

# **North Country Career Center**

# Preparing Students for Career, College & Community

# **PROGRAM OF STUDIES 2017-2018**

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# 2017-2018

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# 'Preparing Students for Career, College and Community'

**North Country Career Center's Vision** is to provide an educational environment for the development of technical, academic, and social skills. NCCC recognizes that education is a lifelong experience and promotes the development of career and technical skills that prepare students for success as productive and responsible members of society through the following:

## RESPONSIVE CURRICULUM

- \*Curricula will prepare all students (high school and adult learners) to meet national and Vermont education and industry standards
- \*Learning environments that are equipped with multimedia technology equipment and software to support multiple pathways for learning and teaching
- \*Curricula that prepares all learners with the personal and professional skills to be successful employees and employers, life-long learners and productive community members, demonstrating the *Habits of Mind* in their everyday lives

#### SEAMLESS INTEGRATION OF SERVICES

- \*Multiple pathways to rigorous curricula, programs and services provide ongoing opportunities for all students
- \*Students have access to curricula and services that develop their technological, interpersonal and employability skills needed for successfully transitioning from learning in school to engaging in civic and business responsibilities
- \*Students take personal ownership for, and with staff support create and monitor their educational and career goals
- \*Work experiences prepare students for a seamless transition into post-secondary learning and employment opportunities

## NCCC Core Values are

- CHARACTER
- **COMPETENCE**
- CREATIVITY
- COMMUNITY

#### We believe that

- Students learn best when they are provided opportunities to apply learning in an authentic manner
- The instructional environment needs to be physically and emotionally safe for all
- > Students' educational needs and differences should be considered when implementing a Personal Learning Plan
- An ongoing focus on academic rigor enhances students' ability to be successful
- ▶ Both technical skills and work-ready skills are equally important for continual student success
- > Technology is an integral portion of a student's learning experience and it should reflect current industry standards
- Students are most successful when they are involved and invested in their educational plan



#### INTRODUCTION AND ADMISSIONS

The North Country Career Center (NCCC) serves the students of Lake Region Union High School (LRUHS), North Country Union High School (NCUHS) and private schools as well as home schooled students and eligible adult students in the Orleans County area. NCCC offers each student the opportunity to participate in quality technical education programs, whether the goal is to pursue post-secondary education and training or move directly into the workplace. All NCCC instruction includes classroom and applied learning experiences using state-of-the-art industry-based equipment.

Programs cover a broad range of industries and offer dual enrollment college classes, articulation to post high school opportunities, Industry Recognized Credentialing (IRC), and work based learning experiences to qualified students. Programs are scheduled for three blocks over the course of the A/B day and are two years long. Each program has an affiliated student leadership organization and state approved skill-based competencies. Students leave NCCC with a career portfolio, the foundational skills in a specific career path to pursue post-secondary education and/or training and entry level qualifications to enter the workforce if they so choose.

Programs are open to eleventh and twelfth grade students. Tenth grade students may apply also through the application process on a space available basis (see the NCCC School Counseling Coordinator for an application).

Pre-Tech Foundation classes (introductory classes: one block for one semester) are designed to investigate career pathways. Priority is given to ninth and tenth grade students, while eleventh and twelfth grade students may enroll when space is available.

Students are given the opportunity and encouraged to visit the career center and tour programs of interest prior to the application process. Applications are distributed to all LRUHS and NCUHS sophomores and are available through the NCCC School Counseling Office. The complete program of study is also available on the NCCC website at <a href="https://www.nc3.ncsuvt.org">www.nc3.ncsuvt.org</a>

Applications must be completed and signed by both the student and the parent/guardian and returned to the NCCC main office with the required documentation (as stated on the application) by the stated submission date. Detailed admission procedures and requirements can be found on the application.

For information or to tour the Career Center, please contact Gillian Staniforth, NCCC School Counseling Coordinator at 802.334.5469 ext. 3385.



## **Pre-Tech Foundation Classes**

These <u>one semester</u>, one block introductory classes offer students the opportunity to explore areas of interest to determine if they want to pursue the career related programs in their 11<sup>th</sup> or 12<sup>th</sup> grade years.

#### PTF-CADD and 3-D Prototyping

.5 credits

This course is intended to give students a working knowledge of architectural and mechanical CAD and how they are used in the engineering and construction career paths. It will also introduce students to the reverse engineering design process as an extension of CAD. This course will involve a wide variety of machines, tools, and processes used for developing prototypes in 3-D.

