness. Project week concludes with a community celebration of learning.

All School Meetings

An important element of the Compass School community is All School Meetings. Scheduled twice weekly, these meetings are a chance for the whole community to come together, celebrate accomplishments, address challenges, set common

Compass School

Westminster, Vermont

direction, and be together in a common space. Students often are given responsibility to lead all school meetings to help contribute to the continuing development of a positive school community.

Advisory

Advisory allows students and teachers to develop close and long-term relationships that help support each student in his or her learning and living at Compass. Advisory groups are organized to have one teacher meet 3 times per week with a small group of students over the course of the year.

Advisory groups discuss issues from within and outside school pertinent to students and teachers and serve as a primary vehicle for student governance and representation. Advisory activities might include group building activities, physical activity, community service projects, or working with students' portfolios. Each advisory group also takes responsibility for building clean-up and helps with the school lunch program as well. Advisory activities evolve over the course of the year and can take many directions as the tenor of the group dictates. The advisor acts as an advocate for the student, and is the primary person parents can contact to address general issues and concerns that they might have concerning their son or daughter.

School Democracy

Students learn about democracy by living democracy. At Compass, we aim to model democracy with a powerful Student Council, Student Judiciary, and Town Meetings held several times each year. Each student is encouraged to participate in the school's democratic practices, either through elected positions or through open forum and advisory input. Compass values the input of all and believes our students develop as citizens by exercising their voice.

Mountain Day

An annual Fall tradition is to have the whole school hike together up a mountain in the region. This is a chance to undertake a physical challenge together, appreciate the outdoors, and build community through shared experience. This also helps take learning beyond the school walls and ties to later trips in the US and beyond.

Compass School

Westminster, Vermont

College Visit Day

Every year, the whole school goes on college visits as a group, helping students see themselves as college students while learning what they value in different college settings. This experience over the years really helps students determine qualities of colleges that best fit their interests and style.

Senior and Junior Projects

An important part of senior year is the Senior Project, scheduled for the period between April vacation and the May spring trips. The senior project is a chance for students to demonstrate their learning skills and interests by pursuing an extensive learning project of their own design. Each student must undertake a significant study of their choosing, writing a formal proposal before January that outlines the topic of study and the methodology. Each student is required to present their learning to the community and complete a written, research component of some type.

For most of students, senior project gives them a taste of the field they will study in college and maybe for a career. Examples of past projects include: work with Human Rights Organizations involved with the United Nations, interning with a Broadway Theater Director, shadowing a State Senator, taking a course to be certified in fiber optics, serving with a midwife, and working with a documentary filmmaker.

Juniors carry out a project of smaller scope but with similar expectations in May of their 11th grade year that helps prepare them for Senior Project and the independent learning skills it entails.

Compass School

Westminster, Vermont

Portfolios

Students at all grades are expected to work on a portfolio demonstrating their work in the 5 Compass Learning Realms of Knowledge, Critical Thinking, Communication, Personal Development, and Community Involvement. At grades 8, 10, and 12, students share these portfolios at an exhibition roundtable as part of a gateway or graduation process.

Portfolios are grades 8 and 10 ask students to reflect on areas of strength, growth, and future development in the 5 realms. This work is presented to a panel of that consists of an advisor, another teacher, parents, and a student peer.

The graduation portfolio asks students to demonstrate mastery in each of the 5 realms, and within the realm of knowledge, must present work in each of the core subject areas (Humanities, Science, Math, and Foreign Language).

The graduation portfolio exhibition is presented to a panel of teachers, peers, parents, and outside community members.

Portfolio items are evaluated for quality and demonstrated mastery using a grid that reflects five major criteria: a viewpoint that encompasses wide knowledge and deep understanding; an ability to draw connections among information and ideas; appropriate use of evidence; an engaging voice and awareness of audience; and attention to quality. When students have completed the portfolio, they have learned to inquire, critique, analyze, present, and defend their ideas. They have also learned to manage long-range tasks that require intention, planning, perseverance, initiative reflection, and revision. In short, they are ready for the world outside of school.



High School Curriculum by Subject

Humanities

9-10th Humanities

In 9th and 10th grade students develop independent ideas, think critically about issues, and connect concepts from class to their own lives and the world around them. Specifically, in 9-10th grade Humanities, students develop an understanding of the principles that define the US as a country, how events are related over time, how to weigh historical evidence and make arguments and how geography and economic, political, cultural, and social forces have affected the evolution of American society. Units are organized to focus on specific themes, readings and skills. SAT vocabulary, grammar, smart use of technology, and reading are ongoing skills emphasized each year.

Trimester-long Thematic Units

The American Dream: Myth or Reality?

An examination of this theme takes students from the roots of democracy and freedom, to contemporary American. There is an emphasis on critical thinking as we contrast differing perspectives of history, and as students compare their own values with past and current American “myths.” Discussions form around “what does this term mean, how has the dream changed throughout history, and is the dream viable today?” A variety of readings frame discussions about government’s role in reaching “the dream,” varying definitions of success, and barriers to reaching the American dream. Visual art as well as written assignments and debates or trials are used as ways to explore our focus questions.

A study of an American Decade—its History, Art, Culture, and Literature (1920’s, 1940’s, 1960’s etc.)

One trimester per year, students focus on one decade as a way to delve into that time in history, but also to make connections to other periods and themes we study, such as fear, justice, and social change. Students take notes during lectures, read and watch from variety of sources to learn about major events and people of the decade, then delve into individual research topics in the second half of the course. As a culminating project, the class works together to create a “Living Museum” which is visited by the school and parents in the evening.

Photography for Social Change

Students are asked: How can art encourage change in America? What societal or political issues do you want to learn more about and how can you take your knowledge to the public? This course is organized into four stages: the first stage focuses on using forms of art and language to express ourselves. Then, students look at how people in history have used art as a vehicle for social change and explore current issues that could be changed through action. In phase three, students research a current American issue that they feel strongly about and write a 7-10 page research paper to reflect their learning. In the final phase, students take photographs that illustrate their researched issue; the class then works together to form an exhibit in a local gallery with these framed photographs and explanations.

US History Survey: Who are our Heroes? (or other essential question)

Using a survey of US history, we will ask the crucial question, what makes a hero, and do we celebrate the true heroes in our country? This is an opportunity for students to get a strong overview of US history. Other essential questions have been used as well, such as who makes change in this country?

