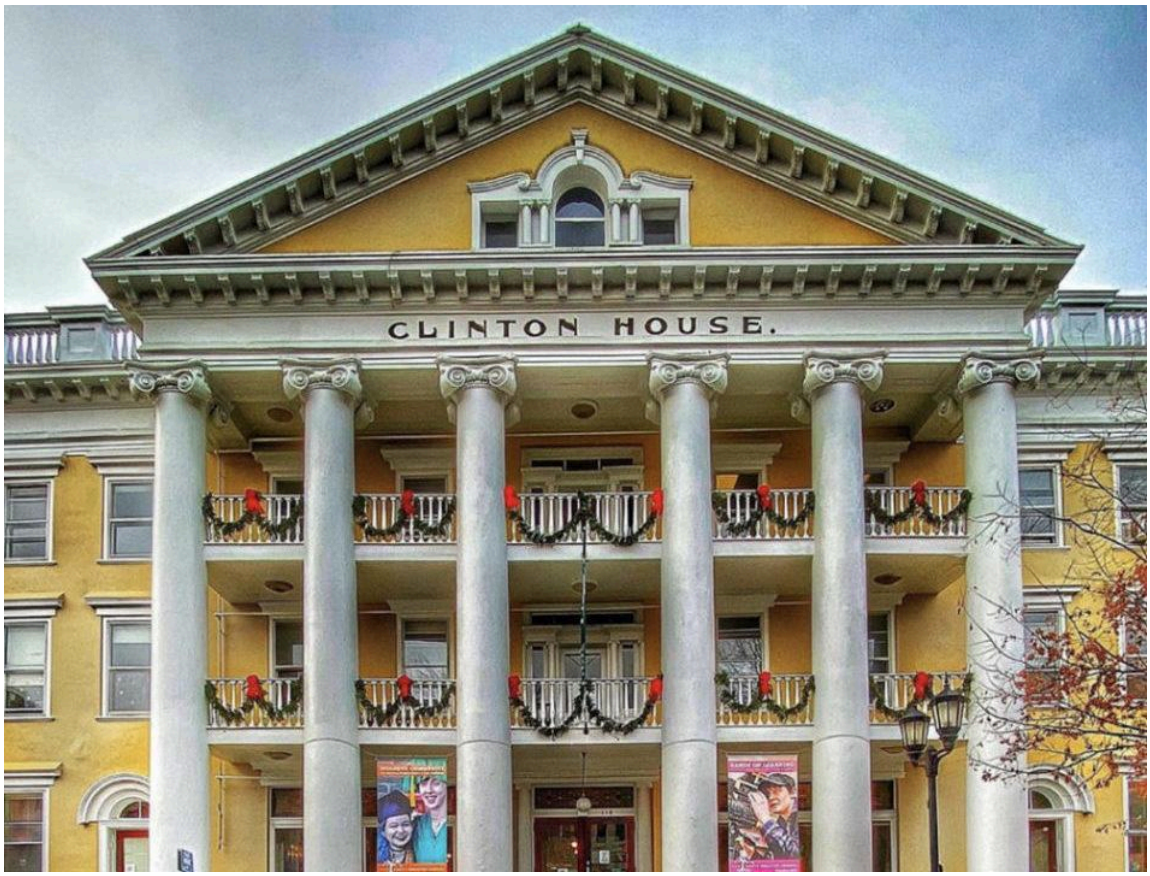
New Roots Charter School

Program of Studies Guidebook

2025-2026



Transformative Outcomes. Expanded Horizons.

Growing Students for a Just and Sustainable Future!

New Roots Charter School is located in the historic Clinton House
116 N. Cayuga St., Ithaca, NY 14850

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Lucas Finn, Mathematics Grades 6-8

Steve Manley, Social Studies Grades 6-8

Liz Purcell, English Grades 6-8

Meg Meixner, Career and Technical Education Grades 6-8

Nik Knobloch, Physical Education and Wellness

Natty Simson, Technology and Mathematics

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Welcome to New Roots Charter School

Letter from the Principal, Tina Nilsen-Hodges

Dear New Roots Students and Families,

At New Roots, you prepare for the future by inventing the future – your future, your community's future, the future of your world.

New Roots is a leader in an international movement devoted to preparing young people to live well in a future characterized by rapid change: change in the climate, change in technology, changes in economic opportunity. Our four-year sequence of study is fully aligned with education for a sustainable future (EfS) standards, which define the "solutionary" knowledge and skills that will give you an advantage in your career and in your life in these changing times.

Our personalized approach to learning is designed to help you discover your passion and purpose, developing your innate talents and strengths while building your capacity to take on whatever challenges life brings. Our inclusive community environment and College and Career Success Seminar ("crew") will foster life-long friendships and strengthen essential social skills.

Our goal is that every New Roots graduate leaves high school with college credits and acceptance in one hand, and a resume demonstrating qualification for well-paid, meaningful post-high school employment in the other.

This Program of Studies describes the elements of our educational program, and how they work together synergistically to support you in developing a strong sense of purpose and a path forward beyond high school. On the following pages, you will find a description of each element of our program, including the many choices you have for customizing your path.

As a New Roots student, you are uniquely poised to make the most of the opportunities life will have to offer you in the 21st century, and to make choices that have a positive impact on the people and places you care about. At New Roots Charter School, we are "growing students for a sustainable future" with that goal in mind. As Paul Hawken said in his 2009 commencement address, *You are Brilliant, and the Earth is Hiring*: "This is your century. Take it and run as if your life depends on it." You've got this!

Tina

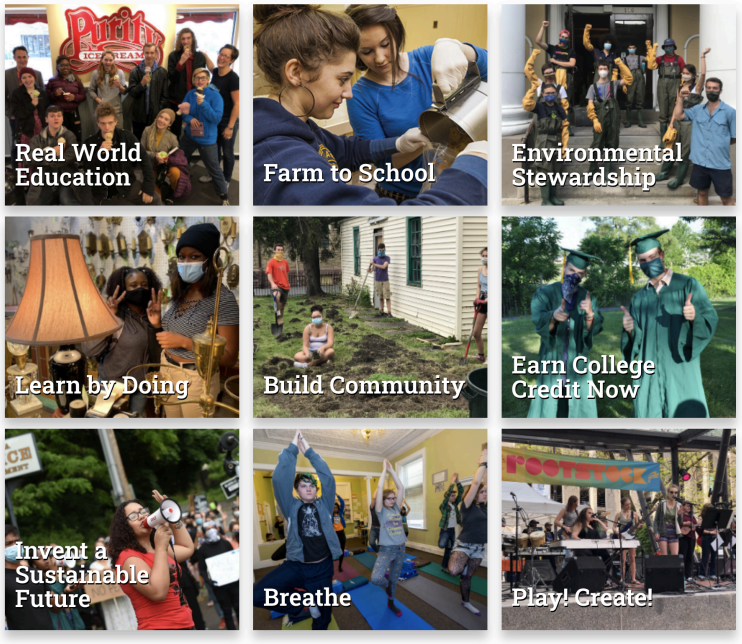
Tina Nilsen-Hodges
Founder, Principal and Superintendent
New Roots Charter School

U.S. Department of Education Green Ribbon School Award (2021)

New Roots Charter School
Mission & Vision for the Future

Our Mission

We prepare a diverse student body to embrace the opportunities of citizenship, work, and life-long learning in the 21st century. Our interdisciplinary academic program of studies features hands-on, community-based learning that supports students in solving real-world problems. Students earn a Regents diploma and demonstrate readiness for higher education by earning college credit and creating a graduation portfolio that demonstrates that they have met or exceeded all New York State Learning Standards. Our school community is a model of secondary education that integrates best practices in sustainability education with those proven to support educational equity.



Our Vision: Looking Forward

New Roots Charter School empowers young people as thoughtful local and global citizens that create and support just, democratic communities and thriving green economies that restore the natural world that sustains us. Excelling in both traditional and innovative curriculum, our students learn actively, think critically, and solve problems creatively and collaboratively, developing the knowledge and skills to redesign our communities for social, economic, and ecological sustainability. We support all students in defining and realizing their goals and aspirations, and in recognizing their ability to take leadership in improving the lives of their families and community. We put the best available tools and the power of informed optimism into the hands of tomorrow's leaders.

Who to Contact at New Roots Charter School

Main Phone: 607-882-9220

Administrative Support Staff

Doris Trefzger, Office Specialist & Registrar
Email: dtrefzger@newrootsschool.org

Social Workers & Nurse

Jhakeem Haltom, MSW & Dean of Students
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Mitch Schaff, RN
Email: mschaff@newrootsschool.org

What Makes a New Roots Education Unique

All students receive a balanced, comprehensive, and college-preparatory curriculum that not only satisfies New York State graduation requirements, but *exceeds* them.

Our curriculum highlights learning experiences that reflect strong interdisciplinary, place-based, and applied learning through the lens of community and environmental sustainability. We offer small class sizes, promote student engagement, offer more personalized approaches, and enhance collaborative learning environments. We prepare students to directly address the ongoing environmental crisis through critical thinking of core issues, emphasizing the relationships between our environment, socio-economic issues, day-to-day behaviors, and developing technologies.through our curriculum, programs, partnerships with local organizations, and other opportunities. We focus on *sustainability* education, providing an integrative and holistic approach to learning that looks at how human health and wellbeing is inextricably linked to the health of our environment.

Unique benefits of a New Roots education include:

Integrated Sustainability Curriculum: as a sustainability-focused school we integrate sustainability and equity principles across various subjects, including science, mathematics, social studies, and the humanities. This interdisciplinary approach helps students understand the interconnectedness of environmental, social, and economic systems.These connections are enhanced by interdisciplinary Anchor Projects each semester.

Experiential Learning: New Roots prioritizes hands-on, experiential learning. Students engage in fieldwork, outdoor education, sustainable agricultural projects, renewable energy initiatives, and community service activities that directly contribute to environmental stewardship and conservation efforts.

Green Campus Practices: Every day we implement environmentally-friendly practices on campus, such as recycling, farm-to-table meals, waste reduction, recycling programs, and water conservation measures. These practices serve as tangible examples of sustainability in action and reinforce ecological responsibility.

Partnerships with Local Organizations: Collaboration with local organizations, businesses, government agencies, and community groups is a hallmark of our sustainability-focused school. These partnerships provide students with opportunities for real-world learning, mentorship, internships, and service-learning projects that address local sustainability challenges.

Emphasis on Environmental Literacy: New Roots prioritizes environmental literacy. Students learn to critically analyze environmental problems, develop creative solutions, and

advocate for positive change in their communities. All students take Roots of Success, an environmental literacy and green career exploration course, to develop a foundation of understanding about how the needs of human communities are met by and impact our local ecosystems. Students earn 6 college credits through our partnership with TC3 CollegeNow, and a U.S. Department of Labor certificate for completing this course.

Student-Led Initiatives: Students take leadership roles in driving initiatives on campus and beyond. This may include organizing clubs, participating in weekly Wednesday service crews, spearheading sustainability campaigns, participating in student government, and initiating projects to improve the environmental performance of their school and surrounding areas.

Global Perspective: At New Roots, we emphasize awareness and interconnectedness, encouraging students to consider the broader implications of their actions on a local, regional and global scale. Students learn about environmental justice, cultural diversity, and sustainable development practices from around the world, fostering a sense of responsibility as global citizens while connecting local and global issues.

Career Preparation: In addition to helping prepare students for college and careers in chosen fields, we equip students with the knowledge, skills, and values needed to pursue careers in sustainability-related fields, such as environmental science, renewable energy, sustainable agriculture, conservation biology, and green technology. We offer specialized coursework, and partner with local organizations to offer internships and mentorship programs to support students' career exploration . All students take College and Career Success Seminar, a four-year course sequence designed to cultivate the knowledge and skills necessary to succeed in high school and beyond.

New Roots Charter School provides a unique educational experience that empowers students to be environmentally conscious, socially responsible, and civically engaged individuals capable of addressing the complex sustainability challenges facing our planet through their daily life, while pursuing endeavors that are personally meaningful and compelling.