#### PTF-Carpentry- Furniture and Cabinetmaking

.5 credits

This course is designed to teach the fundamentals of materials, tools, machines, and processes that are used in building of cabinets and furniture. Occupational information in the field will be provided in areas of furniture or interior design, cabinetmaking, architecture, and sales in the building and construction industry. This course provides the foundation for other occupations relating to the woodworking field.

## **PTF-Carpentry- Construction**

.5 credits

Students will prepare for careers in designing, planning, managing and building in the construction environment. The class will focus on the construction of commercial and residential buildings. Students will learn the care and safe use of both hand and power tools and develop skills in carpentry and electrical circuits.

## PTF-Culinary Arts .5 credits

This class introduces students to the food service industry and explores many facets including career options, employment skills, human relations, customer service, the importance of sanitation and safety, and basic concepts of food production. Students will study and work in a professional kitchen and restaurant environment preparing for entry level employment as well as continuing education in Culinary Arts.

#### PTF-Green Building & Design

.5 credits

Students will explore 'green' materials and resources for building, insulation and design and learn how to design or retrofit energy efficient and environmentally friendly homes. This will include a survey of newly developed products and creative recycling of materials.

#### **PTF-Greenhouse Gardening**

.5 credits

Students will be exposed to a variety of skills and opportunities in the field of Greenhouse Gardening including plant propagation, greenhouse management, hydroponics, aquaponics, integrated pest management, plant science, crop production, ornamental plants and food science. This course will also expose students to careers such as organic farming and greenhouse operation.



#### **PTF-Information & Communication Technology**

.5 credits

Students will investigate different ways to find, manipulate, store, and communicate information effectively and efficiently using technology. Students will build on, and expand essential skills necessary for 21<sup>st</sup> century jobs, careers and educational opportunities using MS Office Suite (Word, Excel, Access, Publisher, and PowerPoint) and Google tools.

## **PTF-Introduction to Agriculture & Natural Resources**

.5 credits

This course is designed to be an introductory course for the Natural Resources cluster. It will emphasize the importance of inquiry and community while supporting and enriching skills in data collection, documentation, and presentation within the context of the natural resources around us. Topics of this course include career exploration, natural resource management, plant science, and agriculture.

#### **PTF-Introduction to STEM and Mechatronics**

.5 credits

Students will learn about mechatronics and robotics by assembling and programming simple robotic devices (using P-basic). Students will explore the relationship of hydraulics, pneumatics and electronics in controlling robotic systems. This class will prepare students for success in the Science, Technology, Engineering & Math, Architectural, and Construction Career Clusters.

## PTF- Landscape Design for Residential & Commercial Construction .5 credits

Students will work on external landscape projects on and off campus as well as use landscape design software (Earthscapes) to create designs for both residential and commercial projects. Students will also explore how to create projects in a virtual reality environment.

#### **PTF- Introduction to Business and Marketing**

.5 credits

Students will learn about skills in business operations, financial matters, marketing, and management, while taking this introductory course. These skills can translate into success by continuing your education and/or enhance your ability to succeed in today's business world. If you are interested in a career in business, the introductory program will prepare you! Students will explore different types of business ownerships including sole proprietorships, partnerships, corporations and franchises. Business related projects such as effective speaking, written research projects, and field trips are part of this exciting class. Students will also be introduced to basic accounting concepts as well as marketing strategies.

#### **PTF- Metalworking Technology**

.5 credits

This semester course is designed to introduce students to technological processes used in the metalworking industry. It is based on using problem solving methods related to metalworking and will integrate knowledge from a variety of sources and technical fields. Students will be given a broad insight into the technical field and will be able to use this knowledge to better prepare for a career choice. Content to be covered will include the steel making process, structural-design process, material testing, basic hand tools, sheet-metal work and resistance spot welding.



## PTF -Powering with Renewable Energy

.5 credits

This class begins with students learning about the concepts of energy and electricity and how alternative and renewable energy sources can be used. Sources of energy discussed will include Hydro-electric, wind, solar, geothermal and rechargeable batteries. Students will learn how these different sources are processed and wired to create electricity for home or commercial use. Students will do hands-on projects and use small scale renewable energy systems (wind and solar).