What Scares Us: A Study of Fear in Literature and History

What is fear, and how does it affect our actions and decisions? There are lots of kinds of fear—from fear of physical danger to fear of the unknown, and in this class, we touch on many using a variety of readings and activities. From Salem's witchtrials and the 1950's Red Scare, to fear of differences and change in the 1930's, (as described in *To Kill a Mockingbird*) students get exposed to and make connections between different periods in American history.

Us vs. Them: A Look at this Phenomenon through the Lens of American History and Literature

This course focuses on issues of justice, injustice, and the boundaries that are formed as a result of race, class, gender, and other differences among us. Students read literature that helps illustrate the "us vs. them" phenomenon, and connect events in history. Debates, discussions, and visuals are all formats for exploration.

Exploration of Artistic Expression on stage and elsewhere

In this course students explore a variety of art forms, examining and celebrating the role of art in our lives. Students study drama fiction, poetry, and history of Blues/Jazz. One goal is to connect art forms—poetry and visual art, for instance. Other important aspects of the course are to learn more about how art tells stories, what makes a good story or performance piece, and, hopefully, how art, in its many forms, can give meaning to our lives, and in turn how we find

meaning in art. Students all write their own 10 minute play and take part in the VT Young Playwrights Festival in Burlington



Sampling of Literature required or offered in above units:

The Great Gatsby, by F. Scott Fitzgerald

To Kill a Mockingbird, by Harper Lee

Secret Life of Bees, by Sue Monk Kidd

Fallen Angels, by Walter Dean Myers

The Things They Carried, by Tim O'Brien

Of Mice and Men, by John Steinbeck

Ragged Dick, by Horatio Alger

Welfare Brat (memoir), by Mary Childers

Speak, by Laurie Halse Anderson

The Outsiders, by S.E. Hinton

The Crucible, (drama) by Arthur Miller

Fences, (drama), by August Wilson

Raisin in the Sun, (drama), by Lorraine Hansberry

Edgar Allen Poe short stories

Night, by Eli Wiesel

10 minute plays

Poetry by wide variety of American poets

- US History texts, current and past newspaper articles are also read and discussed in class
- Other reading is determined by individual students reading ability and choices; independent goals are set by students, with the teacher's discretion. Regular reading responses are completed, using collected passages from the books.

Writing Assignments given within thematic units

Personal narrative/reflective writing

Journal entries

Persuasive essays

Speeches

Analysis of primary sources

Oral histories

Advertisements

Response to literature

Literary essay

Creative writing: 10 minute plays, poetry, short stories, monologues

Mock historical newspaper articles

Research paper (7-10 pages)

Timed essay tests

Notes on lectures and texts

11-12 Grade Humanities

The 11th and 12th grade curriculum follows the theme of “The World Beyond.” Academically, this relates to studying the world beyond our US borders. More personally, this focuses on students readying themselves for the world beyond high school. Part of the year is devoted to core classes by grade level. These courses are described below:

Junior Seminar

The emphasis is World Culture, Geography, and Current Events. Students complete an overview of World History or focus on an area of nonwestern history, such as Latin America. There is a focus on writing throughout the year, and students complete a variety of assignments, with the goal of developing a writer’s voice, diversifying sentence structure, writing on demand, and refining mechanics. They also practice for SATs, read current events, and complete a junior project, which includes a 10 page research paper.

Senior Seminar

The emphasis is college planning, reading literature, and reflecting on how their skills and interests may translate into a place beyond high school. Students write college application essays, complete a resume, study for SAT’s, practice mock interviews, attend college fairs, meet with the college counselor, and read novels both as a class and in small literature discussion groups. Finally, they design, plan and carry out an independent project as described briefly below:

Senior Project: A Culmination of learning, and the continuation of growing

The Senior Project—a graduation requirement—is a major independent endeavor. It is structured for students to explore their interests in a deep and meaningful way. The goals include demonstrating skills and knowledge learned in four years of high school; exploring future career or educational paths; and meeting the challenge of creating and carrying out a personally meaningful project of a depth and scope not previously experienced.

The major components of the project include:

- A broad essential question and sub- research questions
- An academic written piece demonstrating significant research
- Content that is broad in terms of knowledge and skills
- Work that connects to all five of the learning realms
- A real world component (i.e. job shadow; internship; travel; interviews; etc.)
- A 20 minute oral exam post field- work

Compass School

Westminster, Vermont

- An interactive exhibit of their projects to the school and the wider community.

Senior projects have included traveling overseas, visiting UN meetings, going to museums, inventing, interviewing, working in businesses, creating art, composing, and even camping.

11-12th Electives

When not in either junior or senior seminar, students choose among 5-6 week-long electives. The courses vary, but the overall goals include:

- Mastering skills in communication (particularly on-demand essay writing), information handling (both accessing and interpreting information), and critical thinking (drawing connections between ideas, events, and concepts)
- Developing a greater appreciation for and understanding of other cultures and contexts
- Exercising strong work habits to produce quality work in a timely fashion
- Engaging in and enjoying intellectual interchange around complex ideas and concepts
- Development of skill and comfort with reading diverse text

These offerings have included the following in the past, though they change and evolve, depending on teacher and student interest:

Africa

This course asks students to consider: what responsibility, if any, do we have as individuals or a nation to respond to the conditions of life in other places? The learning goals include knowledge and understanding of African culture, the impact of colonization and nationalism on nations, groups, and individuals, and US foreign aid policies. Skills emphasized include: information handling, internet research, reading comprehension and analysis, critical thinking, writing.

Shakespeare

Focusing on one play, students read and usually perform the text, in conjunction with studying relevant history of Shakespeare's life and times and the history of English. The emphasis is on understanding the language, analyzing the characters and images, and discussing the themes within the play—the nature of evil, power, love and so on. Assignments include word collections/studies, critical essay, public (group) performance, visuals, a test on the play, and internet research.

Fate in Classic Drama

This class examines two classic dramatic works: Sophocles' Oedipus Rex and Shakespeare's tragedy, Macbeth. Both Oedipus and Macbeth deal with the issue of fate and freewill, and therefore lead nicely into discussions around questions such as: how much control do we have over our lives; is fate a concept you believe in; and if not fate, then what leads our lives? Do we have free will? We also concern ourselves with the rich language in these plays, study the history of Greek drama, and compare film versions of Macbeth. Assignments include quizzes, essay tests, word collections/studies, critical essay, visuals, and internet research.