Student-Focused Services & Programs

The New Roots community cultivates a sense of belonging, promotes positive interactions and respect for one another, and an overall sense of well-being. We offer student-focused services and programs designed to promote inclusivity, accessibility, and equity for all. At the core of all of our programming is the desire to help students become passionate and informed agents of social, economic, and environmental change – empowered and motivated to protect not only the earth, but also one another.

Student Support

New Roots provides a variety of support services to ensure the well-being and success of our students. This includes a FREE Farm to School breakfast and lunch program featuring locally-grown nutritious food, TCAT FreeRyde bus cards for transportation needs, and access to Chromebooks for educational use. Additionally, dedicated social workers and a school nurse are available to students every school day.

Student Services Team

In all aspects, the goals of our student services team are to provide inclusive, accessible, and equitable services to *all* students. Our Student Services team offers individualized support through IEP and 504 services as needed, respectful and compassionate guidance for all, and restorative justice practices that foster accountability, empathy, and community building. The *Rise to Thrive* program empowers at-risk students by cultivating effective habits of work and learning through goal-setting and support services.

College and Career Guidance

New Roots provides comprehensive college and career counseling, college tours, career-focused workshops, and opportunities to learn about possible career paths, internships, and mentoring programs. In our *College and Career Success Seminar* (“Crew”), a year-long course taken each year, students focus on educational, professional, and personal development. Learning objectives include a wide range of topics, depending on grade level, such as active listening and interviewing skills, strategies for preparing resumes and cover letters, and leadership and team-building skills. And all students participate in service learning through Service Crew once a week, and later reflect on their individual and collective growth.

Academic Support

On our “extended campus” of Ithaca’s urban spaces and its surrounding natural lands, students apply academic learning to hands-on projects that meet community needs, such as restoring wetlands, doing climate-related research, bringing solar panels to low-income neighborhoods, and creating small green business enterprises. An academic advisor is always available to discuss and help guide students through course requirements. And for those that need a little extra help, whether to study for Regents exams or with homework, we make available subject-focused learning labs with teachers in those areas.

Programs & Curriculum for College and Career Success

College and Career Success Seminar (aka "crew") is a four-year course of study focusing on the knowledge and skills necessary for success in high school and beyond. In addition to traditional career and college exploration, students learn critical "soft" skills in leadership and group dynamics through participation in decision-making and school governance processes. College and Career Success Seminar culminates with applications for college and career, a portfolio of learning, and a written post-high school plan developed in the senior year.

Senior Capstone Project is the culmination of four years of community-based studies. Students identify a sustainability issue in our school or wider community that they care about, do research including interviews with community leaders involved in the issue, and develop short- or long- solutions that are data-based and achievable. Capstone projects are shared with the wider school community and community partners during special events held during the Spring semester of the senior year.

EarthForce is a sustainable workforce development program developed at New Roots in partnership with Tompkins County, Cornell Cooperative Extension's Green Warriors Program, the City of Ithaca's Office of Sustainability, and Tompkins Cortland Community College. Roots of Success, a required environmental literacy and job skills training program, supports students in exploring learning pathways to careers in the regional green economy in their junior and senior years. EarthForce fieldwork and internships with local employers and nonprofit organizations provide students with the opportunity to actively participate in hands-on, community-based projects that prepare them for college, career, and civic life in this era of climate change.

Roots of Success Career Exploration course is a required 60-hour course for New Roots Charter School's sophomores and juniors. Through this curriculum, students gain deeper awareness of climate change issues and connections to socio-economic issues through service learning on community-based projects. Students also learn about green careers (and the larger green economy) through learning about green workforce development plans in Ithaca and the wider region. After the completion of this coursework, students earn an environmental literacy certification from the U.S. Department of Labor that gives them additional leverage to get a great internship, new job, or a boost on their college applications. Students earn college credit for Roots of Success from Tompkins Cortland Community College.

Service Crews provide just one way in which our students engage in service learning activities. For 45 minutes, on delegated Wednesdays, students are required to be in service of the school community. Service might include supporting and encouraging school recycling efforts, motivating others through school spirit projects, representing their crew in Student Council, or participating in our free grocery store or clothing exchange programs. Students can earn more hours of service learning credit outside of school for time worked on their project.

Depending on the nature of service, many students have a “product” in the end and/or reflect upon their learning in the classroom or during the *Celebration of Learning* event at the end of each semester.

Sense of Place Week, held in September, is an interdisciplinary, community-based exploration where we live, work, and study that illuminates the curricular themes that students and teachers will be working with throughout the year. Working with the “crew,” students examine both the built and natural environments and are guided through critical workshops, field work, research, written assignments, and a final group team project that demonstrates what they learned about the interconnectedness of these spaces and the people within them. The primary learning goal is to help students become aware of and value the interdependence and interrelatedness between the social, economic, ecological, and architectural spaces they inhabit, as well as how they can contribute to the regenerative capacity of the overall environment.

Intensives Week*,* held in May, engages students in an intensive, week-long participation in a topic-focused course of their choice. Popular Intensives Week courses include local history and hiking, community art studio, gardening and agriculture, documentary filmmaking, ecological restoration, and regional college tours. Some Intensives Week courses also engage students in service to the community or give students a chance to learn more about a particular green job or career through experiential learning. In addition to supporting students expanding their knowledge and skills through Intensives Week, students can also take a specific subject to earn required graduation credits.

Earth Day of Service is an annual tradition aimed at raising awareness about environmental issues and engaging in service-learning within the broader community, while connecting to other local, national, and international actions happening on Earth Day. Students choose from a wide array of ecologically-based service projects, in partnership with local organizations and efforts, such as clearing destructive invasive species, urban gardening, planting native trees, or otherwise helping to restore local ecosystems that have been damaged and to support the growth and diversity of ecological species.

Rootstock is a one-day celebration of live music by youth musicians and performers from around the Finger Lakes region, with acts performed or showcased by youth who are solo artists, music producers, dancers, and band members. The event is sponsored by New Roots Charter School in collaboration with Grassroots Festival of Music and Dance, and features Youth Entrepreneurship Market (YEM) vendors.

Work-based learning elective credits can be earned through a total of 40 hours of work or internship (15 hours above the required 25 on the graduation plan rubric), in addition to an essay, presentation, and/or product. For the purposes of this program, students earn credits by working or interning within positions that either serve the larger good of the community or help students explore a potential career.

Internships are available to juniors and seniors in areas of career interest. The College and Career Program Coordinator works with community partners to find placements that align with each student's goals and interests. Senior schedules are designed to provide greater flexibility for internships and work-based learning in the Spring semester.

Celebration of Learning occurs each semester and is open to families, community partners, and the wider public. During these events, we showcase student work and celebrate their achievements. These events also offer opportunities for students, staff, and faculty to come together in community with one another, as we celebrate accomplishments that come about through our work together.

Youth Entrepreneurship Market **(YEM)** is a community-based youth program that inspires and empowers students to bring their ideas to fruition through hands-on learning and professional mentoring. Local entrepreneurs and coaches teach students how to plan out their business by developing their ideas through workshops and classes, culminating in students taking part in local markets to sell their products.

Kestrel Perch Berry Farm is located on a 3.5 fenced agricultural site at EcoVillage at Ithaca and leased by New Roots Charter School to grow vegetables for our school lunch program. In 2023-24, the school took over management of the berry community supported agriculture business, providing our entrepreneurship students with the opportunity to manage a small agriculturally-focused business.

Educational Standards & Curriculum

All New Roots students take a four-year sequence of courses in each core curriculum area: Science, Mathematics, Social Studies, and English. Courses across the disciplines are integrated through a common problem-based approach to learning, and through interdisciplinary place-based applications, such as through field experiences and service learning projects. Yearly themes, essential questions, and anchor projects provide opportunities for integration across disciplines, drawing on all core subject areas.

Students also meet daily in their assigned College and Career Success Seminar ("Crew"), which includes activities related to academic advising and portfolio development, service learning, social and emotional learning, participation in governance, and college and career exploration opportunities. Our students also graduate with college credit through our concurrent enrollment program with Tompkins Cortland Community College, demonstrate mastery of essential skills and knowledge areas by creating an online digital graduation portfolio, and complete a senior capstone project focused on a local sustainability issue.

New Roots Charter School Graduation Requirements

Our New Roots Charter School academic program is designed to support all students in exploring their passion and purpose and developing the knowledge and skills needed to embark on a satisfying life and career path after high school. We aim for students to have an enriching, meaningful experience during these critical years that support them in their development as a whole person.

Our program is designed in a four-year sequence featuring interdisciplinary themes and projects and core courses for college credit in grades 11 and 12. This document details the requirements and options at each grade level that move students towards the goal of graduating in four years, having laid the groundwork to pursue either college or meaningful, well-compensated work. Every September, our *Sense of Place Orientation* offers students broader and deeper understandings of our community's unique opportunities and challenges.

We are the first four-year high school program in the nation to teach **Education for Sustainability (EfS) Standards** sequentially through content and instructional practices, which cover the following educational visions:

- *Inventing the Future*
- *Strong Sense of Place*
- *Multiple Perspectives/Ways of Knowing*

Lower School Grades 9 and 10: Essential Questions

Focus on: *Systems Dynamics and Change, Natural Laws, Cultural Traditions and Change*

9th Grade: Who am I? Where am I? Getting oriented!
Project themes of water and food explore the relationship between human and natural systems and support success on the Living Environment Regents exam

10th Grade: Where have we come from? Understanding history.
Project themes explore how people can be agents of change and responses to climate change and support success on the Global History Regents exam.

Upper School Grades 11 and 12: Essential Questions

Focus on: *Citizenship, Healthy Commons, Sustainable Economics*

11th Grade Essential Questions: Where are we going? How will we get there?
Project themes explore how citizens can protect and regenerate essential natural resources and create more just social relationships while supporting success on English and US History Regents Exams

12th Grade Essential Questions: What is my role? How will I prepare myself?
Senior Project Capstone requires students to research and develop an action plan on an issue related to a U.N. Sustainable Development goal in our community.

New York State Regents Diploma Requirements

*Below are the graduation requirements in New York State for the Regents Diploma, Regents Diploma with Honors, and Regents Diploma with Advanced Designation.

To Earn a New Roots Diploma

Students who enter New Roots in grades 9 or 10 on track to meet graduation requirements in four years must fulfill all New York State graduation requirements (total of 22 credits), as well as the requirements established by our charter. These include:

- 4 credits in English
- 4 credits in Social Studies
- 4 credits in Mathematics
- 4 credits in Science
- 1 credit in Fine Arts
- 1 credit in Language Other Than English
- .5 credit in Health
- 2 credits in Physical Education (.25 per semester)
- 3.5 credits in Electives
- Required Regents Examinations (4-7)*
- 4 credits (4 years) of College and Career Success Seminars
- 1 credit of Roots of Success (green career exploration course)
- Post-High School Plan (written)
- Senior Capstone Project
- Completion of the College Application Process (even if student intends to enter the workforce after graduation)
- Earn College Credit for 1+ classes (marked with **)
- 30 hours of Community Service a year (by participating in Service Crew)
- Complete 4 credits for chosen Pathway

New Roots students who meet the New York State standards are awarded a New York State Regents Diploma. Students can also earn a Regents Diploma with Honors or Advanced Designation, as detailed below.

Regents Diploma Requirements

Earn a total of 22 units of credit in the following subjects:

- 4 Credits in English
- 4 credits in Social Studies
    - 2 Global Studies
    - 1 United States History
    - .5 Government
    - .5 Economics
- 3 credits in Mathematics
- 3 credits in Science
    - 1 Life Science, 1 Physical Science
- 1 credit in a World Language
- 1 credit in Fine/Performing Arts
- .5 credit in Health
- 2 credits in Physical Education (enrolled every semester in high school)
- 3.5 credits in Electives
- Complete One Pathway

Pass (4) Regents Exams (with a 65+ score): in English, Mathematics, Science, and Social Studies.

