

R.W. Creteau Technology Center

Spaulding High School

140 Wakefield Street

Rochester, New Hampshire 03867

(603) 332-0757



Program Descriptions

2019-2020

Contact Information



Our mission . . . "To guide individuals in developing confidence, goals and marketable skills for life and career success."

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Nondiscrimination Policy

Spaulding High School, the Richard W. Creteau Regional Technology Center and the Rochester School Department do not discriminate in its education programs, activities or employment practices on the basis of race, color, national origin, age, sex, disability, religion, marital status, or sexual orientation under the provision of Title VI of the Civil Rights Act of 1964, the Age Discrimination Act of 1967, Title IX of the Education Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, the Education of all Handicapped Children Act of 1975, or State Ed. Laws 303.01 and RSA 354-A. Furthermore, lack of English language skills will not be a barrier to admission and participation in any of the educational programs and activities held at or by Spaulding High School and the Creteau Technology Center.

Any person having inquiries concerning this system's compliance with the regulations implementing these laws may contact the following:

Christiane Allison, Special Education Director
Superintendent's Office
150 Wakefield Street
Rochester, New Hampshire 03867
(603) 332-3678

Any person wishing to file a grievance in regards to one of the above laws may follow the district's grievance procedure through either the district's website www.rochesterschools.com (school board policy) the telephone hotline (603-335-7373), by completing a grievance form located in the school offices, or by verbally reporting to principal, counselor, school nurse, teacher, or the above listed coordinators. Any person may also contact the Assistant Secretary for Civil Rights, United States Department of Education or the Director, United States Department of Education, Office of Civil Rights, Region I, Boston Massachusetts

Life Ready, College Ready, Career Ready!

Greetings,

Thank you for taking the time to consider a program at the R.W. Creteau Technology Center. We have 15 programs that provide many pathways for your future! Students have several options such as earning Running Start credit, industry certificates and experience extended learning opportunities out in the community. Our students go on to 2 and 4 year colleges, have amazing work opportunities and connections within our community. I would be happy to answer any questions you may have. Please email me at halligan-foley.m@rochesterschools.com. We hope to see you next year!

Sincerely,

Michele Halligan-Foley

Director of Career Technology Education - R.W. Creteau Technology Center



Program Offerings: R.W. Creteau Technology Center

Rochester CTE Programs	College Credit
Accounting	6
Architectural/Mechanical Engineering	3
Automotive Service Technology	3
Banking and Financial Services	3
Business Commerce	9
Computer Networking & Telecommunications	3
Criminal Justice & Homeland Security	6
Environmental Science & Sustainable Studies	-
Foundations of Education	6
Graphic Design	3
Health Science Technology	3
Heating, Ventilation, Air Conditioning, and Refrigeration HVACR	6
Precision Machining	7
Restaurant Management	9
Video & Photographic Arts	3

R.W. CRETEAU TECHNOLOGY CENTER – ROCHESTER

ACCOUNTING PROGRAM

Program Course Sequence

Year 1 – Accounting I and Accounting II (Two semester-long courses)

Program Description: Why Choose Accounting? You may already have an idea about what you want to do for a career. Then again, maybe you're not so sure. Either way, there's one degree that gives you the education to succeed at just about anything in the business world. It's an accounting degree. Accounting opens doors in every kind of business coast to coast. It can give you the foundation you need to go on and become a CPA. It can prepare you to become a partner in an accounting firm, to pursue a career in finance or corporate management, to work in government, or even to become an entrepreneur. In fact, no matter what you decide to do, having an accounting background can open doors wide. You can work as an accounting technician/bookkeeper while in college or after graduating from high school and according to the US Department of Labor you will earn an average of \$18.13/hour. The two courses offered in the CTE Accounting Program are both offered for Running Start credits and if you successfully complete the courses, they will directly transfer to the Peter T. Paul College at UNH as ADMN 502: Introduction to Financial Accounting.