Religions and Culture

The goals of this course include: developing a better understanding of world religions and their place in people's lives, investigating how religion relates to culture, exploring spirituality and its place in human life. Students apply skills of critical thinking, information handling, and communication to explore their own thinking and values. Assignments include writing essays, interviewing people of different faiths, reading, and individual research. Guest speakers and field trips help enrich the experience.

The Best and Worst of Both Worlds: an examination of Utopian and Dystopian Societies

Is a perfect world possible, and if so, what would it look like? What do different visions of an ideal--and often nonexistent--society tell us about human nature and the cultures that they came out of? What problems do utopias try to solve and how do these experiments deal with issues of individual freedom, money, and conflict? At what cost would a utopia be worth attaining? What is the purpose and/or consequence of creating and/or maintaining a dystopian society? These questions frame our study of utopian societies as well as the opposite, called a dystopia. Students survey a variety of utopias in a variety of texts, including film. The novel *Brave New World* provides a view of a dystopia. The format of class is group discussions of reading and mini lectures as needed. The class culminates with two assignments: small groups design and then present (in a variety of formats) their own utopias, and students also write a 3-5 page paper or story, using sources from class.

Compass School

Westminster, Vermont

Film-making: An interdisciplinary course in both Science and Humanities:

This course asks students to slow down and look closely at what goes into a film. Movies start as a story—but what makes a good story? And once you have a story, what do you do to make it powerful on the screen? This is a comprehensive course in filmmaking to produce student projects. The course covers basic film terms, film history, and production techniques, including the use of the video technology cameras and digital video editing equipment and software. Students are expected to develop skills in screenwriting, casting, pre-production planning, and digital video editing and post production. The course culminates in an evening film festival of the students' films, which are judged by local film-makers.

Who's Crazy? : A Study of Mental Illness in fiction, nonfiction, and film:

This course examines what people call “madness.” We ask questions such as: How is insanity socially constructed and how has this label changed throughout history. Depending on the chosen texts, other questions arise: What kinds of responses has mental illness received in other cultures? Can “crazy” behavior contribute positively to society? What is the link, if any, between creativity and mental illness, and under what conditions is the boundary between madness and sanity blurred or redefined? Students read and discuss a variety of texts, view films, and write a final research paper on a chosen topic, which they share with the class.



Fast Food and Sustainability: An interdisciplinary course in Science and Humanities:

In this elective, students delve far and wide in studying topics related to food, the food industry, food production, and the many ways food impacts life in the US and around the world. Learning objectives include understanding the science, economics, and politics of the food industry. Areas of study include: economic theory, the Stock Market and consumer rights and power, Government Regulation, and the importance of being scientifically and economically literate. In the Humanities portion of the course, students read *Fast Food Nation* and other articles, and conduct a major independent research project on a food related topic of their choosing.

Oceans

In this cross-disciplinary study of Oceans and Sea Life, students develop an understanding of ocean systems and life in and around the water that covers over half our planet. In Science, students focus on biology of ocean life, looking at currents and organisms affected by them. In Humanities, students explore public policy and economic issues related to the ocean (and particularly fishing), the culture of life around the sea, and how artists have interpreted the sea and life at sea. In the last two weeks of the unit, we go on an overnight trip to the coast to see first hand the history, culture, and science of life on the ocean.

Other elective courses offered in past years:

- China: The Next Superpower?
- The Middle East: Israel and Palestine through the Lives of People
- Iraq War Teach-in
- World War II
- The Russian Revolution
- History of Middle East

Writing Collection

Writing is an integral tool for success in communication, school and life. At Compass School we practice writing in many ways across the curriculum. In an effort to help assess writing skill growth and to organize writing assignments, we have the Writing Collection (WC). The WC is a collection of writings chosen from among the many examples students have collected in their portfolio. Here's the basic explanation:

The ongoing Writing Collection is kept in an organized binder throughout the year. It contains drafts of writing (not just final essays) from a variety of classes (even math). It remains in the Advisory classroom, with the student portfolio work. In Humanities class, students write a reflective essay as a cover letter for the collection. Each grade has different requirements, which are listed on the [Grade Level Requirements](#) handout.

Types of Writing Required for Writing Collection

- Technical/scientific/procedure
- Persuasive/argument
- Fiction/Poetry
- Response to Literature
- Expository/Report
- Narrative/Autobiographical

Humanities teachers use the collections as a tool to assess each student's progress, and to communicate with parents about concerns and celebrations in the evolution of a student as writer. A pass/fail grade is given each year on this collection of writing, and when students are in need of extra help, they enroll in the "Writing Club" which is a writing tutorial led by Humanities teachers as well as trained peers. Other supports are discussed as needed in reports card conferences.

Science

Overview of Science at Compass School

Direct, hands-on scientific experiences form the foundation of the science curriculum at Compass School. The curriculum is designed to develop students who can think critically and creatively, solve problems, employ scientific methods and tools, understand scientific claims and analyze their veracity, participate as scientifically informed citizens, and appreciate the natural world in which we live.

Rather than study just one discipline each year, students work with biology, chemistry, physics, and earth science every year in an integrated science curriculum that approaches these topics through underlying themes, essential questions, and authentic explorations.

Grades 9-10 Science Cycle

Grades 9 and 10 cycle through a two year curriculum which includes study of the scientific method, information analysis (“How do you know what to believe?”), basic chemistry, cell biology, genetics, forensic science, cosmology, geology, evolution, anatomy and physiology, and electives in topics of ecology and design engineering.

Blue Year--1st Trimester

“How Do You Know What to Believe?”

Through the lens of the essential question “How do you know what to believe?”, students research scientifically controversial questions. Through this work students improve their ability to judge the reliability of information and formulate opinions based on analysis of evidence. One content thread is the study of waves, sound, light, and perception, learning the basics of the physical science involved, and connecting this learning to our essential question.

Sample Projects:

- Major research paper on a scientifically controversial topics
- Originally designed web page
- Inquiry-based labs which challenge students to build a deeper understanding of scientific concepts.
- Perception museum display
- Culminating project -- Science Portfolio Exhibition; students reflect on and display work from the trimester and engage in a formal interview presenting their work to an outside evaluator.

2nd Trimester

Chemistry

We begin the trimester by exploring the Kinetic Theory, conducting a few heat challenges that lead us into discussing molecular structure. We then focus on the periodic table and many of the more common elements in our universe.