#### **PTF-STEM Discovery Lab**

.5 credits

Students will create, design and build projects to explore and apply basic math and science principles by experimenting with numerous materials, tools and methods in the lab, including 3-D printing. This class will prepare students for success in the Science, Technology, Engineering & Math, Architectural, and Construction Career Clusters.

#### PTF- Introduction to Video Game and Web Programming

.5 credits

Introduction to Video Game and Web Programming introduces students to Video Game Programming through the use of Gamemaker, Python with Minecraft and other fun to use programming tools. Also covered is an introduction to computer graphics for video game content using Photoshop and Blender, and an introduction to web site creation using HTML. Students will build an application for a portable computer (Android phone/tablet). Students will create a web-based portfolio to organize and display their work. Students who take Introduction to Video Game and Web Programming will be well prepared to take the full Video Game and Web Programming course, or other Career Center classes that utilize computer and web technology.

#### PTF -Wiring and Plumbing

.5 credits

Students will be introduced to a basic overview of residential plumbing and residential wiring. Topics will include safety procedures, proper use of tools and an overview of career opportunities. The class will include labs in the installation of plumbing fixtures, water supply lines, electrical switches, and various other fixtures. During the labs students will become familiar with related math concepts.

## PTF-Woodworking Technology

.5 credits

This course is designed to develop the student's practical problem solving abilities related to woodworking and to integrate knowledge from a variety of sources and technical fields. Through this experience, the student will gain an insight into our technical world and will be able to use this knowledge in preparing for a career choice. Content to be covered will include the physical properties of wood, basic hand tools, power tools, design process, abrasives, finishing process and safety.



## FORESTRY, AGRICULTURE & WATER RESOURCES

This program will introduce students to various disciplines and skills involved in natural resource management careers. The focus is broad, however specific proficiencies in several skills will be included; tractor operation, equipment maintenance, gathering and analyzing inventory data, management planning, map use, maple syrup production, sawmilling, timber harvesting, and arboricultural techniques. Students will learn and practice the ecological principles that help them understand the methods and importance of being a good steward. The goals of this program are:

- Foster an understanding of the complexity inherent in natural systems
- Appreciate the interrelatedness between and within the geological, hydrological, and biological components of local forest, aquatic, and agricultural ecosystems
- Build an awareness of the connection between good management practices and the resulting social, environmental, and economic benefits
- Introduce students to a variety of careers in natural resources
- Provide students with the vocabulary, conceptual understanding, technical knowledge, and physical skills necessary to pursue natural resource careers
- Engage students in hands-on project-based learning activities to develop safe and effective working practices
- Enhance students' transferable employment practices and values
- Engage students with their local community by providing opportunities for field trips and community service projects

## Forestry, Agriculture & Water Resources I

3 credits

This class is open to all 11<sup>th</sup> and 12<sup>th</sup> grade students in good academic standing.

## Forestry, Agriculture & Water Resources II

3 credits

This class is open to all students who have successfully completed Forestry, Agriculture and Water Resources I.

**Additional Program Information** 

Embedded Credit	Industry Credential	Dual Enrollment	Student Organization
Science	OSHA 10  Game of Logging Chainsaw Safety; levels1-4	CCV ENV 1010 Intro to Environmental Science 3 credits	Future Farmers of America (FFA)
	National Safe Tractor and Machine Operator- NSTMO		

Teacher		
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## COMPUTER & NETWORK TECHNOLOGY

Students learn the functionality of hardware and software components as well as suggested best practices in maintenance and safety issues. The students, through hands-on activities and labs, learn to assemble and configure a computer, install operating systems and software, and troubleshoot hardware and software problems. In addition, this course includes an introduction to networking. This course helps students prepare for the CompTIA A+ certification. Upon successful completion of level one, the student receives a Certificate of Completion for Cisco IT Essentials I: PC Hardware and Software. The focus of year two, Network for Home and Small Business, sponsored by Cisco, is an intensive introduction to networking fundamentals and multi-user/multitasking network operating systems. Characteristics of the Linux and Windows network operating systems will be discussed. Students will explore a variety of topics including installation and configuration procedures. More advanced administrative tasks such as troubleshooting issues, security issues, and remote access will also be covered. Upon successful completion of this course, the student will receive a Certificate of Completion for Cisco CCNA Discovery: Networking for Home and Small Businesses.

## Computer & Network Technology I

3 credits

This class is open to all 11<sup>th</sup> and 12<sup>th</sup> grade students who are in good academic standing.