ACCOUNTING I HNR (π) – Running Start

CRS 070013 Grades: 11-12 CREDIT 1 (fall semester course, CTE Program)

PREREQUISITE: Acceptance into the Accounting program

This course is an introduction to accountings as the language of business and the purpose of accounting in business. Students will develop an understanding of the concepts and use of the classification of assets, liabilities, equity, revenue and expense accounts. The student will be introduced to accounting procedures necessary to prepare financial statements utilizing current concepts and accounting principles. This includes journalizing transactions, preparation of trial balance, accounting adjustments, closing journal entries, inventory, accounts receivable, accounts payable, special journals, payroll, cash receipts, disbursements, and banking procedures. Note: Students taking this course will have the option of earning three college credits. There would be a fee associated with this option.

ACCOUNTING II HNR (π) – Running Start

CRS 070023 Grades: 11-12 CREDIT 1 (spring semester course, CTE Program)

PREREQUISITE: Successful completion of Accounting I

This course consists of a more in-depth study of accounting procedures and concepts. An emphasis is placed on accounts from the balance sheet such as accounts and notes receivable; plant, property and equipment; and current and long-term liabilities. This course will also involve comparing and contrasting sole proprietorships, partnerships and corporations, as well as capital stock and stock transactions. The student will learn to use financial ratios to measure financial strength, profitability and liquidity. Note: Students taking this course will have the option of earning three college credits. There would be a fee associated with this option. The successful completion Accounting 1, HNR AND Accounting 2, HNR will transfer to the Peter T. Paul College at UNH and replace ADMN 502: Introduction to Financial Accounting, a requirement of various business majors.

ARCHITECTURAL/MECHANICAL ENGINEERING

Program Course Sequence

Year 1 - Architectural/Mechanical Engineering I (Full year, one block course)

Year 2 - Architectural/Mechanical Engineering II (Full year, one block course)

ARCHITECTURAL/MECHANICAL ENGINEERING I ENR - (AutoCAD Drafting) (π)

CRS 0800012 Grades: 11 CREDITS 2 (Full-year course, CTE Program)

ARCHITECTURAL/MECHANICAL ENGINEERING I HNR - (AutoCAD Drafting) (π)

CRS 0800013 Grades: 11 CREDITS 2 (Full-year course, CTE Program)

PREREQUISITE: Acceptance into the Architectural/Mechanical Engineering program.

During the first year students learn basic drafting techniques as they apply to industry. Hands on approach to computer aided drafting (CAD) are emphasized. Students will be able to utilize technology such as the 3-D Printer, Laser engraver,

and CNC machinery to take ideas into real life objects. Students will explore all aspects of engineering including Mechanical, Architectural, Environmental, and others to understand how engineers can solve real world problems and better our society. Topics include: Safety, computer programming, STEM, drafting, physics, manufacturing skills. Students choosing to enroll in this course at the honors level will be required to complete more rigorous work and sign an honors contract. Note: This course will fulfill the fine arts requirement for graduation.

ARCHITECTURAL/MECHANICAL ENGINEERING II ENR (AutoCAD Drafting) (π)

CRS 0800022 Grades: 12 CREDITS 2 (Full-year course, CTE Program)

ARCHITECTURAL/MECHANICAL ENGINEERING II HNR (AutoCAD Drafting) (π)

CRS 0800023 Grades: 12 CREDITS 2 (Full-year course, CTE Program)

PREREQUISITE: Successful completion of Architectural/Mechanical Engineering I

During the second year students expand upon their experience in CAD and specialize in a field of engineering (Mechanical, Architectural, Environmental, Aerospace, etc.) This course is designed to be very individualized to meet the student's interests within engineering. Students will continue to utilize technology such as the 3-D Printer, Laser engraver, and CNC machinery to take ideas into real life objects. Students will develop a website portfolio to showcase all of their engineering success and market themselves to compete in today's exciting, rewarding engineering field. Topics include: Safety, computer programming, STEM, drafting, physics, manufacturing skills. Students choosing to enroll in this course at the honors level will be required to complete more rigorous work and sign an honors contract. Note: This course will fulfill the fine arts requirement for graduation. *Note:* This program has articulation agreements with Southern Maine Community College