Sample Projects:

- Birthday Candle heat challenge
- Element research power point
- Periodic table written assessment
- Fireworks Lab

3rd Trimester

“Where are we and how did we get here?”

Students examine how the universe, earth, and life on earth has changed over time. Under the general heading of Evolution, we study topics ranging from cosmology and the solar system to the origin of life, the history and classification of life, natural selection and organic evolution, genetics, human evolution, and biotechnology.

Sample Projects:

- Creating a brochure describing possibilities for life on other planets
- Creating original artwork depicting the hypothetical evolution of humans in the future
- Completing a set of genetics challenge board activities
- Reading an evolution-related book and writing reflections
- Final formal essay
- Final synthesis project

Green Year --1st Trimester

Scientific Methods and Thinking

In this introductory unit we create a strong foundation upon which we can build our continued science learning. Students undertake labs, challenges, and experiences within a whole range of science fields. This “tour” of the fields of science introduces students to the broad diversity of scientific disciplines. Perhaps more importantly, our focus is on the scientific method and scientific thinking itself.

Sample Projects:

Concept map of the fields of science.

Lab reports in a number of formats.

Reflective essay on personal preferences within the fields of science.

Excel spreadsheet to present data.

Original piece of experimental research.

Annotated literature search.

Formal scientific paper presenting an original experiment.

Graphic portfolio display and interview for the culminating science fair.

Web page presenting at least one of the above works as a portfolio piece.

“What Floats?”

We work on critical thinking skills as we investigate such science concepts as buoyancy, gas laws, states of matter, and fluid dynamics. Students take on numerous hands-on challenges and present their results and thinking in a variety of formats including formal written reports, posters, interviews, and animated Power Points. The trimester culminates with students creating a reflective portfolio poster of their best work and formally presenting it to outside evaluators.

Sample Projects:

- Self designed lab
- Vacuum lab power point
- Cardboard boat challenge
- Portfolio poster presentation

2nd Trimester

Biology

This course in Biology is taught in two sections. One is Cellular Biology, looking at the organelles within a cell and their functions. We expand our understanding by looking at cellular respiration and photosynthesis. We also focus on the processes of Mitosis and Meiosis, leading into a study of how plants and many other organisms reproduce. The other section of this unit is an in-depth study of DNA and genetic engineering. Students begin by building a foundation of knowledge about the structure and function of DNA. With this grounding, they are then able to grapple with the complexities of genetic engineering and its many ethical questions.



Design Engineering

During this six-week elective, students work in design teams that compete with each other on small engineering challenges. The class is very hands-on, involving building, tinkering, problem solving, and teamwork. Through this process, students learn a lot about physics, mechanics, and engineering. Work is documented in the form of individually written lab reports in which students present their results in detail and reflect on their learning process.

Psychology

This six week elective covers topics in the fields of psychology and sociology. Class starts with an investigation of Howard Gardner's theory of multiple intelligences, helping students better understand themselves as learners as they dissect a major theory in modern psychology. The class surveys popular psychological theories from the 20th century, studies the anatomy of the human brain, and completes a neurology lab, before moving on to an in-depth sociological exploration of human behavior. Students analyze and discuss concepts of social-deviance, ableism, and social Darwinism, and complete the course by researching individual topics in Sociology and crafting a five-part lab report analyzing their findings in their chosen area.

Sample Projects:

- Research psychological theorist
- Neurology lab
- Sociology paper with lab and research component

3rd Trimester

Geology

In this 5-week unit, students learned some basic geology as applied to the observed landscape of our region. Some of the major concepts we studied were rocks and minerals, tectonics, glaciations, and river dynamics. Two projects that students created were a computer animation explaining the tectonic history of our region and a dynamic model of river or glacial action. Students also completed a quiz and a final comprehensive exam.

Sample Projects:

- Pet rock research project
- Journal of site visits
- Final synthesis essay

Computer Science

This elective is an introduction to Web page design. Students are first introduced to XHTML and learn how to hand-code pages using a basic text editor. With this foundation in place, they then learn how to use Adobe Dreamweaver to create pages with XHTML and CSS layout and styling. Web graphics and a short introduction to Flash animation are also covered. The final project for this class is an individual Web site each student creates using all of the concepts covered.

Grades 11-12 Science Cycle

Compass juniors and seniors continue to study science in an inquiry-based way, emphasizing science content critical to success in college and becoming scientifically literate citizens. Grades 11 and 12 cycle through a two year curriculum which includes mechanics, electricity and magnetism, physical chemistry, organic chemistry, ecology and evolution. Students also choose science electives which have included options such as ornithology, GIS mapping, zoology, field ecology, design engineering, and advanced topics in chemistry.

Every spring juniors and seniors choose a course which is team-taught by a science teacher and a humanities teacher, integrating these perspectives. Themes have included Film Making, Oceans, Fast Food, and Future Studies. Students are also required to complete an independent science investigation at the end of junior year.

Green Year

Ecology

This course is an in-depth look at forest ecology, with the larger goal of gaining a better understanding of the complexity and relationships of life on earth. Our laboratory for this study is a local forest ecosystem in Westminster, Vermont. In 2006 students mapped and conducted an ecological survey of this piece of land, proposing a trail system and a land use plan to the town of Westminster. Through this work they developed field skills as well as an understanding of general ecological theory.

Sample assignments:

- Ecosystems Dynamics Poster
- Tree ID Quiz, Ecological Theory Test
- Field journal
- Forest site survey
- GIS trail map
- Original page in a tree ID guide
- Powerpoint presentation on town forest

Advanced topics in Physical Chemistry

After a review of Lab Safety and Methods, atomic structure, elements and the periodic table, reactions, equations, and kinetics, students engage in more advanced chemistry topics such as orbital concepts and notation, quantum theory, stoichiometry, and precision laboratory methods.

Students conduct a self-designed experimental investigation, and connect their work to current topics in science in society.

Psychology

This science elective consists of a survey of topics in psychology, including brain and endocrine anatomy and physiology, learning theory, perception, memory, personality, theories of consciousness, and a survey of famous psychologist and their theories of human development.

Sample assignments:

- Presentation— introductory topic
- Presentation— famous psychologist
- Original perception experiment and report
- Personality testing investigation
- Final paper— students are challenged to describe their personal psychological world view and to relate that to the theories, ideas, and schools of thought we had examined in the class

Physics: Mechanics

This course covers mechanics and kinematics, including velocity, acceleration, force, friction, inertia, momentum, kinetic energy, and projectile and rotational physics. Students carry out a variety of hand-on explorations culminating with a design engineering challenge which applies the physics concepts we studied.