Under the "4+1" pathway assessment option, students must take and pass four required Regents exams (one in each of the following subjects: English language arts, mathematics, science, and social studies) and complete a comparably rigorous pathway to meet the fifth assessment requirement for graduation. Students who enter New Roots after the start of grade 9 with credit deficiencies may graduate by fulfilling Regents diploma requirements only, at the sole discretion of the school. All other students must complete all New Roots graduation requirements.

Regents Diploma with Honors Requirements

Earn a total of 22 units of Credit as listed for a Regents Diploma plus
Earn a 90+ score on Regents Exams: in English, Mathematics, Science, and Social Studies.

Students must complete all New Roots graduation requirements to be awarded a diploma with Honors.

Regents Diploma with Advanced Designation Requirements

Earn a total of 22 units of credit as listed for a Regents Diploma plus:

Pass 7 Regents Exams (with a 65+ score):

- English
- Global History
- United States History
- Algebra 1
- Geometry
- Algebra 2
- Life Science
- Physical Science

Complete one sequence option below:

- Earn 2 additional credits in World Languages (for a total of 3 credits) and pass the locally developed Checkpoint B World Languages Exam
- 5-unit sequence in the Arts
- 5-unit sequence in Career and Technical Education (CTE)

Students must complete all New Roots graduation requirements to be awarded a diploma with advanced designation.

Guide to Creating & Understanding Your Schedule

Levels of Instruction

High school courses taken at New Roots are generally offered in sequence by grade level. In grades 9-12, select core courses prepare students to take Regents Exams required for high school graduation in New York State. Many core and elective courses in grades 11-12 are concurrent enrollment courses, carrying dual enrollment credits (both high school and college credit awarded). Students in grades 9-12 may elect to complete honors extensions in any core subject area course, which can be especially useful if the student is college-bound or interested in pursuing a particular field of study. As described previously, the type of diploma a student earns is dependent upon the course choices made during high school. To help students navigate the challenges of a specific course, we provide specialized subject-specific learning labs and tutors, as needed.

Honors Program

The New Roots Charter School Honors Program empowers students to become leaders within the academic environment and our community. We offer two different ways of adding honors distinction to transcripts. In both instances, courses will have extended areas of study that are not typically available, additional work outside of school hours, and in some cases extensive research projects and independent study. This program is available to any student who wants a greater academic challenge and opportunities to expand post-graduation opportunities.

- *Honors Extension* is a program in which students would work with chosen subject teachers to do additional work above what is required for a course they are taking. Teachers typically would add readings, assignments, a final reflection and report or presentation, and/or assign a semester-long project aligned with the classwork that would allow students to demonstrate advanced understanding of the course topic. To pursue this option, students must indicate their interest in completing an honors extension to chosen subject faculty (those who are teaching the course in which they want to earn honors credit) and/or to their academic advisor.

- A student can also earn honors through online courses such as “Precalculus Honors” or “Physics Honors.” Please check with your academic advisor about available courses.

New York State Regents Exams

Core courses aligned with required Regents exam subjects offer in-depth studies with real-world applications and assist students in preparing for Regents exams. Students may also elect to prepare for Regents exams in subjects that meet requirements for a Regents diploma with Advanced Designation.

New Roots Career Pathways

Upon entry into their junior year, students identify a New Roots Career Pathway that can lead them to developing a deeper understanding of a particular field of interest, which in turn contributes to a more robust college application and/or credentials and access to entry-level employment in fields where compensation meets or exceeds the living wage. **Students will be required to take 4 credits of courses** within their chosen pathway and can fulfill those credits through any number of offerings made available each semester.

The courses listed below are *representative* of recent pathway options that have been made available to students of New Roots. Courses represented by ** indicate dual enrollment for college credit. Other pathway approved courses may be a part of the core curriculum or elective courses. Some courses offered during Intensives Week (week-long courses held in May) may also count towards a pathway. In other instances, we may offer specialized seminars, and internships for credit could lead to fulfilling pathway credits, depending on the focused area of study or work experience.

NOTE: Many of these courses may change year to year to keep up with current career trends and our ability to offer new courses. Also, make sure to check how much credit each pathway course fulfills (they range from .25 to .5 and 1 credit/s).

Examples of credit-earning courses that meet Pathway requirements include, but are not limited to:

Food and Agriculture	Green Energy	Skilled Trades (any field requiring specific skills, education, or certificates - ie. medical to electrician)
Intro to US Food Systems**	Technical Math**	Technical Math**
Regenerative Agriculture**	Preservation Trade Skills	Physics**
Farming Intensive	Internship/s	Anatomy & Physiology
Culinary Arts	Physics**	Preservation Trade Skills
Internship/s	Roots of Success**	Roots of Success**
Foraging and Plant Identification	Cayuga Wetlands Restoration Intensive	Regenerative Agriculture** (i.e. Hydrologist)

Ecological Restoration	Entrepreneurship	Media Arts
Global Environmental Science**	Financial Management**	Videography
Chemistry**	Entrepreneurship**	Media Arts
Internship/s	Personal Money Management**	Internship/s
Roots of Success**	Specific courses in area of Entrepreneurial Interest (i.e. applicable art courses)	Creative Writing (storytelling)
Ecological Restoration	Youth Entrepreneurship Market	Digital Photography
Cayuga Wetlands Intensive	Local Enterprises Intensive	Documentary Intensive

Roots of Success Certification

The Roots of Success course is required for all New Roots Charter School students, and is generally taken in the sophomore year. In addition to earning six dual enrollment credits from Tompkins Cortland Community College, students earn an Environmental Literacy certificate from the U.S. Department of Labor, a credential that is recognized by many employers locally, and is being promoted by the City of Ithaca. Through the curriculum, students gain deeper awareness of climate change issues and connections to socio-economic issues through service learning and community-based projects. The course emphasizes environmental literacy, focuses on local sustainability efforts and the larger green economy, and introduces students to a variety of “green” careers and jobs. In Roots of Success, students also learn about Ithaca’s Green New Deal, Ithaca’s green workforce development efforts, and what options exist within green career and technical education, training through coursework, internships, apprenticeships, and a path forward into a career focused on sustainability, should students choose to follow this path.

Dual Enrollment Courses

New Roots Charter School works closely with Tompkins Cortland Community College (TC3) to approve qualified high school faculty members to teach college-level courses at New Roots. Students are given many opportunities to earn dual enrollment college credit for regularly scheduled courses within the CollegeNow's Concurrent Enrollment Program, particularly during their junior and senior years.

Qualified students earn high school and college credit concurrently, at ***no cost to students***. This free program enables students to take challenging, college-level courses in high school, strengthen the transition from high school to college, and earn college credits that can then be transferred to many colleges and universities in New York and throughout the country. All students enrolled in these core classes will be offered the opportunity to sign up for the course at New Roots Charter School during the course request and registration process. Students also can sign up for online courses, on their own, at a reduced tuition rate.

Check out our current list of dual enrollment courses!

Benefits of Advanced-Level Coursework

The New York State Education Department uses the term “advanced-level coursework” to describe courses that come with honors designation, are in some way advanced and/or accelerated, are part of an international baccalaureate program, offer dual enrollment or concurrent enrollment with a college or university, or any other course that offers students college credit or an industry-recognized certification. Other benefits include, but are not limited to:

College / Career Preparedness: Advanced courses are often designed to mimic the rigor of college-level coursework or help better prepare students for skills-based employment. By enrolling in such classes, students can better prepare themselves for the academic or career-focused demands they will face after high school.

College Credit: Dual enrollment courses allow students to earn both high school and college credit simultaneously. This can help students save time and money by reducing the number of credits they need to complete if they enroll in another college. In many cases, students can graduate from New Roots with almost enough credits to earn an associate’s degree.

Increased Academic Challenge: Advanced courses typically cover more material and delve deeper into subject matter than standard-level classes. This challenges students to think critically, problem-solve, and engage with complex concepts, fostering intellectual growth.

Enhanced College / Job Applications: Admissions officers and employers often look favorably upon applicants who have taken challenging coursework throughout high school. Successfully completing advanced courses demonstrates a student's commitment to academic excellence, a willingness to go above and beyond what is required, and readiness for college or entry-level work.

Development of Essential Skills: Advanced courses emphasize skills such as time management, organization, and effective study habits. These skills are crucial for success in both academic and professional settings.

Access to Specialized Subjects: Advanced courses may offer students the opportunity to explore specialized subjects not typically covered in standard-level classes. This can help students discover new interests and passions, potentially influencing their future academic and career paths.

Preparation for Standardized Tests: Many advanced courses align closely with standardized exams such as the Regents and SAT Exams. Engaging with challenging coursework can better prepare students for these tests, potentially leading to higher scores and increased college admissions opportunities.

Networking Opportunities: Enrolling in advanced courses often means being surrounded by motivated and high-achieving peers. This can create a supportive academic environment where students can collaborate, exchange ideas, and form valuable connections for future endeavors. Advanced courses may also have more experiential learning opportunities, allowing students to network with local organizations and community members.

Your Track to Graduation

Important Information About Courses

- Students typically take 3 one-credit core courses, College and Career Success Seminar, 1-2 elective courses, and physical education each semester. During the last period of the day, we offer courses that meet once a week in subjects such as Art, Music, and Physical Education, along with numerous popular electives and clubs.

- Each semester, students are required to take one .25 credit course of Physical Education. Additional physical education courses may be taken for elective credit.

- During a student's Lower School years (grades 9 and 10), most courses they take will be core required courses. Choices expand as students move into Upper School (grades 11 and 12). Each year, students will be offered a wide variety of choices for 6th period courses.

- Before every school year, students are given a survey to choose their favorite Arts, PE, and Elective courses, as well as make suggestions for new ones. We will do our best to meet student requests!

- Sometimes we ask students to take a math placement test. If you believe you are misplaced and were not offered a math placement test, but would like to take one, let us know!

- Check in every semester with your crew leader and academic advisor to make sure you are on track with graduation requirements in credits and NYS exams.

- Select courses and levels that are unique to <u>you</u> and <u>your</u> individual interests and goals.

- Explore elective areas such as art, technology, music, and drama. Clubs and organizations are also great opportunities to make connections and develop extracurricular interests.

- We do our best to make sure all students get into their requested courses, but this is sometimes challenging or even impossible due to scheduling conflicts with the Master Schedule and core courses. But if first, we don't succeed… we will try again!

Sample Graduation Progress Worksheet

Example of a Student's Four Year Schedule

NYS Regents Graduation Requirements	9th Grade (Current Classes)	10th Grade	11th Grade	12th Grade
English (4 credits)	*English Language Arts*	*Literary Studies*	*Academic Writing & Literature*	*College Writing & Literature*
Social Studies (4 credits)	*Global Studies: Prehistory to 1750*	*Global Studies: 1750 - Present*	*U.S. History & Government*	*Participation in Government and Sustainable Economics*
Math (4 credits)	*Algebra 1*	*Geometry*	*Intro to Statistics Algebra 2*	*Technical Math Personal Money Management*
Science (4 credits)	*Earth Systems Science 1*	*Earth Systems Science 2*	*Global Environ Science*	*Chemistry Physics*
World Language (1 credit)	*Spanish 1*	*Spanish 2*	*Spanish 3*	*Study Abroad Trip*
Fine Art (1 credit)	*Studio Art*	*Contemporary Band*	*Music Production*	*Drawing and Illustration*
Career & College Success Seminar	*CCSS (Crew) 9*	*CCSS (Crew) 10*	*CCSS (Crew) 11*	*CCSS (Crew) 12*
Physical Education (0.5 credits/year)	*Physical Education: Team Sports*	*Physical Education: Movement*	*Physical Education: Hiking*	*Physical Education: Salsa Dancing*
Health (0.5 credits)	*Personal Wellness*	*Personal Wellness*	*N/A*	*N/A*
Electives (3.5 credits)	*Culinary Arts & Philosophy*	*Roots of Success & Psychology*	*Food and Farming & Cafe: Food Prep*	*Senior Capstone & Ecological Restoration*
22 credits total				

4 Year Planning & Course Worksheet

NYS Regents Graduation Requirements	9th Grade (Current Classes)	10th Grade	11th Grade	12th Grade
English (4 credits)				
Social Studies (4 credits)				
Math (4 credits)				
Science (4 credits)				
World Language (1 credit)				
Fine Art (1 credit)				
Career & College Success Seminar				
Physical Education (0.5 credits/year)				
Health (0.5 credits)				
Roots of Success (1 credit)				
Elective (3.5 credits)				
22 credits total				

New Roots & TC3 Concurrent / Dual Enrollment Courses

Below are courses that are or have been approved for dual enrollment credit from TC3 (Tompkins Cortland Community College). No tuition or textbook fees are charged. Credits transfer to all SUNY colleges and many other public and private institutions.