AUTOMOTIVE SERVICE TECHNOLOGY

Program Course Sequence

Year 1 – Automotive Service Technology I (One full-year course)

Year 2 – Automotive Service Technology II (One full-year course)

AUTOMOTIVE SERVICE TECHNOLOGY I ENR (π)

CRS 080132 Grades: 11 (Grade 12 on space available basis) CREDITS 2 (Full-year course, CTE Program)

AUTOMOTIVE SERVICE TECHNOLOGY I HNR (π)

CRS 080133 Grades: 11 (Grade 12 on space available basis) CREDITS 2 (Full-year course, CTE Program)

PREREQUISITE: Acceptance into the Automotive Service Technology program

The purpose of this course is to train future technicians in the fundamentals of automotive theory, maintenance, diagnosis and repair. During this course students will learn about tools, fasteners, engine design and theory, steering and suspension, brakes, electrical/electronics and engine performance. Students will have the opportunity to reinforce theory with hands-on experiences and by participating in live repairs. Students are permitted to work on personal vehicles on a limited basis and are eligible to join SkillsUSA and compete in several competitions. Students choosing to enroll in this course at the honors level will be required to complete more rigorous work and sign an honors contract. **NOTE:** Clothes that can get dirty, long pants, and boots are required to be worn when in the lab setting.

AUTOMOTIVE SERVICE TECHNOLOGY II ENR – Running Start (π)

CRS 080152 Grades: 12 CREDITS 2 (Full-year course, CTE Program)

AUTOMOTIVE SERVICE TECHNOLOGY II HNR– Running Start (π)

CRS 080153 Grades: 12 CREDITS 2 (Full-year course, CTE Program)

PREREQUISITE: Successful completion of Automotive Technology I, maintain a clean driving record

The purpose of this course is to train future technicians in the fundamentals of automotive theory, maintenance, diagnosis and repair. During this course students will learn more in-depth topics relating to the ASE areas of brakes, steering and suspension, electrical and electronics, and engine performance. Students will have the opportunity to reinforce theory with hands-on experiences and by participating in live repairs. Students are permitted to work on personal vehicles on a limited basis and are eligible to join SkillsUSA and compete in several competitions. Students choosing to enroll in this course at the honors level will be required to complete more rigorous work and sign an honors contract. **NOTE:** Clothes that can get dirty, long pants, and boots are required to be worn when in the lab setting. *Note:* Students taking this course will have the option of earning four college credits. There would be a fee associated with this option.

BANKING AND FINANCIAL SERVICES PROGRAM

Program Course Sequence

Year 1 – Banking and Financial Services year-long

BANKING AND FINANCIAL SERVICES I ENR (π)

CRS 070672 Grades: 11-12 CREDITS 2 (Full-year course, CTE program)

BANKING AND FINANCIAL SERVICES I HNR (π)

CRS 070683 Grades: 11-12 CREDITS 2 (Full-year course, CTE program)

PREREQUISITE: Acceptance into the Banking and Financial Services program. Students are required to submit with the application: two teacher recommendations and their resume. An interview with the instructor is also required. Students must have a minimum GPA of 2.25. Students choosing to enroll in this course at the honors level will be required to complete more rigorous coursework and sign an honors contract.