Blue Year

Organic Chemistry

This course introduces basic concepts of organic chemistry and puts the topic into a real world context. We start with a survey of organic molecules in our lives, and then students learn the basics of organic chemistry nomenclature. After instruction, guided practice, and model building, students demonstrate mastery on a practical exam. Each student then completes a research paper and gives a presentation on a real-world topic related to organic molecules.

Advanced topics in Life Science

2007- Zoology



Electricity and Magnetism

During the first half of the course students work in the *Conceptual Physics* text and engage in hands-on exercises and lecture/discussion to learn the fundamentals of electrostatics, circuits, magnetism, and electromagnetic induction. The second half of the course is spent on a problem solving design challenge in which students create originally wired electric devices ranging from generators to motors to Tesla coils. In addition to the device itself, each student produces a design journal, an annotated explanatory diagram, a written performance evaluation, and a short research paper on the applications of this technology.

Sample assignments:

- Written exam covering fundamentals of electricity and magnetism
- Deriving information from text
- Lab reports
- Annotated explanatory diagrams
- Originally designing and building an electronic device
- Full mechanical performance evaluation and documentation

Fast Food: Grade 11/12 Humanities/Science Integrated Elective

Food is central to our lives as humans wherever we live in the world. Much more than just a physical necessity, our relationship to food in many ways shapes our daily lives and our culture. After sleeping, food preparation and consumption is probably the greatest focus of our time in our lives. The more we investigate the topic of food, the more interesting the issues it raises. In this elective, we delve far and wide in studying topics related to food, the food industry, food production, and the many ways food impacts life in the US and around the world. A fundamental text for

Compass School

Westminster, Vermont

this study is the bestselling book Fast Food Nation. In the Humanities part of this class, we apply the lenses of Economics and Political Science (as well as some sociology and psychology and environmental science) to deepen our understanding about the world around us. In the science portion we study the chemistry of nutrition and analyze our diets and the relationship to physiology and health. We also look at the biology and ecology of farming and food production.

Visions of the Future: Grade 11/12 Humanities/Science Integrated Elective

We look at our present and the past in order to imagine and predict the future. More specifically, we concern ourselves with ethical questions around modern technology from computers to cloning to cure-all drugs, and ponder the question: with all the advances and capabilities we have today, are things improving or getting worse? We read the book *Future Shock*, and the course culminates with a formal debate around our essential question.



Compass School

Westminster, Vermont

Science Curriculum Overview

Division I (Grades 7/8)		Division II (Grades 9/10)		Division III (Grades 11/12)	
Blue Year	Green Year	Blue Year	Green Year	Blue Year	Green Year
What is Science?	Who are scientists?	How do you know what to believe?	What are scientific methods and thinking?	Organic and Nuclear Chemistry	Local and Global Ecosystem studies
General Ecology: Rivers Classification	General Ecology: Aquatic Environments Animal Adaptations	Waves and optics Some electricity and magnetism	Kinetics Phases of matter Classification of matter: solutions and mixtures	Advanced topics in life science Electricity and magnetism	Mechanics: advanced simple machines, velocity, acceleration vector, etc.
Phases of matter Basic structures of atoms Kinetics	Cape Cod Oceanography Cell Structures Human Systems Weather	Comparative Anatomy Classification of Life Evolution Genetics	Geology, Glaciology, Global and plate tectonics DNA Meiosis/Mitosis	Energy History of Science	Advanced topics in Physical Chemistry Integrated humanities/science elective
Energy-types, sound and light Simple machines	Intro to astronomy-the night sky	Atomic structure Periodic Table Reactions and equations	Photosynthesis/Respiration	Integrated humanities/science elective Junior science project	Junior science project
Local Geology Rock Cycle					

MATH

Mission and Philosophy-

Our mission for math is two-fold: to help students build the skills and knowledge they will need to succeed in their future education and careers and also to build strong thinkers. Mathematically we want to expose students to numerous branches of mathematics. Allowing some choice in the upper grades permits students to begin finding appropriate levels of challenge and concepts of interest. We aim to meet the needs of those students who may want to pursue mathematical fields at higher levels beyond high school as well as those who will not. For these latter students, we hope to give them the background and confidence to face math as it appears in other fields, such as statistics and social sciences or geometry and carpentry. We strive to create confident mathematical thinkers, students who have a comfort with numbers and mathematical concepts and can apply these concepts to the real world. We would like to see the students able to apply their mathematical learning to the real world.

Calculus

Students in calculus class explore differential and integral calculus. The year begins with a review of the nature of various functions and their behaviors. The next focus is on the nature of slopes, especially slopes of the tangents of functions. Students utilize pencil and paper for many activities, and also use the computer program Graphcalc to aid in the visualization of functions as well as derivatives. The concept of limit is revisited as derivatives are studied. Throughout our studies, special attention is paid to the graphic behavior of functions, derivatives, and second derivatives. The algebraic manipulations of differentiation (Product, Chain, and Power Rules) is utilized as derivatives of more complicated functions are explored.

By mid-year, we begin our study of integral calculus. The concept of the integral as the area beneath a curve is stressed as we explore the more algebraic components of integration (Sum, Multiplication, Perfect Integral, and Power Rules). We study the Fundamental Rule of Integral Calculus. We work with the substitution method of solving integral problems and then move on to such further applications of integration as calculations for volumes, arc lengths, surface areas, and the center of mass. Fundamental to this class is a clear understanding of the algebraic and geometric underpinnings of what derivatives and integrals are.

Pre-Calculus

We base our exploration into higher mathematics on a Glencoe Text in the same series a majority of the class used for Algebra II. Therefore it is a familiar building block for them to work from. The course builds on the strong understanding the students have gained in past years of exploration, taking them from the grounded concepts of Algebra into the more cerebral strategies of Calculus. We look at limits, trigonometry, sequences and series. This class is intended for students who take mathematics seriously and may want to continue mathematics or study applied fields in the future.

Text: Glencoe/McGraw-Hill,, Advanced Mathematics

Probability and Statistics

Applying advanced mathematics, this class looks closely at how mathematics applies and controls our daily world. We explore Statistics and give the students a strong base for when math is used to explain patterns. Projects with game theory, business math applications, and other research allow students to use mathematics in real world situations.