Courses offered for dual credit change from year to year, depending on student interest, need, and course and teacher availability. For semester updates, contact the Dean of Postsecondary Success, Kris Erickson.

New Roots Course Title	TC3 Course Number & Title	Credits HS / TC3	Credit for Pathway(s)
Academic Writing & Literature	ENGL 101 - Academic Writing II	1 / 3	
Algebra II	MATH 120 - College Algebra	1 / 4	
Career & College Success Seminar 12	ACAD 100 - Introduction to the College Experience	1 / 3	
Chemistry	CHEM 101 - Principles of Chemistry I	1 / 4	Food & Agriculture; Green Energy; Skilled Trades (i.e. medical)
College Writing	ENGL 102 - Approaches to Literature	1 / 3	
Entrepreneurship	BUAD 103 Entrepreneurship 1	1 / 3	Entrepreneurship; Skilled Trades (esp if working for self)
Food Systems	ENVS 110 - Food Systems I: Introduction to U.S. Food Systems	1 / 3	Food & Agriculture; Ecological Restoration; Entrepreneurship
Global Environmental Science	ENVS 101 - Introduction to Environmental Science	1 / 3	Food & Agriculture (i.e. soil health); Green Energy; Skilled Trades (Environmental Safety); Ecological Restoration
US History	HSTY 201 - American History to 1877	1 / 3	
US History	HSTY 202 - American History since 1877	1 / 3	
Personal Money Management	BUAD 109 - Personal Money Management	1 / 3	Entrepreneurship

New Roots Course Title	TC3 Course Number & Title	Credits HS / TC3	Credit for Pathway(s)
Philosophy	PHIL 101 - Philosophy	1 / 3	
Physics	PHSC 104 - General Physics I	1 / 4	Green Energy; Skilled Trades (i.e. Electrical / HVAC)
Regenerative Agriculture	ENVS 110 - Regenerative Agriculture	1 / 3	Food & Agriculture; Green Energy; Skilled Trades (i.e. Hydrologist)
Roots of Success 1	ENVS 149 - Roots of Success I	1 / 3	Food & Agriculture; Green Energy; Skilled Trades; Ecological Restoration
Roots of Success 2	ENVS 249 - Roots of Success II	1 / 3	Same as above
Senior Crew	ACAD 100 - Introduction to the College Experience	1 / 1	
Spanish II	SPAN 202 - Intermediate Spanish	1 / 3	Skilled Trades (i.e. translator)
Spanish III	SPAN 201 - Intermediate Spanish I	1 / 3	Skilled Trades (i.e. translator)
Statistics	MATH 200 - Statistics	1 / 3	Green Energy; Skilled Trades (i.e. safety / quality control); Ecological Restoration (data analysis)
Sustainable Economics	ECON 101 - Introduction to Economics	1 / 3	Entrepreneurship ; Green Energy & Ecological Restoration (i.e. resource efficiency); Skilled Trades (i.e. data analysis)
Technical Mathematics	MATH 122 - Technical Mathematics	1 / 3	Green Energy; Skilled Trades (i.e. carpentry); Ecological Restoration (site analysis); Entrepreneurship; Media Arts (animation)
Participation in Government	POSC 103 - American National Government	1 / 3	

Course Request / Change Process

- As you review the Program of Studies and begin to formulate ideas about courses you would like to take, consult with your crew leader, consider any teacher recommendations you may have received, and review your plans with your academic advisor, if you have any questions.
- After you have received your schedule, you will have a few weeks in which to request changes. If you have changes you want to make to your courses, you must tell your Crew Leader first, who will then communicate your wishes to the Dean of Postsecondary Education.
- Lastly, be sure to check your schedule regularly within the first two weeks, as changes might occur as adjustments are made to the master schedule to accommodate student needs.

Subjects & Course Descriptions

Note: The courses below are typically offered at some point within the year; but some courses may only be offered every other year, depending on the availability of certain teachers.

All core courses needed for graduation will be available annually. Sometimes, however, elective, fine arts, and PE courses change, depending on student interest and demand.

The courses below represent those that we are most likely to be offered during the 2024-25 school year. That said, if you have a suggestion for a new course or club, please email your ideas to Kris Erickson!

English Courses *

* Unless otherwise noted, students may request an honors extension for all listed courses.

English Language Arts

Level: 9th grade
Credit: 1
Prerequisite: None
Course Description: In this course, students develop their writing skills in reading, writing, speaking, and listening. Students examine questions related to the present historical moment, as it is experienced in students' lives and the world at large. Themes include adolescence and initiation, community, nature, local issues, and contemporary global issues, with a focus on project themes of water and food that explore the relationship between human and natural systems. Students read and write stories, poems, essays, and responses for purposes of information, expression, analysis, and interaction, as aligned to the NY State Standards.

Workload/Homework: Weekly in-class reading and small assignments, written essays, creative writing, digital presentations, and an interdisciplinary final project.

Literary Studies

Level: 10th grade
Credit: 1
Prerequisite: None
Course Description: In this course, students build skills in reading, writing, listening, and speaking, focusing on issues related to human history and development. Students read a set of texts representing a variety of genres and authors, focusing on texts related to human evolution, history, great ideas, human development, and current global issues. Students will read and write stories, poems, essays, and responses for purposes of information, expression, analysis, and interaction, as aligned to the New York State Learning Standards. Students will develop complex writing assignments and oral presentations that offer students the opportunity to articulate and explore their own identities.

Workload/Homework: Weekly in-class reading and small assignments, written essays, creative and artistic adaptations, digital presentations, and an interdisciplinary final project.

Academic Writing & Literature

Level: 11th grade / Preparation for NYS Regents Exam in Language Arts
Credit: 1
Prerequisite: None
Course Description: Through this class you will encounter a wide array of texts, including fiction, non-fiction, poetry, and more. Our local community is our additional "text," and you will learn about our community from community experts. You will also learn a range of methods for analyzing texts, and you will develop your interpretations through extensive writing, reading, and class discussion. You will also examine literature from a writer's perspective, making note of and experimenting with the strategies that other writers use to craft their work. In addition, this course culminates in the New York State English Regents exam.

Workload/Homework: Students complete writing assignments in stages, from pre-writing, drafting, and revision to editing and publishing. Written assignments include poetry, fiction, speeches, literary analyses, and argumentative and analytical essays.

College Writing & Literature

Level: 12th grade / Dual College Credit through TC3 Concurrent Enrollment
Credit: 1
Prerequisite: None
Course Description: This course addresses questions related to sustainability, citizenship, and vocation through a survey of contemporary literature. Students examine questions around how to situate oneself in the world and what it means to be a local, national, and global citizen. Students read and evaluate narratives from multiple cultural perspectives. Students also refine their critical thinking skills and strategies and prepare for college-level writing course work.

Workload/Homework: Written essays and individual and group projects.

Mathematics Courses *

* Unless otherwise noted, students may request an honors extension for all listed courses.

Pre-Algebra

Level: 9th grade
Credit: 1
Prerequisite: None
Course Description: In this course, students will explore the basics of algebra needed to advance to Algebra I. Students will achieve fluency in operations with variables, solving equations, and basic calculator skills. Students will interpret graphs of linear functions and their real world applications. This course is aligned to prepare students for the Next Generation State Standards.

Workload/Homework: Fluency practiced in class.

Algebra 1

Level: 9th grade / Preparation for Regents exam
Credit: 1
Prerequisite: Pre-algebra or satisfactory result on placement exam
Course Description: In this course, students explore a variety of topics within algebra including linear, exponential, quadratic, and polynomial equations and functions. Students achieve fluency in solving linear and quadratic equations, as well as manipulation of polynomials using addition, subtraction, multiplication, and factoring. Students learn the key differences between linear and exponential functions, as well as how to model problems using algebra, functions, sequences, probability, and statistics. This course is aligned to the Common Core State Standards for Algebra I.
Workload/Homework: Fluency practiced in class.

Algebra 2

Level: 11th grade / Preparation for Regents exam / Dual College Credit through TC3 Concurrent Enrollment
Credit: 1
Prerequisite: Regents Geometry
Course Description: In this course, students learn about a variety of advanced topics in algebra. Students expand their understanding of functions by learning about polynomial, logarithmic, and trigonometric functions. These new functions, along with linear, quadratic, and exponential functions, are used to model a variety of problems, including compound interest, complex numbers, growth and decay, projectile motion, and periodic phenomena. Polynomial and rational algebra is extensively covered, including advanced factoring and polynomial long division. Advanced work in probability is included that focuses on the use of conditional probability. Extensive statistics work is done to help students understand how population

parameters can help to infer properties about populations. This course is aligned to the Common Core State Standards for Algebra II.
Workload/Homework: Fluency will be practiced in class.

Elements of Geometry

Level: 10th grade
Credit: 1
Prerequisite: Algebra 1

Course Description: Students use a practical approach to explore two-dimensional and three-dimensional space. These tools include Euclidean geometry, rigid motion transformations, dilations and similarity, and coordinate geometry. Finally, students will model real world objects using geometric formulas for perimeter, area, and volume. Three dimensional objects such as prisms, pyramids, cones, cylinders, and spheres are used in a variety of models. This course is aligned to the Common Core State Standards for Geometry.

Workload/Homework: Classwork / Projects.

Regents Geometry

Level: 10th -11th grade / Preparation for Regents exam
Credit: 1
Prerequisite: Algebra I

Course Description: Students acquire tools to help them explore two-dimensional and three-dimensional space. These tools include Euclidean geometry, rigid motion transformations, dilations and similarity, and coordinate geometry. Students learn how to prove various geometric facts about triangles, quadrilaterals, and circles by using axiomatic and coordinate geometry proof. Students model real world objects using geometric formulas for perimeter, area, and volume. Three dimensional objects such as prisms, pyramids, cones, cylinders, and spheres will be used in a variety of models. This course is aligned to the Common Core State Standards for Geometry.

Workload/Homework: Fluency in class.

Personal Money Management

Level: 12th grade / Dual College Credit through TC3 Concurrent Enrollment
Credit: 1
Prerequisite: Algebra I

Course Description:This course addresses finance at a personal and practical level. Students examine current economic conditions, while focusing on how they can impact their personal economic situations. Ethics, personal management of cash, debt, credit, investments, insurance, and home buying are examined.

Workload/Homework: A final culminating project will include creating a personal budget and presenting it to the class.

Pre-Calculus

Level: 11th -12th grade / Dual College Credit through TC3 Concurrent Enrollment
Credit: 1
Prerequisite: Algebra 1, Regents Geometry, and Algebra II for Dual College Credit

Course Description: Following student success in algebra and geometry, this course prepares students to build their skills and practice the content needed to enroll in calculus in the future (a foundational requirement for many science and engineering disciplines).

Workload/Homework: Classwork / Projects / Quizzes (Homework if classwork not completed, additional work for TC3 credit).

Statistics

Level: 11th grade / Dual College Credit through TC3 Concurrent Enrollment

Credit: 1
Prerequisite: Algebra 1, Regents Geometry, and Algebra II for Dual College Credit

Course Description: This course is a study of the application of statistical procedures to the analysis of experimental data. Topics covered include methods for presentation of data, measures of center, dispersion and position, sampling techniques, elementary probability, hypothesis testing and confidence intervals for both one and two populations, and linear correlation and regression. Use of the binomial, normal, student's T, and chi-square distributions are also covered. Technology such as a graphing calculator or Excel is required. MATH 200 satisfies the SUNY Gen Ed Mathematics category. Learning from this course will be applied to the Senior Capstone Project.