## Computer & Network Technology II

3 credits

This class is open to students who have successfully completed Computer and Network Technology I.

**Additional Program Information** 

Embedded Credit	Industry Credential	Dual Enrollment	Student Organization
Science	CompTIA A+ CompTIA Network +		

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## VIDEO GAME & WEB PROGRAMMING

This program forms the groundwork for the increasing number of Internet and Computer Game and Entertainment Related Careers ranging from Computer Programmer (covering applications, web and game programming), Game Designer, Web Designer, Graphic Designer (for web based graphics, print media and game graphics) and Database Designer. Web programming (using JavaScript and PHP) and E-Commerce are covered. Programming languages such as Java, JavaScript, PHP and SQL will be covered as well as multimedia tools: Photoshop, Blender, Inkscape and Game Programming tools (Gamemaker). Additional topics such as interactive websites with Javascript and 3D Game Programming will also be covered.

## Video Game and Web Programming I

3 credits

This class is open to all 11<sup>th</sup> and 12<sup>th</sup> grade students in good academic standing. It is recommended that students have successfully completed Algebra I.

## Video Game and Web Programming II

3 credits

This class is open to all students who have successfully completed Video Game and Web Programming I.

**Additional Program Information** 

<b>Embedded Credit</b>	Industry Credential	<b>Dual Enrollment</b>	Student Organization	
Science		VTC CIS 2271 Java Programming 3 credits		
		AP Computer Science		

Teacher		
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## **CULINARY ARTS**

The Culinary Arts program provides the student with hands-on experience in foodservice in a professional kitchen and restaurant setting. The Falcon Café is a student-run full service restaurant that allows students to experience all aspects of the restaurant business. Students in Culinary Arts I learn to prepare baked goods, learn and practice cooking techniques, cook for the restaurant and engage in customer service. Students start portfolios that document their work in the culinary program, explore food service careers and demonstrate employability skills.

In Culinary Arts II, students will build on the skills they have developed and take leadership roles. The students use the second year to explore the area of food service that most interests them. Students continue to expand their knowledge of food services, food preparation, demonstrate bakery production skills and gain a greater understanding of the hospitality industry.

Culinary Arts I 3 credits

This class is open to all 11<sup>th</sup> and 12<sup>th</sup> grade students who are in good academic standing.

Culinary Arts II 3 credits

This class is open to all students who have successfully completed Culinary Arts I.

**Additional Program Information** 

Industry Credential	Dual Enrollment	Student Organization
ServSafe	New England Culinary Institute	SkillsUSA
SP/2 Workplace Safety	Introduction to Food and Beverage	
SP/2 Food Safety	3 credits	
	ServSafe SP/2 Workplace Safety	ServSafe New England Culinary Institute SP/2 Workplace Safety Introduction to Food and Beverage

#### **Teacher**

Frances Woodward 802.334.5469 ext. 3374 Frances.Woodward@ncsuvt.org



## **MARKETING**

Explore the exciting world of marketing and advertising; create brochures, magazine and newspaper ads as well as radio commercials. Students will learn how products are developed, branded, and sold to businesses and consumers. Creative hands-on projects, multimedia presentations and group work lead students to an understanding of distribution, marketing-information management, market planning, pricing, product/service management, promotion, and selling. Work-based learning strategies include cooperative education, entrepreneurship, and school-based enterprise. Training will also include scheduled work hours in The Falcon's Nest, a student run enterprise. DECA (an association for Marketing Education students) competitive events, community service, and leadership activities provide the opportunity to excel in workplace readiness skills through authentic experiences. DECA and store hours are integral to marketing and as such are required elements. Students gain leadership skills through The Falcon's Nest managing staff activities focusing on the marketing mix, purchasing, financing, human resources, pricing and running an effective enterprise.

Marketing I 3 credits

This class is open to all 11<sup>th</sup> and 12<sup>th</sup> grade students who are in good academic standing.

Marketing II 3 credits

This class is open to all students who have successfully completed Marketing I.