Text: Statistics for Dummies--excellent examples and explanations.

Sample Projects:

- Casino day
- Business math challenge
- Class research projects



Functions and Trigonometry

Focusing on trigonometry, a branch of math that can help answer numerous problems we have been unable to solve thus far, we look at how trigonometry helps us answer questions around us such as how tall is the basketball hoop, or how far is the ball traveling when thrown from the foul line? We simplify, unravel, and solve equations with multiple trigonometric functions. We use trigonometry to find areas, angles and distances. The course ends with a weeklong challenge based on our exploration of vectors.

Sample Projects:

- Pre- and Post trig measuring challenge
- Creating art with graphing calculator
- Exploring harmonics

Algebra 2

This class looks deeper into the concepts of variables, graphs and inequalities. Students take their practical use of these concepts on to a higher level: Graphing circles and parabolas, beginning trigonometry and building a strong mathematical base.

Text Glencoe/McGraw-Hill Algebra 2

Sample Projects:

- Juggling ball projectile lab
- Pringle eat in-equality lab
- Word problem books

Algebra 1 and Geometry

By combining Algebra and Geometry, students see an immediate application of the skills they learn. This course is grounded in everyday usage of math. Students explore with computers building shapes and creating many of their own word problems. The class also has a great deal of practice homework, helping students build stronger math skills as well as organizational ability. Essential topics include graphing, especially of linear functions, with a focus on the role of slope in interpreting and understanding functions. Algebraic manipulations of variables in many forms, including factoring, expanding, square roots, exponents, and binomials are emphasized. In Geometry we focus on triangular similarity rules, proportion, and angles.

Text: Glencoe/McGraw-Hill Geometry

Sample Projects:

- Graphing the drive
- Slope of car hoods
- Quilt squares
- Paper Airplane Lab
- Slope with Cartoons
- Perspective drawing

Spanish

Language Requirements

Students are required to take Spanish, unless they qualify and choose Special Education support during the language time, or if they have demonstrated proficiency through the Division II level. If students wish to take another language, they must set this program up themselves and find either an accredited language course or a qualified language teacher that meets with that student for the entire year.



Spanish Divisions

There are three divisions one can pass through during their time at Compass in Spanish. Each division should take on an average of two years to complete. Depending on the individual, it could take less or more than two years to complete a division cycle. Each division is aligned directly with a two year curriculum. At the end of each division cycle, teachers determine, based on a variety of assessments and a Spanish portfolio system, whether or not the student is adequately prepared to move on to the next division. A typical student's list of Spanish courses throughout their Compass years would look like:

Middle School Introduction to Spanish and Culture

Division I (2 years)

Division II (2 years)

Division III

Junior Year Mexico Exchange Program and Immigration Exploration

Juniors in their second trimester study border issues, immigration policy, and global trade as they immerse themselves in another culture and in the Spanish language through family stays and community service. Juniors study the current

Compass School

Westminster, Vermont

immigration debate in-depth and travel to Nogales, Arizona to learn first hand about the complexities of immigration, and then travel south to live with Mexican families in Sonora. Mexican students from the same community travel to Compass the same year. Students use this experience to connect the language with real life situations. Upon return, students prepare and present their experiences to both the school and wider communities in the area.



Sample Assessments in all Divisions

- Target Language Use and Participation Points
- Quizzes, Final Trimester Exam, and Final Year Oral Exam
- Daily Homework
- Communication Assessments including skits, presentations, memorizations, compositions, readings, and art that cover speaking, reading, writing, and listening skills.
- Portfolio Reflection in Spanish

Division Breakdown for Spanish Curriculum

Introduction to Spanish—(usually grade 7)

(An activity-based curriculum focusing on basic conversation, Hispanic culture, and introduction to grammar)

Grammar and Pronunciation

Vowels and Consonants sounds	Basic greetings and other basic expressions
Basic English grammar review	School
Subject Pronouns	Family
Present tense —ar verb conjugations	Emotions
Articles	Personality descriptions
Adjective rules	Physical descriptions
Numbers 1-100	Days of the week
Conjunctions	Months of the year
Simple prepositions	Basic classroom expressions
Vowel and consonant sounds	Telling time
Vocabulary and Expressions:	#s 1-100

Culture

Why Spanish?	Culture project of choice
Geography of Latin America	Play performance
Geography of Spain	“Rotating Cultural Units”
Races of the Hispanic World	

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Westminster, Vermont

Introduction to Spanish—(usually 8th grade)

In addition to a thorough review of Introduction to Spanish grammar and vocabulary,

Grammar:

Review of 7th grade material

Alphabet

Diphthong sounds

Noun-Adjective rules

Present tense (regular ar, er, ir)

Present tense (ser, estar, ir, tener)

Gustar

Possessive articles

Interrogatives

Negative words

Numbers 100-1,000,000

Ordinal numbers

More prepositions

Adjectives with —Isimo, ito

Vocabulary and Expressions that may be covered:

Cognates

Travel

Restaurant

House

Town

Food

Animals

Professions

Seasons

Weather

Nature

Parts of the body

Health

Holidays

Transportation

Clothes

Daily routine

Culture:

Sports and leisure

Argentina

Spanish-speaking Country of choice project

Rigoberta Menchü (indigenous rights)

“Rotating Cultural Units”

Culture Skits

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Westminster, Vermont

Spanish Division I: (targeted towards 9- 10 grade)

In addition to a thorough review of Introduction to Spanish grammar and vocabulary, or in absence of any Spanish instruction upon entering High School, students will be provided with an accelerated curriculum of key components of “Introduction to Spanish” their first year and they will also learn:

Grammar:

Present tense (regular)	Interrogatives
Ser vs. Estar	Negative words
Present tense (irregular)	Numbers 100-1,000,000
Present tense (stem-changing)	Ordinal numbers
Future with “ir a”	Informal Commands
Future	More prepositions
Present progressive	Idioms of tener
Gustar	Idioms of hacer
Reflexive verbs	Accentuation
Direct object pronouns	Adverb formation
Estar vs. ser	Demonstrative adjectives
Possessive articles	Complex prepositions
	Adjectives with —Isimo, ito

Vocabulary and Expressions:

Cognates	Weather
Travel	Nature
Restaurant	Parts of the body
House	Health
Town	Holidays
Food	Transportation
Animals	Clothes
Professions	Daily routine
Seasons	Sports and leisure

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Westminster, Vermont

Culture:

Guatemala—historia

El Norte

Bolivia

Immigration and Chicano culture

Rigoberta Menchü (indigenous rights)

“Rotating Cultural Units”



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Westminster, Vermont

Spanish Division II (targeted for 11-12 grades)

In addition to review as needed...