Workload/Homework: Classwork / Projects / Quizzes.

Technical Mathematics

Level: 11th -12th grade / Dual College Credit through TC3 Concurrent Enrollment
Credit: 1
Prerequisite: Algebra I

Course Description:Designed specifically to meet the needs of students in technology programs, this course is a study of fundamental algebraic operations, linear equations, functions, applied geometry, trigonometry, and vector analysis.

Workload/Homework: Fluency demonstrated in class.

Science Courses *

* Unless otherwise noted, students may request an honors extension for all listed courses.

Earth Systems Science 1

Level: 9th grade
Credit: 1
Prerequisite: None

Course Description: Students engage in dynamic scientific learning that blends theoretical understanding with practical application. Through place-based fieldwork, students conduct hands-on lab experiments, explore natural phenomena, and research in-depth case studies. Students delve into four main topics of study: experimental design and information literacy (i.e. informational validity / reliability), the origins of the universe, stars, planetary bodies, and elements, the atmosphere, and the hydrosphere (i.e. water). Students also learn about how all of Earth's systems are interconnected and interdependent.

Workload/Homework: Students complete an interdisciplinary project ("Water is Life") in Earth Systems Science 1 and in Global Studies 1 that explores the importance of water to life on Earth, to shaping natural landscapes on planets, and to human movement and human settlement throughout history.

Earth Systems Science 2

Level: 10th grade / Preparation for Regents exam
Credit: 1
Prerequisite: None required; Earth Systems Science I preferable

Course Description: Students continue an exploration of the interdependence of Earth's systems through in-depth study of the biosphere (the living world) and how it is both changed and affected by Earth's systems. Students continue their learning using place-based fieldwork, hands-on lab experiments, and case studies into four further topics: Ecosystems & Biodiversity, Cells, Organelles, and Cell Processes, The Human Body and Environmental Impacts on Body Systems, and DNA and Evolution.

Workload/Homework: Students complete an interdisciplinary project ("Model UN") to research an environmental issue that impacts / is caused by humans. Students explore the political, economic, and cultural context in which this issue is embedded - and engage in a Model United Nations dialog to come to an agreement about how to ameliorate their environmental problem.

Energy & The Environment

Level: 11th - 12th grade
Credit: 1
Prerequisite: ESS1, ESS2, and Global Environmental Science (or course equivalent)

Course Description: Students will explore the world of energy from the basics of what energy is and where it comes from to how humanity will reduce its carbon footprint through the use of renewable energies. Students will study the pros and cons of both renewable and non-renewable energies and explore the technologies needed to propel the world into a sustainable future. This course is designed to be interdisciplinary and will touch upon environmental science, physics, and chemistry concepts throughout.

Workload/Homework: This course is designed to be at college-level. It will include readings and projects, some of which will need to be completed outside of class time.

Intro to US Food Systems

Level: Introductory
Credit: 1
Prerequisite: None

Course Description: Students learn how the U.S. food system functions, who gets to eat the food produced each day, and how food is distributed. Students evaluate the social, political, economic, and environmental impact and consequences associated with the way food is produced, distributed, and consumed. Other topics include a brief history of food and the industrialization of agriculture, environmental and political influences, societal health and waste, and the complexities of these areas in relation to our human society. Students also learn and apply strategies in systems thinking, research, communication, and analysis.

Workload/Homework: Through various class activities, students consider alternative approaches to our food system, including the farm-to-table and local food movement. Other assignments include smaller reflections, a historical project, a food waste presentation, a food policy in action project, and a final exam.

Global Environmental Science

Level: 11th grade / Dual College Credit through TC3 Concurrent Enrollment
Credit: 1
Prerequisite: ESS 1 & 2

Course Description: Students apply and reinforce knowledge from ESS 1 and ESS 2 to construct a holistic understanding of how Earth's Systems operate and influence each other. Students also are introduced to the concept of The Ethnosphere, and learn about how various groups of people interact with and serve as stewards of ecosystem resources. In this concurrent enrollment TC 3 course, students continue their learning using place-based fieldwork, hands-on lab experiments, and case studies into four further topics, including: Ecosystem Dynamics, Community & Population Biology, and Biodiversity, Biogeochemical Cycles, Land Use, Water Use, Ecosystem Services, Pollution, and Toxicology, and the Ethnosphere: People as Agents of Change.

Workload/Homework: Workload is commensurate with a college-level Environmental Science course bearing 3 credits. An interdisciplinary anchor project, "Agents of Change," shared between U.S. History and Environmental Science challenges students to draw overarching

connections between case studies of human / natural system interactions and social justice movements in United States history. The main Education for Sustainability themes students master are: Healthy Commons, Sustainable Economics, Responsible Global and Local Citizenship, and Inventing and Affecting the Future.

Chemistry

Level: 11th - 12th grade / Dual College Credit through TC3 Concurrent Enrollment
Credit: 1
Prerequisite: ESS1, ESS2, and Global Environmental Science (or course equivalent)

Course Description: Students study the basic principles of chemistry, including measurement, atomic structure, bonding, mole concept, stoichiometry, and chemical formulas and equations. Laboratory experiments are hands-on, using a wet-lab. Substantial outside preparation for the laboratories is required. Students examine matter, units of measurement, and perform chemical calculations. Students learn about atomic and molecular structures, how to name and write chemical formulas for simple inorganic compounds, and write and balance chemical equations for simple chemical reactions. Students also perform chemical stoichiometric calculations, examine gas law phenomena, and complete calculations.

Workload/Homework: This course is designed to be college-level, meeting the requirements of CHEM101 at TC3. Practice-based homework is given about once per week. Students are also expected to finish post-lab work and projects outside of class time as necessary.

Intro to Physics

Level: 9th -12th grade / Dual College Credit Option through TC3 Concurrent Enrollment
Credit: 1
Prerequisite: None

Course Description: This course offers students hands-on learning about the nature of spacetime, motion, and energy and challenges them to apply the concepts they learn to real world situations and experiments. Through class discussions, students will help to direct their learning through selecting topics of study that are of interest to the group. This course prepares students for further study and careers in science, technology, engineering, or medicine. Students learn to describe the natural laws that govern the way objects move through space and time, and can use math and engineering design to solve problems. Students explore different forms of energy and learn to design devices to convert one form of energy into another.

Workload/Homework: Additional work if TC3 credit is desired. Otherwise, the focus is on sustained work during class time only.

Social Studies Courses *

* Unless otherwise noted, students may request an honors extension for all listed courses.

Global Studies: Prehistory to 1750

Level: 9th grade
Credit: 1
Prerequisite: None

Course Description: In this course, students acquire a meaningful overview of human history in direct relationship to the current challenges of political, economic, and environmental sustainability. New York State content standards are explored thematically to help students deeply understand the structures and processes that shape our current world system, prior to 1750. Students explore the relationship of local history and culture to natural systems and to world political, economic, and energy systems, analyze the historical origins of our modern world through the lenses of social sciences, and explore the origins, ideas, and development of the world's religions, and the role of religion and values in current global conflicts.

Workload/Homework: Smaller weekly assignments and a larger culminating assignment.

Global Studies: 1750 to Present

Level: 10th grade / Preparation for Regents exam
Credit: 1
Prerequisite: None

Course Description: Students learn about the state of the world in 1750 and progress their studies into the modern era. Students examine how changes in mindset shaped the foundation of the modern world with revolutionary ideas about political, economic, and social systems. Students also explore fascinating events that have contributed to developing the modern world in which we now live. Students draw parallels between what happened in the past and what is happening today. The course also helps to prepare students for the NYS Global History and Geography Regents exams.

Workload/Homework: Interdisciplinary anchor project, participation in a Model UN simulation, and a series of smaller weekly assignments.

U.S. History & Government

Level: 11th grade / Preparation for Regents exam / Dual College Credit through TC3 Concurrent Enrollment
Credit: 1
Prerequisite: None

Course Description: This course prepares students to demonstrate their understanding of American history and government in multiple ways, including passing the United

States History and Government Regents examination. Students examine U.S. history from first nations to the present day and examine how historical knowledge can be used today to create a more just and equitable society and democracy. Students also learn about the development of the United States within a global context, examine its history from multiple perspectives, and use historical thinking skills to recognize and understand complex systems, question norms, and explore what would be needed to create a just and sustainable future. Students learn about local history as it relates to the Underground Railroad and the African American experience in Ithaca.

Workload/Homework: Research paper, project and presentation.

Participation in Government

Level: 12th grade / Dual College Credit through TC3 Concurrent Enrollment
Credit: 1
Prerequisite: None

Course Description: This course introduces students to the main ideas and practices of civics, as they relate to current political, economic, and ecological challenges. Students study the basic concepts of political theory, American politics, comparative politics, international relations, and developments toward sustainability in local, national, and transnational governance.

Workload/Homework: Students work in groups to plan and produce a capstone project which demonstrates their understanding of economics and/or government as it relates to current local community challenges.

Sustainable Economics

Level: 12th grade / Dual College Credit through TC3 Concurrent Enrollment
Credit: 1
Prerequisite: None

Course Description: Students take a deep dive into current thinking about how to create just and sustainable economical and political systems on a local, national, and global scale. Students will examine both microeconomic and macroeconomic forces to better understand the essential function that economics play in the lives of individuals, communities, and countries. Students analyze the evolving theories and practices of economic, natural, and social forms of capital, the role of supply and demand, and globalization. Students also explore the challenges facing the U.S. free economy in a global environment and how the government addresses such challenges.

Workload/Homework: Tests, essays, and projects.

World Language Courses *

* Unless otherwise noted, students may request an honors extension for all listed courses.

Spanish 1

Level: Introductory
Credit: 1
Prerequisite: None

Course Description: Students develop basic listening, speaking, reading and writing skills to communicate and understand ideas in Spanish to earn one foreign language credit required for graduation. Students learn a variety of vocabulary words, as well as foundational grammar. Mastery of concepts such as subject-verb agreement, adjective-verb agreement, different pronoun groups, differentiation between the use of infinite verbs and conjugation of regular verbs, as well as stem-changing verbs in the present tense, correct use between *ser* and *estar*, present progressive and reflexive verbs are essential. As students practice speaking skills they will research, present, and learn about Spanish-speaking countries.

Workload/Homework: Regular weekly assignments, writing and speaking assessments, and an interdisciplinary anchor project.

Spanish 2

Level: Intermediate
Credit: 1
Prerequisite: Spanish 1

Course Description: Students continue to develop listening, speaking, reading, and writing skills to communicate and understand ideas in Spanish in real-life situations. Emphasis is placed on mastering speaking skills. Daily practice of Spanish is required for success. In addition to reviewing Spanish I vocabulary and skills, students will learn the preterite tense and simple future. Students learn a wider range of vocabulary, as well as demonstrate an understanding of more complex sentence structures and smaller texts, such as short stories, poems, and articles.

Workload/Homework: Regular weekly assignments, writing and speaking assessments, and an interdisciplinary anchor project.

Spanish 3

Level: Advanced / Dual College Credit through TC3 Concurrent Enrollment
Credit: 1
Prerequisite: Spanish 2

Course Description: In this course, students gain an advanced level of proficiency in Spanish in four skill areas: listening, speaking, reading, and writing. Cultural learning is embedded in all the skills areas and in all topics. Students learn to speak and write using more complex

sentence structures within a wider range of vocabulary, understand complex sentence structures, and the main ideas of short stories, essays, articles, poems, and other texts.

Workload/Homework: In addition to regular weekly assignments, students write short stories, journal entries, and letters with varied tenses and a wide range of vocabulary.

Fine Arts Courses

Afro-Cuban Percussion Ensemble

Level: Introductory
Credit: .25
Prerequisite: None

Course Description: In this course, students explore the rich musical traditions of Cuba, focusing on the rhythmic and percussive elements that define its unique cultural identity. Through hands-on learning, students will learn basic performance skills, such as playing traditional Afro-Cuban instruments, such as congas, bongos, timbales, and more. Students will also learn about some of the historical and cultural contexts, including its African roots and influences.

Workload/Homework: Active in-class participation.