**Additional Program Information** 

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Embedded Credit	Industry Credential	<b>Dual Enrollment</b>	Student Organization	
Math	DECA School Based Enterprise Individual Certification DECA SBE		DECA	

Teacher

Lydia Alexander 802.334.5469 ext. 3312 Lydia.Alexander@ncsuvt.org



## **BUILDING TRADES**

Students are exposed to proper safety techniques, safe use of power and hand tools, identification and use of building materials, print reading, construction-related math (including decimals, fractions, estimation, geometry, linear, area, and volume calculations), and proper construction procedures. These include the framing of floors and walls, planning and construction of stairs, calculation and construction of roofs, installation of doors and windows, installation of various insulation products, interior wall coverings, apply siding, exterior trim, and how to plan and build decks. Interior finish work includes applying trim to doors and windows, applying moldings, hanging interior doors, cabinetry, and installing hardware. Students, after proper class preparation, will work on actual construction projects in the community and apply learned procedures. Students are also exposed to teambuilding and will hone problem-solving and employability skills.

Building Trades I 3 credits

This class is open to all 11<sup>th</sup> and 12<sup>th</sup> grade students who are in good academic standing. It is recommended that students have successfully completed Algebra I and are familiar with Geometry.

## **Building Trades II**

3 credits

This class is open to all students who have successfully completed Building Trades I.

**Additional Program Information** 

Embedded Credit	Industry Credential	Dual Enrollment	Student Organization
Math	OSHA 10 Construction  AGC Carpentry Level 1	Central Maine Community College BT 101 Hand & Power Tool Safety	SkillsUSA
	ride curpentry Level 1	1 credit	

Teacher

Jeremy Broe

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# **HEAVY EQUIPMENT OPERATION & MAINTENANCE**

Students are exposed to the basic maintenance and operation of construction equipment: Bulldozers, Excavators, Loaders, Backhoes, Dump Trucks, Graders, and Trailers. The main emphasis in the program is on safety and work ethics. Students will also learn the basics of the 1-800-DIG-SAFE system, OSHA regulations, trench safety, basic first aid, personal protective gear and clothing, hand signals for equipment control, motor carrier safety regulations, the use of fire extinguishers, basic mechanics, basic welding, the proper use of hand tools, fluids, types of soils, erosion control, contamination considerations, stump and snow removal, reading blueprints, the use of transits, leveling/grading, preventative maintenance, road design, and employment/workplace skills.

## **Heavy Equipment Operation and Maintenance I**

3 credits

This class is open to all 11<sup>th</sup> and 12<sup>th</sup> grade students who are in good academic standing.

## **Heavy Equipment Operation and Maintenance II**

3 credits

This class is open to all students who have successfully completed Heavy Operation and Maintenance I.

**Additional Program Information** 

Embedded Credit	Credential	Dual Enrollment	Student Organization
Science	OSHA 10 Construction		SkillsUSA
	American Heart Association Heartsaver First Aid Heartsaver CPR CDL Learner's Permit		

Fred Bishop

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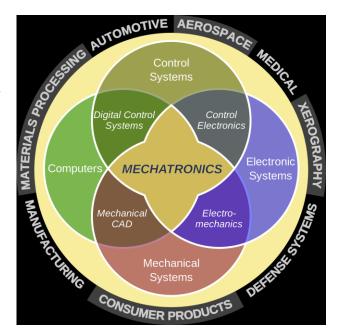
## STEM & MECHATRONICS

First year students will learn the fundamentals of hydraulics, pneumatics, electronics and mechanics. This course will also incorporate robotics and industrial design using 3D software such as **Solidworks** in the development of mechanical systems. Work in this portion will include AutoCAD Software and design build projects using a 3D printer and CNC machines. OHMs Law and electronic components and their applications including resisters, diodes and capacitors will be studied. Year two focuses on preparation for the Level I Siemens Mechatronics Systems Certification and the Systems Approach to Mechatronics. Students taking this program will be well prepared to enter a number of STEM related fields.

# **Mechatronics I**

3 credits

This class is open to all 11<sup>th</sup> and 12<sup>th</sup> grade students who are in good academic standing.



## **Mechatronics II**

3 credits

This class is open to all students who have successfully completed Mechatronics I.