Grammar:

Preterite	"A" personal
Imperfect	Degrees of comparison
Conditional	Apocopated adjectives (el buen libro, el primer seflor,
Imperative	una gjj, mujer)
Present perfect	Passive voice
Past participle (and passive voice)	Introduction to Subjunctive
Indirect object pronouns	Formal Commands
Direct object pronouns	Expressions/Vocabulary:
Por vs. para	Expressions with Que!

Vocabulary:

Based on books, projects, and themes that students and teachers choose to explore.

Culture:

Globalization issues in Hispanic world	Latin American and Spanish Art
What goes into a cup of coffee?	"Rotating Cultural Units"
Colombia and "Maria liena de gracias"	

Spanish Division III (For selected students)

Grammar:

Review of all tenses

Extensive review of Division II grammar

Past Subjunctive

Sophistication of writing styles

Past present perfect

Oral Presentations

Adverb and adjective clauses

Vocabulary:

Based on books, projects, and themes that students and teachers choose to explore.

Culture:

An increased awareness of cultural and linguistic variations between regions, countries, and peoples within countries. Learn common spoken language and slang.

Hispanic Literature

In-depth analysis of specific Hispanic history, culture, art, and literature

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Exploratory & Intensive Catalog



Compass School

Westminster, Vermont

Quarter 1

Soccer

Play the world's most popular sport, your key to good health, good fun, and endless opportunities to connect with people throughout the globe. The team meets every exploratory day as well as additional days for games. We expect everyone to participate fully in practice and games. While we aim to perform our best in interschool competition and we certainly enjoy winning, the overriding goal for the sports program is to have students learn to strive for their personal best as individuals and as a team. While we expect to learn to win and lose graciously, we won't measure our success by our won-loss record. We will, however, push our students to aim for personal greatness, team development, and continual growth. **Requirements:** A willingness to try your best, to come prepared, and to be a positive team member. **Prerequisites:** None. **Meets:** 3 times a week for 1 quarter.



Ceramics

Continue your work in the ancient medium of clay. An intensive in clay is very open ended since the substance is so versatile. Work with form or function, sculpture or wheel work. Some intensive ideas, based on the requirements of a level one college class, are listed below. To pass one quarter class you need to complete two from the first list (to be displayed) and at least one from the second. A ceramics intensive can also be done by apprenticing in a potter's studio.

Prerequisite: a previous ceramics class- Compass or elsewhere

Intensive Ideas:

- Create a piece with extensive texture
- Hand build from a mold
- Create a mixed media piece
- Build a piece using hand building and wheel work
- Create plaster mold
- Create a set of four matching mugs
- Throw a piece with a lid



Compass School

Westminster, Vermont

Help recycle clay
Lead a bisc firing
Lead a glaze firing
Keep a personal firing notebook

Life Drawing

Have you always wanted to learn how to draw people? Or do you need to hone your skills at hands and faces to take your artwork to the next level? Then this class is for you. We will take turns posing for each other in quick-sketch and extended poses to practice the skills and techniques of drawing the human figure. Learn about human proportion and posture. Concentrate on details, such as hands, feet, and faces, or on the gesture of the figure as a whole. Draw realistically or experiment with different styles. **Requirements:** A portfolio that includes studies of the face, hands and full body, a self-portrait and at least one finished, exhibition-quality piece to be displayed. **Prerequisites:** Drawing exploratory or equivalent drawing experience. **Meets:** Once a week for 2 quarters.

Chamber Music

Be a part of a gathering of friendly musicians playing classical music or whatever the group decides on. We will work toward a performance either at an All School or to other schools, possibly collaborating with the Chorus Intensive. Possible instruments include strings, woodwinds and piano. **Requirements:** Participation in the culminating performance. **Prerequisites:** Ability to read music, at least two years of lessons on your instrument of choice. **Meets:** Once a week for 1 quarter.



WOOL Radio Storytelling

Join WOOL radio and create a live on-air broadcast. NOT for the shy, this intensive will yield a high-quality storytelling experience for the Greater Falls community. **Requirements:** Taking WOOL's FCC radio training and becoming WOOL members. Time outside of class developing a weekly show. Willingness to take risks, exaggerate voices, and tell a variety of stories. Students and Ron will evaluate each week's show in search of improvements. **Prerequisites:** Some storytelling or acting experience. **Meets:** Once a week for 1 quarter.

Playwriting/Tibetan Studies

In this exploratory, we will read about and discuss the life stories of Tibetan refugees who have fled from Tibet to India over the Himalayas since 1999. From these true stories (collected by Michelle Bos-Lun, Anna Bowler and others mostly during the Compass trip to India in November '04), we will select various people and situations to portray in a script. We will write scenes with multiple characters that will be acted out on the stage as well as scenes where a single character will speak directly to the audience. **Requirements:** Enough written output to be presented this year as the school's play. **Prerequisites:** An interest in the Tibetan situation is a must, though you do not need to have a lot of knowledge, just a willingness to learn. Some experience writing plays is desirable though not required. A willingness to complete some written work outside of Exploratory time may also be necessary. **Meets:** Twice a week for 1 quarter.

Compass School

Westminster, Vermont

PHOTOGRAPHY 101

This class will focus on building a good foundation of photography skills. Using digital SLRs, we will work on understanding the camera controls of aperture, shutter speed and ISO to capture images; exploring the principles of creative composition; and displaying our work in various formats. **Requirements:** Each student will be required to submit a digital portfolio of their work and display at least three mounted prints. **Prerequisites:** A good attitude and a willingness to challenge yourself. **Meets:** Once a week for 2 quarters.

Chorus

We will learn songs from all over the world, some serious, some funny, some familiar and some exotic. No prior experience is necessary. **Requirements:** Participation in a brief performance at All School Meeting. **Prerequisites:** None. **Meets:** Once a week for one quarter.