Contemporary Ensemble: Newts Band

Level: Introductory
Credit: .25
Prerequisite: None

Course Description: This course offers students an opportunity to experience playing music as part of a group, with instruments that we provide to students while in school. Instruments include: acoustic/electric guitar, keyboards, drumset, electric bass, voice, flute, clarinet, saxophone, trumpet, trombone, and baritone horn. Students also learn how instruments and voices relate to one another and altogether function in a band. This course is a place for structured creativity, where students choose and agree upon songs to cover, as well as arrangements. Significant class time is given to composition and songwriting, and collaboration is encouraged. The bands also play at Rootstock!

Workload/Homework: In-class participation regularly expected. Outside practice is encouraged, but not required, as all students do not have the same access to musical instruments outside of school.

Digital Art

Level: Introductory
Credit: .25
Prerequisite: None

Course Description: Designed for students beginning their study of digital art on a high school level. Digital Art will focus on the fundamentals of digital art and graphic design utilizing various design programs and apps such as Adobe Photoshop and Illustrator. Studrents design images to communicate ideas and messages. Students also develop skills in design,

typography, illustration, branding (logos), and computer technology, while learning about copyright laws, printing processes, and procedures. By the end of this course, students have design and presentation skills that are essential in college courses and in the workplace. Students to utilize the elements and principles of art and design in their own work.

Workload/Homework: Small projects and in-class participation.

Digital Photography

Level: Introductory
Credit: .25
Prerequisite: None

Course Description: This course introduces students to three different methodologies of creating photographs. Students begin with phone photography and end with film photography and development. Students also learn the basics of composition and camera techniques, including depth of field, shutter speed, ISO, white balance, and metering. Students will learn some basic editing techniques, both with mobile apps and in the Lightroom.

Workload/Homework: The course culminates in a chosen image making methodology as a vehicle to create a five to seven image photo narrative.

Digital Storytelling

Level: Introductory
Credit: .25
Prerequisite: None

Course Description: Students will learn foundational skills in digital storytelling, such as storyboarding and exploratory filming, as well as basic camera techniques, sound checking, and film editing. The course goal is to create a short film to build on for future film projects.

Workload/Homework: In-class participation and creating a short film.

Drawing & Illustration

Level: Intermediate
Credit: .25
Prerequisite: None

Course Description: Students explore foundation drawing, principles of design, and story-telling using traditional illustration media: charcoals, conte, pencils, inks, and watercolors. Students perform individual art reviews and complete slide presentations related to processes of visual art-making as “illustration.”

Workload/Homework: In-class participation with creative drawing challenges, foundation drawing sessions, and related review.

Fiber Arts

Level: Introductory
Credit: .25
Prerequisite: None

Course Description: In this course, students explore basic techniques in fiber construction. The structure and design of woven and non-woven fiber forms will be investigated using traditional methods and materials. This course introduces students to the manufacture and manipulation of fibers as an art form through hands-on creative studio experiences. Students also gain a basic understanding of the types and sources of various plant and animal fibers, along with the various ways they are manipulated to become fabrics, garments, vessels or other objects. Students explore natural dyeing techniques and basic crochet techniques.

Workload/Homework: Students crochet a hat or garment and design an embroidery motif and use yarn they dyed to embroider their design onto woven fabric.

Immersive Art 1

Level: Introductory
Credit: .25
Prerequisite: None

Course Description: Students in this course will explore spatial thinking and propose plans to fill space with three dimensional work. We will consider noted installation artists such as Sara Szhe and Maya Lin for inspiration and examine the design and installation processes of many artists including past works from this course. Students will be expected to present some expression of a concept plan and help in the execution of individual or group work on spaces inside or outside the school.

Workload/Homework: In-class participation.

Introduction to Guitar

Level: Introductory
Credit: .5
Prerequisite: None

Course Description: In this course, students learn to play the 16 open chords. By turning those chords into barre chords, students can then play major, minor, 7, and major 7, and minor 7 chords in any key. Students also learn how to play scales, read guitar tab notations and chord diagrams through basic strumming and fingerpicking techniques.

Workload/Homework: Active in-class participation

Intermediate Guitar

Level: Intermediate
Credit: .5
Prerequisite: Introduction to Guitar (or demonstrated proficiency)

Course Description: This class builds on the techniques learned in Introduction to Guitar, (building chords, scales etc) and allows students to focus these musical skills. In this course, students also are encouraged to engage musical material in a creative manner, as well as work collaboratively with other students in learning songs, writing their own songs, and improvising.

Workload/Homework: Active in-class participation.

Media Arts

Level: Intermediate
Credit: .5
Prerequisite: None

Course Description: This investigatory course teaches students the basics of media arts, allows students an opportunity to further explore a particular area of media arts of interest, and requires students to reach out into the community for interviews and/or research conducted. Students will use emerging technologies and apply what is learned to create a finished documentary or fiction film, podcast, or another type of digital media project. Advanced camera techniques and editing will be explored in this course as well as philosophical discussion on the future of media in society.

Workload/Homework: In-class participation.

Música Brasileira e Sociedade (Brazilian Music & Society)

Level: Introductory
Credit: .25
Prerequisite: *Preferred* completion of Spanish I, II, or III but not required

Course Description: In this course, students explore the popular music genres of Brazil. Genres include *samba, bossa nova, MPB,* and *tropicalia*. Students will make connections between how these types of Brazilian music influenced popular music in the United States throughout the 20th century. In order to connect with the music in a tangible and enjoyable way, students will learn some basic Portuguese in order to understand some Brazilian song lyrics, and even sing some songs in Portuguese! While students do *not* need to know how to play an instrument or sing, one project in the course will involve creating a class cover arrangement of one Brazilian song we have studied with voice and light percussion.

Workload/Homework: In-class participation

Music Appreciation

Level: Introductory
Credit: .25
Prerequisite: None

Course Description: In this course, students explore the popular music of the United States from the 1920s to modern day, with a special focus on the evolution and innovations that bridged different eras and styles of music. Students acquire knowledge of the time period in which a piece of music is created, as music or any art is often a reflection of what is going on in society at the time. Within American popular music, students discover many examples of music that are hard to classify into a specific genre or setting. Students gain an understanding of how the United States has benefited from being home to many different cultural backgrounds and a variety of musical styles.

Workload/Homework: Project and presentation, along with smaller weekly assignments, such as journal entries.

Music Production

Level: Introductory
Credit: .25
Prerequisite: None

Course Description: In this course, students explore the art and science of creating music through digital technology. Students will learn fundamental concepts of digital recording, editing, and mixing of music. Other topics include basic introduction to MIDI sequencing, audio recording techniques, sound design, sampling, and arrangement.

Workload/Homework: In-class participation.

Painting

Level: Introductory
Credit: .25
Prerequisite: None

Course Description: In this course, students explore various techniques and styles of visual expression through the medium of paint. Through guided instruction and practice, students will also learn about colors, composition, and brushwork. Emphasis is placed on helping students develop their own individual creativity and artistic expression.

Workload/Homework: In-class participation.

Public Art: Creative Expression and Community Connection

Level: Introductory
Credit: .25
Prerequisite: None

Course Description: This course invites students to explore the power of public art as a means of self-expression, visual communication, and community engagement. Each week, we will explore different themes within the broad field of Public Art where students will have the opportunity to analyze case studies, develop technical skills, and complete hands-on projects. Together, we will reflect on the connections between public art, personal identity, and the values of our New Roots school community by fostering creativity and thoughtful engagement with the world around us.

Workload/Homework: In-class participation

Scientific Illustration

Level: Introductory
Credit: .25
Prerequisite: None

Course Description: Using nature as our guide, we will record our observations by illustrating plant parts, feathers, minerals, and more. Shading techniques common to historical scientific sketches will be explored as we improve our skills and learn about the items we draw.

Workload/Homework: in-class participation.

Sound & Lighting for Production

Level: Introductory
Credit: .25
Prerequisite: None

Course Description:
This course explores the creative and conceptual aspects of designing and producing sound for a variety of multimedia and popular musical forms, including artistic and experimental presentations and/or installations; audio and lighting for theatre; and basic principles of lighting & sound production.

Workload/Homework: Daily activities, in-class group work, daily participation.

Steel Drum Percussion

Level: Introductory
Credit: .25
Prerequisite: None

Course Description: This course introduces students to the practice of playing steel drums and includes some historical and cultural background on its origins in Trinidad and Tobago, as well as its influence on global music. Students obtain hands-on learning experience, learning different skills and strategies for steel drum percussion, which then culminates in showcasing their musical proficiency in a small performance.

Workload/Homework: In-class participation.

Studio Art

Level: Introductory
Credit: .5
Prerequisite: None

Course Description: In this course, students learn fundamental drawing skills, color theory, and basic artistic concepts, as well as explore a variety of media and techniques. This course will expose students to a wide range of artistic expression, including drawing, painting, collage, sculpture, two-dimensional applied design, and digital media. Students develop the skills for further art study and learn to utilize the elements and principles of art and design in their own work.The emphasis is on art-making but students also learn a variety of other important skills such as articulating ideas using the language and vocabulary of art, recognizing connections between art and other curriculum areas, appreciating the value of art venues and other community resources, and acknowledging the visual arts as a source for various career opportunities.

Workload/Homework: Weekly activities, assignments, and a series of projects.

Theatre Arts

Level: Introductory
Credit: .25
Prerequisite: None

Course Description: Our theatre arts group is a fun elective where students work together to create short theatrical productions. You don't need any acting experience (or any theater experience at all!) to join – whether you want to be on stage, behind the scenes, or somewhere in between, there's a role for you. You can perform, direct, contribute creative ideas that shape the show, or any combination to suit your interests. Expect lots of collaboration, creativity, laughter, and problem-solving as we choose short plays and work through them together. If you'd like to give new things a try (whether that sounds exciting or scary), or just want a class that's energetic and different every day, this experience is for you. We're committed to helping you find success.

Workload/Homework: Daily activities, in-class group work, daily participation.

Visual Communication - Photography

Level: Introductory
Credit: .25
Prerequisite: None

Course Description: Collaborate with a professional photographer to explore contemporary photography and develop your visual style. This course covers diverse career options in photography, starting with photo essays in photojournalism and progressing through portraiture, golden-hour landscapes, architecture, and fashion photography. Students can shape assignments creatively, guided by instructors and faculty at New Roots, integrating with core studies. The class begins with fundamentals: using a mirrorless digital camera, composition, lighting, Adobe photo software, and crafting meaningful, story-driven photos.

Workload/Homework: The course concludes with a collaborative Photo Essay—a curated series of photos telling a story or expressing a theme.

Vocal Ensemble

Level: Introductory
Credit: .25
Prerequisite: None

Course Description: Students will (re)discover, refine, and practice their vocal skills in this course through ensemble singing in a variety of genres. Through rehearsals and practices, students develop basic vocal technique, sight-reading abilities, and ensemble blending skills. Emphasis is placed on teamwork and the joy of making music together.

Workload/Homework: In-class participation.

Elective Courses

Required Elective Courses

Career & College Success Seminar - 9th grade

Level: Advanced / Required
Credit: 1
Prerequisite: None

Course Description: Students explore a number of topics throughout the year, as they relate to personal development and community building. Themes of the course include social justice and equity, job acquisition skills, career exploration, social support and celebrations, social and emotional learning, and mindfulness. Students go on a variety of local field trips to learn more about their community and how Ithaca and the surrounding areas are addressing climate change issues.

Workload/Homework: Students complete a variety of weekly assignments and perform community service.

Career & College Success Seminar - 10th grade

Level: Advanced / Required
Credit: 1
Prerequisite: None

Course Description: Students explore a number of topics throughout the year related to individual personal development and community building. Themes of the course include social justice and equity, job acquisition skills, career exploration, social, emotional, and cognitive learning styles, climate activism, and mindfulness. Students go on a number of local field trips to learn more about their community, including how local organizations and governmental entities are working towards sustainability.

Workload/Homework: Students complete a variety of weekly assignments and perform community service.