**Additional Program Information** 

Embedded Credit	Industry Credential	Dual Enrollment	Student Organization
Science	Level One Siemens Systems Certification	VTC MECH 1011 Solidworks 3 credits	SkillsUSA

**Teacher Teacher** 

Hazen Converse 802.334.5469 ext. 3429

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Dan Ross 802.334.5469 ext. 3426 dan.ross@ncsuvt.org



## TRANSPORTATION SCIENCE TECHNOLOGY



The Transportation Science Technology (TST) program is NATEF certified in the area of Maintenance and Light Repair. Students work in the classroom and lab area involved in practical job service, with over half of the total program time spent working on vehicles. Instruction will focus on personal and environmental safety practices, service maintenance, brakes, engine fundamentals, steering and suspension diagnosis and repair, front end geometry and wheel alignment. The

second year focuses on developing competencies with electronic and other test equipment in the areas of automotive electricity and engine performance. Time management, professional conduct, organizational skills, and the completion of work in accordance with industry standards are emphasized. Co-curricular instruction in Language Arts is included.

# Transportation Science Technology I Transportation Science Technology Language Arts I

These classes are open to all 11<sup>th</sup> and 12<sup>th</sup> grade students who are in good academic standing.

# Transportation Science Technology II 3 credits Transportation Science Technology Language Arts II 1 credit

These classes are open to all students who have successfully completed Transportation Science Technology I.

**Additional Program Information** 

<b>Embedded Credit</b>	Industry Credential	<b>Dual Enrollment</b>	Student Organization
Science	SP/2  • Mechanical Safety Repair  • Pollution Prevention  • Supervisor's Course  • ASE Student Certification  • Brakes  • Suspension  • Electrical  • Maintenance & Light Repair  VT State Inspection Certification	VTC ATT 1010 Suspension & Steering 3 credits  VTC ATT 1050 Alignment & Brakes 3 credits	Skills USA

Teacher		
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3 credits

1 credit

## **WELDING & METAL FABRICATION**

This course is designed to study the various fields in the construction welding trade. Areas that will be covered in the first year are: Oxy-fuel cutting, Shielded Metal Arc Welding (SMAW), Blue print reading, Metallurgy and Occupational safety, Students will apply math, science, English and problem solving skills in daily activities. In year two, students will study various applications of Gas Metal Arc Welding (MIG) and Gas Tungsten Arc Welding (TIG). Students will be exposed to small business procedures, job estimation and accounting. After rotation through all the areas, the student will select an area for in-depth study that includes career research.

## Welding & Metal Fabrication I

3 credits

This class is open to all 11<sup>th</sup> and 12<sup>th</sup> grade students who are in good academic standing.

## Welding & Metal Fabrication II

3 credits

This class is open to all students who have successfully completed Welding & Metal Fabrication I.

**Additional Program Information** 

Embedded Credit	Industry Credential	Dual Enrollment	Student Organization
Math	OSHA 10		SkillsUSA
	American Welding Society D1.1Structural Steel		

## **Teacher**

Ben Wells 802.334.5469 ext. 3363 Benjamin.Wells@ncsuvt.org



## **COSMETOLOGY**

For students who are interested in pursuing the cosmetology profession, course work and curriculum will be accomplished through e-books, textbooks, lectures, guest speakers, career related field-trips, research and projects. This program uses both classroom experience and hands-on training in a salon-like setting and off-site field experience. Students will study: professionalism; leadership and ethics; sanitation; sterilization, hygiene; anatomy; laws, rules, and regulations; Shampooing and related chemistry;

Waxing; Permanent waving, hair straightening and related chemistry; Finger waving, pin curls, roller formation, blow-waving, and related chemistry; Manicuring and related chemistry; basic aestheticism, facials, makeup and related chemistry; tinting, bleaching, rinsing, and reconditioning and haircutting. Year two students will be more involved with scheduling appointments and performing services on clients both in the school setting and out in the community. Upon completion of the program, students may use some of the accumulated hours towards the 1500 hours required for the cosmetology licensing examination depending upon their academic standing in the program and the post-secondary school of their choice.

Cosmetology I 3 credits

This class is open to all 11<sup>th</sup> and 12<sup>th</sup> grade students who are in good academic standing.

Cosmetology II 3 credits

This class is open to all students who have successfully completed Cosmetology I.