Creative Writing Intensive

Do you dream of publishing your own writing? Do you love to write? Have you written the first 7 pages of your novel, but don't know what to write next? In this intensive, a group of committed writers will work on unfinished pieces, begin new ones, act as editors for each other's pieces of writing, and challenge ourselves in a focused and supportive environment. Our pieces will be published in a Compass literary and art magazine at the end of the year. We will explore other publication and writing contest options as well. **Requirements:** At least one polished (revised, edited, completed) piece of fiction, non-fiction or play writing or a collection (at least 3-6 pieces) of poetry. **No prerequisite. Creative Writing Exploratory highly recommended before taking this intensive, but not required. Lots of imagination and commitment to producing quality writing necessary.**

Quarter 2

Basketball

Avoid the winter doldrums by shooting some hoops! Practice three times a week to improve basic skills and teamwork. We will play local schools. We will have both a junior and senior high team. Girls are welcome to join and make our teams co-ed. However, we hope to schedule games for a junior high girls team this year (ninth graders could play on this squad). **Requirements:** Attend all practices and games. If one must miss practices or games, Intensive credit will not be earned. **Prerequisites:** None. **Meets:** 3 times a week for 1 quarter.



Compass School

Westminster, Vermont

VIDEO 101

This class will focus on building a good foundation of video skills. Using digital video cameras (DV), we will explore how to use the tools and techniques of the trade to capture inspiring video. We will explore various topics such as camera controls, creative composition, lighting, audio, editing and special effects. **Requirements:** Each student will be required to submit three different edited video pieces of at least 2-3 minutes each. **Prerequisites:** A good attitude and a willingness to challenge yourself. **Meets:** Once a week for one quarter.

WOOL Radio

Go beyond simply spinning records and reading PSAs on WOOL to develop an interesting, exciting, and cohesive show. Show format is open-ended and can include music, storytelling, documentary, talk shows, or anything else you can imagine putting on the radio. **Requirements:** A proposal describing the format of your show, your goals for the show and how you will develop your radio skills. Time outside of class each week preparing your show to match those goals. A reflection at the end of the quarter on whether you achieved those goals. **Prerequisite:** WOOL certification & membership. **Meets:** Once a week for 1 quarter.

Knitting: While some consider this an “old ladies” activity, there has been a huge resurgence of knitting in the US among women and men. A big part of the knitting culture is based on the social knitting circle—chatting while doing handwork. At Compass, we have been very strong at this social knitting but we want to offer more advanced knitters the chance to develop skills and have real products to show for their effort. **Requirements:** For intensive credit, students are expected to complete a project which could include pattern reading, perhaps pattern making, and use of at least a couple different stitches (at least both knitting and purling). This class will also be offered as an exploratory with both new and experienced knitters, with expectations considerably higher for those in the intensive. **Prerequisites:** Prior knitting experience and some sense of a project in mind. **Meets:** Once a week for 1 quarter.

Life Drawing (continued from Quarter 1)

Photography 101 (continued from Quarter 1)

Quarter 3

Media Arts

This class allow students to focus on areas of media arts that are most interesting to them. Whether it's photography, video, motion graphics, Web design, or some combination, students will start by outlining their learning goals and proposed project for this class. Proposal will include what skills each student wants to focus on and a description of what each of their three final projects will look like. This experience will allow each individual to follow their own passion, dive deeply into a topic, and push their artistic skills to the next level. **Requirements:** Each student will be required to three different pieces of work that match their learning goals. **Prerequisites:** Photography 101, Video 101 or equivalent. **Meets:** Once a week for 2 quarters.



Theatre – Acting: Join the Compass School play as we rehearse twice a week initially and move to more frequent rehearsals as we approach our performance dates. **Requirements:** Participate fully in all rehearsals and performances AND do all homework promptly. If homework is not completed promptly, Intensive credit will not be earned. **Prerequisites:** None. **Meets:** Twice a week for one quarter.

Theatre – Crew: Support the Compass School play through set design, set construction, technical support, costumes, et cetera. **Requirements:** Participate fully in the production of the play. The final products of the set, costumes, lighting and sound should show your efforts. **Prerequisites:** None. **Meets:** Twice a week for one quarter.

Jazz

We will learn about the history of jazz, study and play jazz standards, create original jazz compositions, and create a jazz performance for a public audience. You don't need to have experience with jazz, but you need to be able to play an instrument at slightly more than a beginner level. Jazz doesn't need to be your favorite music, but you need to bring an open

mind. **Requirements:** Original composition, participation in performance. **Prerequisites:** Permission of instructor. **Meets:** Once a week for 1 quarter.

WOOL Radio

Go beyond simply spinning records and reading PSAs on WOOL to develop an interesting, exciting, and cohesive show. Show format is open-ended and can include music, storytelling, documentary, talk shows, or anything else you can imagine putting on the radio. **Requirements:** A proposal describing the format of your show, your goals for the show and how you will develop your radio skills. Time outside of class each week preparing your show. A reflection at the end

Compass School

Westminster, Vermont

of the quarter on whether you achieved those goals. **Prerequisite:** WOOL certification & membership. **Meets:** Once a week for 1 quarter.

Video 101 (Continued from Quarter 2)

Quarter 4

Ultimate Frisbee

Come join Vermont's #1 Ultimate team and help defend the state title. This will take commitment and hard work, but the rewards are irreplaceable and the "fun factor" is high! All levels are welcome, but you must be willing to travel on weekends and commit to be a team player. We practice 3-4 days a week and often have games that end after 4:30 PM during the week. **Requirements:** 2-3 practices per week, attend at least 2 tournaments, keep a positive attitude, cleats. **Prerequisites:** None. **Meets:** 3 times a week for 1 quarter.



Printmaking

We will be working with monoprints, linoleum cuts and drypoint etchings, perhaps taking advantage of the press at Great River Arts Institute in Bellows Falls. Topics not covered in the Exploratory will include giving your prints depth and texture, using multiple plates for one print and creating multiple prints from one plate. **Requirements:** A portfolio of at least 5 mounted, exhibition-quality prints to be displayed. **Prerequisites:** Printmaking exploratory or equivalent printmaking experience. **Meets:** Twice a week for 1 quarter.

Diploma Art

Compass School diplomas are not your regular diploma. They represent our community and are taylor made for each graduate. You need not have extensive art experience or a detailed understanding of each senior but both are very helpful. **Requirements:** A willingness to put thoughtful careful hours in for our senior class. **Prerequisites:** None. **Meets:** 1 time a week for 1 quarter.

Media Arts (Continued from Quarter 3)

Compass School

Westminster, Vermont