Career & College Success Seminar - 11th grade

Level: Advanced / Required
Credit: 1
Prerequisite: None

Course Description: Students explore a number of topics throughout the year, as they relate to personal, community, and professional growth. Themes of the course include community building, personal development, social justice and equity, personal career inquiry and development, social support and celebrations, and mindfulness. Students are also taken on

field trips to explore local colleges, organizations, and businesses to learn more about careers of interest. Students also further explore leadership, community service, interpersonal and professional communication, and college and career readiness.

Workload/Homework: Students complete a variety of weekly assignments and perform community service.

Career & College Success Seminar - 12th grade

Level: Advanced / Required
Credit: 1
Prerequisite: None

Course Description: This course helps students to have a strong, successful senior year, guiding them through a graduation portfolio and equipping seniors for success in whatever post-graduation endeavor they choose to pursue. Course topics include planning for the future, accessing college and career resources, learning how to network, and gaining important time-management and goal-setting skills. Students further explore their career options, go on local field trips to meet professionals in various fields of interest, and learn more about how to locate internships, career mentoring opportunities, pre-college programs, and apprenticeships. Students receive support applying to colleges of their choice and learn about financial aid, understanding the personal adjustments successful college students make, and what is required for academic success in college. This course also covers important life skills, such as buying a car, finding an apartment, cooking on a budget, and managing finances.

Workload/Homework: Students complete a variety of weekly assignments, reflections, and worksheets, aimed at helping to prepare them for life after high school. Students also perform community service throughout the year.

Roots of Success

Level: Introductory
Credit: 1
Prerequisite: None

Course Description: Roots of Success (ROS) is an empowering environmental literacy and job training program that prepares students to access jobs and career pathways in environmental fields and improve environmental and social conditions in their communities. The course covers topics such as, environmental literacy, water, waste, transportation, energy, buildings, food, community organizing and leadership, and financial literacy, while giving the students an opportunity to apply what they've learned in real-world situations. The RoS pre-apprenticeship program is offered to Roots of Success students and is articulated to the Roots of Success Pre-Apprenticeship Standards. Students receive an "Environmental Specialist" certificate upon completion of the 10-module Roots of Success course. This course also builds the basic literacy, math, and work-readiness skills today's employers require to begin a pathway to a career.

Workload/Homework: Daily reflections and student workbook assignments.

Senior Capstone

Level: Advanced / Required for all seniors to graduate
Credit: 1
Prerequisite: None

Course Description: Students demonstrate their accumulated knowledge and experiential learning in this course by creating a senior capstone research project. Working within the area of the UN Sustainable Development Goals, students use their understanding of sustainability, civic engagement, and interdisciplinary learning to research a specific problem, phenomenon, issue, or concern within the community. Students then devise or propose a solution that will be a significant contribution - both personally and to the community.

Workload/Homework: Students propose and then complete a multifaceted capstone project that serves as a culminating academic and hands-on-learning experience.

Chosen Elective Courses (3.5 required credits can include additional cores)

African American Cultural Studies

Level: Introductory
Credit: .25
Prerequisite: None

Course Description: Students explore the diverse history, contributions, and experiences of African Americans through literature, art, music, and history. In addition to gaining a deeper understanding of African American culture, students will explore their own place within these contexts, as they discuss a variety of social, economic, and cultural issues.

Workload/Homework: Active participation and weekly assignments.

Berry Farming

Level: Introductory
Credit: .25
Prerequisite: None

Course Description: Using sustainable methods, this course provides students with an introduction to berry farming, covering the fundamental principles and practices essential for successful berry cultivation. When the weather keeps us inside, we will cook small treats and learn about how to grow and maintain house plants.

Workload/Homework: Through practical hands-on experience, students will explore various aspects of berry farming, including plant selection, soil preparation, cultivation techniques, irrigation methods, harvesting, and post-harvest handling.

Creative Writing

Level: Introductory
Credit: .25
Prerequisite: None

Course Description: Students work on crafting their own creative projects including short stories, novels, poems, song lyrics, comics, and personal memoirs. We discuss some of the tips and tricks that real authors use to enhance their work and share (when comfortable!) some of our best writing.

Workload/Homework: In-class writing activities such as haikus, villanelles, limericks, idea prompts, word challenges, and picture inspirations. Students will submit one independent final writing project that they have worked on during class throughout the semester.

Culinary Arts

Level: Introductory
Credit: .25
Prerequisite: none

Course Description: Students will explore a range of cuisines and learn many methods of cooking and baking, including basic kitchen skills and routines.

Workload/Homework: In-class participation.

Ecological Restoration

Level: Introductory
Credit: .25
Prerequisite: None

Course Description: This course is designed as a field-based, hands-on learning experience. This course encapsulates the essence of ecological stewardship and restoration. Students focus on three main objectives for ecological restoration: ecology using natural sites in Tompkins County, engagement in ecosystem restoration by restoring native species and phytoremediating species, and learning about traditional ecological knowledge through Indigenous perspectives on ecology. In this transformative course, we not only cultivate ecological restoration expertise but also a profound respect for the wisdom of Indigenous cultures and their enduring relationship with the natural world.

Workload/Homework: Hands-on learning experiences.

Entrepreneurship

Level: Introductory / Dual College Credit through TC3 Concurrent Enrollment
Credit: .5
Prerequisite: None

Course Description: Designed to provide a basic foundation of entrepreneurship, this course presents a general overview of what it takes to create a new small business by establishing a sustainable competitive advantage. Topics include the various forms of business ownership, the need for social responsibility and ethics, how to purchase and operate a new business, the human resource skills needed, an awareness of legal issues involved in starting a business, and how to market the business to acquire loyal, long-term customers. Students will gain hands-on experience helping the school run and manage the berry CSA at Kestrel Perch Berry Farm.

Workload/Homework: Students will complete powerpoint presentations, give in person presentations, conduct business and marketing research, and write summaries of articles/documentaries. Most work will be done in class but may need to be completed at home from time to time.

Foraging and Plant Identification

Level: Introductory
Credit: .25
Prerequisite: None

Course Description: In this course, students will learn how to identify local plants and learn which plants can be used for medicinal and nutritional purposes. During class, we will walk around Ithaca and find plants that we have researched in class. When the weather is bad, we will do more research or cook with plants we have foraged.

Internship

Level: Intermediate
Credit: .5
Prerequisite: None

Course Description: Students acquire hands-on experience doing something that they are interested in through an internship, job-shadowing, or a series of job tours, depending on your interests and available sites. Class time will be devoted to helping students find an internship site and build professional skills such as resume writing, exploring strengths and values as they relate to potential careers, researching careers and vocations of interest, and creating a digital reflection portfolio of the internship experience.

Workload/Homework: Successful completion of internship and reflection portfolio.

Introduction to Coding

Level: Introductory
Credit: .5
Prerequisite: None

Course Description: The coding elective will give students the opportunity to learn the basics of computer programming and create their own projects. We will build a foundation for lifelong coding skills, including defining variables, conditionals, lists, loops, and functions. We will also explore different ways technology is created and used – from game design to web development to social media – and analyze its role in the world around us.

Workload/Homework: In-class participation and work towards a final project.

Introduction to Hydroponics

Level: Introductory
Credit: .25
Prerequisite: None

Course Description: This course provides students with an introduction to hydroponic systems and farming. Students will explore the basic principles of hydroponic cultivation, with an emphasis on sustainable agricultural practices. By the end of the course, students will gain the knowledge and skills to design, implement, and manage hydroponic systems for a variety of crops.

Workload/Homework: Students will build and maintain a hydroponics system, contributing to the school's food-to-table lunch program, and harvest delicious lettuce, basil, and other vegetables and herbs.

Introduction to Robotics and Engineering

Level: Introductory
Credit: .5
Prerequisite: None

Course Description: This elective provides the opportunity for hands-on work with designing and programming robotic devices for a variety of purposes (many will be drawn from student interest). We will use the engineering process to design solutions to a variety of real-world problems and incorporate feedback to improve on them. We will also explore different ways technology is designed and used, and analyze its role in the world around us.

Workload/Homework: In-class participation and work towards a final project.

Introduction to Trade Skills

Level: Intermediate
Credit: .25
Prerequisite: Upper school only, Approval from administration

Course Description: In the Introduction to Trade Skills class students will learn the basics of hand tools, carpentry, electrical, and other trade skills. Located in the workshop

at Significant Elements students get the opportunity to learn these skills by working with preservation professionals on antique and vintage furniture, lighting and houseparts**.**

Workload/Homework: Active participation, professionalism, and dedication to showing up and learning

Laser Printing

Level: Intermediate
Credit: .25
Prerequisite: Completion of a digital design elective or equivalent experience is required to enroll.

Course Description: Dive into the intersection of art and technology with this laser engraving art elective led by Conor Gaffney, founder of *Spoken Glass*. Building upon the foundational skills acquired in a digital design elective, students will embark on a creative journey exploring the limitless possibilities of laser engraving as an artistic medium. Conor's expertise will guide students in harnessing the full potential of laser engraving machines, software, and design principles to create intricate and innovative artworks.

Workload/Homework: Through a blend of hands-on instruction and project-based learning, students will refine their digital design skills and learn advanced techniques for laser engraving on a variety of materials such as wood, acrylic, and metal.

Latin & the Roman Empire

Level: Beginner / Intermediate
Credit: .25
Prerequisite: None

Salve discipuli! How often do you think about the Roman Empire? If the answer is "pretty often," you should consider taking this class. Come learn the basics of the ancient language of the Romans—Latin! In this class we will learn about history, mythology, art, culture, and literature, as well as gaining a working understanding of the *Lingua Latina*. While Latin is not spoken anymore by any living culture, it forms the basis of our scientific/medical vocabulary as well as being used in contemporary religion. And knowing a bit of Latin will make learning Latin's modern descendants (Italian, Spanish, French, Portuguese, and Romanian) way easier!

Philosophy

Level: Introductory
Credit: .25
Prerequisite: None

Course Description: Goals for this course include developing critical thinking, speaking and listening, and presentation skills. Students increase knowledge and understanding of the

branch of philosophy known as ethics, or notions of right and wrong, and the systems that are built around those concepts. Students are asked to apply what they learn about a given ethical system to a dilemma, thought experiment, issue, scenario, work of art, film clip, poem/song lyric, political cartoon, and so forth.

Workload/Homework: Reading, writing, speaking, listening, and presenting

Preservation Trade Skills

Level: Introductory
Credit: .25
Prerequisite: None

Course Description: Introduction to Preservation Trade Skills is taught by the Work Preserve program at Historic Ithaca, a historic preservation non-profit organization.

In this course students will work on period restoration projects while learning how to safely and properly use a variety of hand tools, power tools, and other trade skills equipment. Although the class is taught through the lens of sustainability and historic preservation, the skills learned will be applicable across many applications and provide the student with a solid foundation in general trade and life skills. In addition to hands-on restoration projects, the course offers instruction and feedback on building a resume, workplace communication, and establishing good work habits.

Workload/Homework: In-class projects (80%) and discussions (20%).

Psychology

Level: Introductory
Credit: .25
Prerequisite: None

Course Description: In this course, students delve into the fascinating study of the human mind and behavior, exploring topics such as memory, cognition, motivation, and social interactions. Through a variety of activities, students learn about basic psychological theories, gaining insight into both themselves and others within the world around them.

Workload/Homework: Small weekly assignments.

Radio Programming

Level: Introductory
Credit: .25
Prerequisite: None

Course Description: WRFI Radio (on the third floor of this building!) is offering New Roots students their own radio program from 3-4 pm on Thursdays. Got an idea for a series? Have an issue of importance you want to discuss on air, invite guests to interview, and/or invite call-ins? Have some interesting artistic ideas you want to highlight, mixing talk radio with some music? Stories you want to tell? Wanna explore a particular theme on the radio with the public and radio guests? What kind of radio program would you like to have?

Workload/Homework: Active participation in the radio programming process

Regenerative Agriculture - Spring

Level: Introductory
Credit: .5
Prerequisite: None

Course Description: This course will walk you through the basic skills needed to manage an organic fruit and vegetable farm. At the beginning of the semester, we will work on planning our annual vegetable rows. We will order seeds and begin indoors. After the February break, we will go to the farm at 2:15 pm, work from 2:30 to 4:15 pm, and be back at school by 4:30 pm. At the farm, we will work on planting, pruning, and overall farm maintenance.