**Additional Program Information** 

Embedded Credit	Industry Credential	Dual Enrollment	Student Organization
Science	SP/2 for Cosmetology		SkillsUSA
	American Heart Association Heartsaver First Aid Heartsaver CPR Barbicide Certification		

Teacher Assistant

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## EARLY CHILDHOOD DEVELOPMENT

This program is designed for students who are interested in exploring or pursuing a career working with children ages birth through eight years old. This program uses both classroom experience and off-site training to prepare students for future careers and options. Students who apply for this program should like children and enjoy being around them, be willing to write lessons and teach lesson plans in local elementary schools, understand that there are weekly homework assignments and a variety of required in-depth research projects, and actively participate in class activities, including public speaking. Through research and study, students will develop the knowledge and skills to effectively work with children and their families. Students will also learn to organize lesson plans, activities and appropriate environments to promote positive physical, emotional, intellectual and social growth in children. After completing the required coursework foundations, students will begin entering the field and have the opportunity to practice skills in local childcare facilities, elementary schools and preschools. Students will be required to speak in front of children and adults as they will implement lesson plans and activities with children in the field. The second year curriculum includes a developmental overview of all stages of life: birth to death. This overview will allow students an opportunity to explore other career options in the field of Human Services.

## **Early Childhood Development I**

3 credits

This class is open to all 11<sup>th</sup> and 12<sup>th</sup> grade students who are in good academic standing.

## **Early Childhood Development II**

3 credits

This class is open to all students who have successfully completed Early Childhood Development I.

**Additional Program Information** 

<b>Embedded Credit</b>	Industry	Dual Enrollment	<b>Student Organization</b>
	Credential		
Social Studies	OSHA 10	CCV Edu 1030	SkillsUSA
		Introduction to Early Childhood Education	
	American Heart	3 credits	
	Association	CCV PSY 2020	
	Heartsaver First Aid	Infant & Toddler Development	
	Heartsaver CPR	3 credits	
		CCV Com 1015	
		Effective Communication in the Workplace	
		3 credits	

**Teacher** 

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## **HEALTH SCIENCES**

Health Sciences I includes anatomy & physiology, human growth and development, infection control, legal responsibilities, medical terminology, job safety, employability skills, and much more related to the health care industry. A clinical component is included to provide practical experience in many health care areas including (but not limited to) nursing, physical therapy, radiology, respiratory therapy, dental care, nutrition, surgical services, veterinary science and other related areas. In Health Sciences II students continue to expand skills and career path options and choose between Licensed Nursing Assistant (LNA) or dual enrollment in the Human Growth and Development course; all students study Medical Terminology for optional dual enrollment credit.

Health Sciences I 3 credits

This class is open to all 11<sup>th</sup> and 12<sup>th</sup> grade students who are in good academic standing.

## **Health Sciences II**

This class is open to all students who have successfully completed Health Sciences I.

3 credits

Semester 1: Students choose either Licensed Nursing Assistant (LNA) or Human Growth & Development LNA Pre-requisites: Able to lift and move 50 pounds, free of neck, shoulder, knee, back or hip problems (medical clearance required for prior injury); free of abuse/neglect, theft, and/or drug or alcohol convictions; direct patient care required.

## **Semester 2: Medical Terminology**

**Additional Program Information** 

<b>Embedded Credit</b>	Industry Credential	Dual Enrollment	Student
			Organization
Science	American Heart Association	CCV BIO 1140	SkillsUSA
	BLS for Healthcare Providers	Human Biology	
		3 college credits	
	American Heart Association Heartsaver First Aid	fulfills 1 NCUHS Science credit	
		VTC PSY 1050	
	American Red Cross	Human Growth and Development	
	Blood Borne Pathogens	3 credits	
	OSHA 10	CCV AHS 1205 Medical Terminology	
	VT Licensed Nursing Assistant	3 credits	

Teacher -Year I	Teacher - Year II
Dr. Kathy Gray 802.334.5469 ext. 3444 Katherine.Gray@ncsuvt.org	Celine Champine, R.N. 802.334.5469 ext. 3435 Celine.Champine@ncsuvt.org





## WORK-BASED LEARNING AND APPRENTICESHIPS

This flexible, individualized program provides a link between school and work. Students are placed with community enterprises, businesses and organizations where they receive "on-the-job" training related to their NCCC program. Work-based learning experiences are individually tailored to each student's career goals, the demands of his/her program and community opportunities. In addition, students may earn wages. Eligibility is based on teacher recommendation, grades, excellent attendance, mature behavior and a demonstrated work ethic. Students are supported and supervised by a Work-Based Learning Coordinator. Work-based learning experiences can take place during and/or after school hours and occur throughout the school year. Students must be a career center student in good standing to be eligible and can earn up to two (2) academic credits over the two years of a program.

Carol Trembley 802.334.5469 ext. 3306 Carol.Trembley@ncsuvt.org