Workload/Homework: Active participation

Vegetable Farming

Level: Introductory
Credit: .25
Prerequisite: None

Course Description: In this course, students will be introduced to vegetable farming. Using sustainable practices, students will learn the basic methods of growing organic vegetables at our school farm, which will then become part of our -to-table lunches! Students also will learn how to grow and maintain house plants and cook simple treats when the weather keeps us indoors!

Workload/Homework: Through practical demonstrations and hands-on-experience, students will explore various aspects of vegetable farming, including seed and/or plant selection, planting and cultivating techniques, and harvesting.

Physical Education Courses

Just Dance!

Level: Introductory
Credit: .25
Prerequisite: None

Course Description: Students will “just dance!” This includes following dance videos from the video game, as well as exploring multiple styles of dances from all over.

Workload/Homework: In-class participation.

Martial Arts Foundations 1

Level: Introductory
Credit: .25
Prerequisite: None

Course Description: Students in this course learn the fundamental principles and techniques of various martial arts disciplines, such as karate, taekwondo, and judo. Through training and hands-on / experiential learning, students develop strength, agility, and self-confidence, while also gaining an appreciation for the cultural and philosophical aspects of martial arts.

Workload/Homework: In-class activities.

Physical Education: Lifetime Activities

Level: Introductory
Credit: .25
Prerequisite: None

Course Description: Students learn the fundamentals of physical activities that are often pursued throughout most stages of life. Examples may include, but are not limited to, climbing, yoga, bowling, hiking/camping, racket sports, cycling, and ping pong.

Workload/Homework: In-class participation.

Physical Education: Mindful Movement

Level: Introductory / Intermediate
Credit: .25
Prerequisite: None

Course Description: Students engage in physical activities such as yoga, stretching, calisthenics, and dance with a focus on combining both mental and physical wellness.

Workload/Homework: In-class participation.

Physical Education: Outdoor Ed

Level: Introductory / Intermediate
Credit: .25
Prerequisite: None

Course Description: Getting outdoors is good for the body and the soul! In this elective class students will get some fresh air and take walks around the beautiful Ithaca area. If the weather does not permit us going outside students will engage in indoor activities.

Workload/Homework: Weekly experiential activities.

Physical Education: Personal Fitness

Level: Introductory
Credit: .25
Prerequisite: None

Course Description: Students will learn how to create and apply a personalized fitness program tailored to their individual needs/goals.

Workload/Homework: In-class participation.

Physical Education: Relax and Reset

Level: Introductory
Credit: .25
Prerequisite: None

Course Description: Students learn and practice various physical activities that are rooted in relaxation and slower deliberate movement. This course is intended for students that are looking for a noncompetitive atmosphere. Examples may include yoga, stretching, walking, and Tai Chi.

Workload/Homework: In-class participation.

Physical Education: Strength Training

Level: Introductory
Credit: .25
Prerequisite: None

Course Description: Students will learn practical strength training philosophies and approaches, majorly without additional equipment.

Physical Education: Team Sports

Level: Introductory

Credit: .25
Prerequisite: None

Course Description: Students learn the fundamentals of team sports, rules of the game, safe play, and respect for others, while having fun exercising.

Workload/Homework: In-class participation.

Salsa Dancing

Level: Introductory
Credit: .25
Prerequisite: None

Course Description: Students learn the basics of salsa dancing, as well as explore multiple styles of dances from around the world.

Workload/Homework: In-class participation.

Tai Chi

Level: Introductory
Credit: .25
Prerequisite: None

Course Description: In this course, students learn about natural philosophy developed thousands of years ago in China and how it relates to living in the modern era. Our guide is *Huang Di Neijing*, the foundational text of Chinese Medicine. This text draws heavily from empirical observation of the natural world, as well as Taoist and Buddhist philosophy, and describes how to live, work, and thrive within the seasonal and celestial rhythms of our environment. The movement portion of the course will include warmup exercises to improve breathing, balance, and flexibility, group form-work, and eventually two person drills.

Workload/Homework: Active in- and out-of-class participation.

Urban Hiking

Level: Introductory
Credit: .25
Prerequisite: None

Course Description: In this course, students explore the cityscape of Ithaca, while discovering hidden gems, street art, and historical landmarks. Through guided walks through the city, students learn about Ithaca, while enjoying some physical activity.

Workload/Homework: In-class participation.

Yoga

Level: Introductory
Credit: .25
Prerequisite: None

Course Description: Students will learn the basics of Yoga Asana (poses), Dharma (philosophy), Pranayama (breathwork), and Meditation. Other class activities include learning about mantras, mudras, yoga sequences, breathwork, restorative poses, guided meditation, chakras, Yamas and Niyamas, Yoga Sutras, and mandalas.

Workload/Homework: In-class participation and journaling.

Health Course

Personal Wellness

Level: Introductory
Credit: .25 or .5
Prerequisite: None

Course Description: In this physical education and health course, students will develop an integrated understanding of the physical, psychological, and social dimensions of human wellness, and create a personal plan with measurable outcomes. Through a variety of topics, students will learn practical life skills to help them make informed and conscious choices that promote well-being, such as analyzing health influences, accessing resources, developing interpersonal communication, decision-making, goal setting, practicing health-enhancing behaviors, and advocacy.

Workload/Homework: Weekly assignments, essays, and tests.

Frequently Asked Questions About Courses & Schedules

Here you will find answers to many of the common questions we receive regarding courses and schedules. If your question is not here, feel free to reach out to your instructor, crew leader, or academic advisor.

- **Can I skip a prerequisite?**

  Generally, no. If there is a prerequisite, it is in place to introduce a common vocabulary and practice of that course and support student success at the next level/course. However, if you believe you have gained the necessary prerequisite experience or knowledge elsewhere, contact the teacher to find out how you might be able to demonstrate your experience and join the course.

- **Can I take more than one PE or Fine Arts course in a semester?**

  Most of the time, yes! The only time you might not be able to take more than one PE or Fine Arts course in the same semester is if you are getting closer to graduation and need another credit to graduate or if you are needing to complete credit or attendance recovery in a learning lab that conflicts.

- **Can I take one or more of my classes online rather than at New Roots?**

  Sometimes, yes! It depends on what course you want to take online and why. We encourage everyone to attend in person, as doing so generally is important for social and emotional well-being and community building, but if you have extenuating circumstances and want or need to take one or more courses online, we are open to discussing options. With permission, students also may take a course online in addition to their on-campus courses, especially if a course they want to take is not being offered that semester. If you are interested in taking an online course, speak first to your crew leader or, if you have one, your assigned student services team member. They will bring your request to the attention of the academic advisor, who will then follow up with you.

- **Do the concurrent enrollment courses for college credit cost me or my family anything?**

  No, courses offered at New Roots that are concurrent enrollment courses for college credit (with TC3) do NOT cost anything for students. However, if you live outside of Tompkins or Cortland County, then you must complete the Certificate of Residency requirement (annually and by the deadline), and then you will not be billed for the out-of-county tuition. Also, if you choose to enroll in a TC3 or other college course while at New Roots (that is not offered by New Roots as part of the CollegeNow program), then you will have to pay for that course.

- **Do I have to take a PE every semester, even if I have met the total PE credit requirements to graduate?**

  Yes, you must take a PE every semester, regardless of how many credits you have in PE.

- **If I want, can I take the same course again?**

  Sometimes, students love an Arts, PE, or Elective course so much that they want to take it again! While we do allow students to retake Arts, Elective, and PE courses, we encourage you to sample as many different courses as possible. Also, if a course is very popular and fills up quickly, we either try to add another section or we may have to offer it first to students who have not had a chance to take it before you are offered a chance to take the course a second time.

- **Does New Roots have Honors courses?**

  Not in the traditional sense. But you can request an **honors extension** for most core (required) courses. To do so, approach your teacher in the first week of classes and let them know that you would like to complete an honors extension. If your teacher approves, you will receive an additional larger assignment that allows you to earn that honors extension. Once completed, your transcript will indicate that you earned an honors distinction for that course.

- **What about AP courses? And what is the difference between an AP course and a course with an honors extension / distinction?**

  We are working on offering some AP courses for the 2026-2027 school year. We also offer many **dual college credit through TC3 concurrent enrollment** courses, which we have prioritized over AP courses because they allow you to earn actual college credit. In fact, most New Roots students can graduate with over one year's worth of college credits, which they can then transfer into most public and private universities or colleges of their choice. AP courses are meant to reflect college-level learning, so our dual college credit courses are similar in that way, but offer *actual* college credit. An honors extension for a course features some college preparatory work.

- **Acceleration of courses / degree?**

  Most students can complete their New Roots graduation requirements within four years, with their final semester focused primarily on work-based learning and/or internships. New Roots graduation requirements go above and beyond New York State standards and include four credits of mathematics and science, Roots of Success, College and Career Success Seminars, and Senior Capstone. Students who enter grade 9 with high school credits or Regents exams may be able to accelerate their graduation.

- **What do I do if I want a class or club that is not currently offered?**

  We always welcome your thoughts and suggestions when it comes to course and club offerings! Every spring, we send out a course selection survey, and on it, we will always ask if you have any new ideas for us or if there are courses or clubs of interest that you do not see in our catalog, but would like to see. But you don't have to wait until you receive the survey. You can **email Kris Erickson** at any time with your questions and suggestions. We always do our best to meet our students' requests!

- **Can I use summer coursework or online classes to meet my high school requirements?**

  New Roots students can meet some coursework requirements through independent study, online courses, community college courses, or other summer programming. Students can consult with Kris Erickson about available options.

- **Which courses offer dual credit through TC3 CollegeNow?**

  Click here to see the list of college-level courses that we currently offer for dual (TC3 college) credit.

- **Do I have to take a world language if I took one in 8th grade?**

  It depends. We want to make sure that you meet the NY State requirements to graduate, and the state of New York requires a high school-level world language course. If you believe the 8th grade course you took was at high school level (usually a full year long), please let us know, and we will look at your transcripts and consider whether that course meets the requirements.

- **How many Regents exams do I need to take?**

  For a **Regents Diploma** you must score 65 or better on a minimum of 4 Regents exams. (1 English, 1 Social Studies, 1 Math, and 1 Science). Most students take an additional Social Studies Regents exam to complete their graduation pathway, as both social studies courses (Global Studies: 1750 to Present and U.S. History) are required by NYS for graduation. For a **Regents Diploma with Advanced Designation**, you need 3 additional exams: 2 additional math, and 1 additional science.

- **If I have transferred to New Roots, how many Regents exams do I need?**

  If you transferred from any school in New York State the exam requirements are the same. If you transferred from a school in another state and your first year in a NYS high school is 11th grade, for example, you are exempt from the Global History Regents exam. You still need to pass 1 English, 1 Social Studies, 1 Math, and 1 Science. If you transferred from a school in another state and your first year in a NYS high school is 12th grade, you are exempt from the Global History and Science Regents' exams. You still need to pass 1 English, 1 Social Studies, and 1 Math Regents.

- **If I attended a school in NYS in 9th grade, then left the state, but returned as a junior, what regents exams do I need to take?**

  Since you began high school in NYS, the Regents exam requirements are the same as a student who remained in a NYS school all 4 years.

- **If I'm planning to apply to college - what should I be doing now?**

  It depends on what grade you are in. Every year at New Roots, you will take a **Career & College Success Seminar**, or what we call "Crew," in which you will explore your future career interests and how to create and reach your post-graduate goals. But it's good to

know that the **Dean of Postsecondary Success** is always available to discuss your future plans and help you achieve important steps towards your goals. **Email Kris Erickson** to set up an appointment or just drop by the office.

- **How long after classes begin do I have to change my schedule?**

  The add/drop period is generally after the first two full weeks of the semester. You will receive notification about the add/drop deadlines.

- **Other questions?**

Please contact Kris Erickson, Dean of Postsecondary Success, at kerickson@newrootsschool.org with any additional questions that you may have. Thank you!