The HRCU branch is opened to the school as well as the public providing an excellent opportunity for "hands-on" learning and exposure to all aspects of banking. Students will be trained as professional HRCU tellers. As a teller they will learn how to handle different transaction types, maintain and balance cash drawers, be familiar with HRCU's products and services, negotiable instruments, and learn basic customer service skills as well as professionalism. They will also become knowledgeable in the many different departments and aspects of banking such as compliance, accounting, Federal Regulations, investments, insurances, lending, marketing, and the history and structure of credit unions. There will be job shadow days to the Brock Street Branch and other departments. Professional dress and appearance will be required. Opportunities for community service events and financial education outreach may also occur, along with the planning of CU 4 Reality event held at the high school. **NOTE:** Students will be held to professional standards and adhere to HRCU's policies and procedures. Students taking this course will have the option of earning three college credits. There would be a fee associated with this option.

BUSINESS COMMERCE PROGRAM

Program Course Sequence

Year 1 – Business Management and Marketing (Two semester-long courses)

Year 2 – International Business and Entrepreneurship: Small Business Management (Two semester-long courses)

BUSINESS MANAGEMENT ENR

CRS 070622 Grades 11-12 CR 1 S 1 block

BUSINESS MANAGEMENT HNR

CRS 070623 Grades 11 (12 on space available basis) CR 1 S 1 block

PREREQUISITE: Acceptance into the Business and Commerce program.

Every business needs a manager. It doesn't matter if you are in an office or a construction site, someone is in charge. This course is designed to prepare students for the business world. In this course, students will develop and improve management techniques. They will also enhance their computer skills through practical business applications. They will work cooperatively on activities and team-building activities. Presentation and reviews will be a major part of the class. Students will complete simulations and learn how to succeed in a business environment. The course will provide the students with opportunities to experience real-world scenarios, including working in the Retail Learning Lab, The Raider Shack. Students will also have the opportunity to join the Future Business Leaders of America (FBLA), where they can participate in community service and compete in business M, drafting, physics, manufacturing skills. Students choosing to enroll in this course at the honors level will be required to complete more rigorous work and sign an honors contract. **Note:** Students taking this course at the HONORS LEVEL ONLY will have the option of earning three college credits. There would be a fee associated with this option.

ENTREPRENEURSHIP: SMALL BUSINESS MANAGEMENT ENR

CRS 070642 Grades 11-12 CR 1 S 1 block (Spring semester course, CTE Program)

ENTREPRENEURSHIP: SMALL BUSINESS MANAGEMENT HNR

CRS 070643 Grades 11-12 CR 1 S 1 block (Spring semester course, CTE Program)

PREREQUISITE: To be eligible for college credits, you must have taken Business Management HNR for college credits prior to taking this course.

Most of the jobs created in recent years have been in the small business sector. Forecasts indicate that this trend will continue. This course will offer a unique opportunity to develop and promote your own product or business in a Shark Tank-like format. Students will benefit from developing an appreciation for and understanding of small business development in our economy. Students have the opportunity to become involved in the student organization, FBLA, which offers many opportunities for community service, leadership, travel and conferences. Students choosing to enroll in this course at the honors level will be required to complete more rigorous coursework. Note: Students taking this course at the HONORS LEVEL ONLY will have the option of earning three college credits. There would be a fee associated with this option.

INTERNATIONAL BUSINESS ENR

CRS 070692 Grades 11-12 CR 1 S 1 block

INTERNATIONAL BUSINESS HNR

CRS 070673 Grade 12 (Grade 11 with space availability) CR 1 S 1 block

PREREQUISITE: To be eligible for college credits, you must have taken Introduction to Business, HNR for college credits prior to taking this course.

Have you ever wondered about International Business and the role that it plays in your life? No matter where you look, social media, television, print, or on the radio, it is there. International Business is everywhere! The increasing globalization of the market place affects all who are involved with business or who must make business decisions. Understanding the impact of the globalization that exists in today's ever-changing business landscape has become an essential part of doing business. Whether you work for a large company, or own your own small business, you will inevitably be impacted by global issues. This course provides an overview of the global environment, the national business environments, international trade and investment, the international financial system and international business management. Students choosing to enroll in this course at the honors level will be required to complete more rigorous coursework. Note: Students taking this course at the HONORS LEVEL ONLY will have the option of earning three college credits. There would be a fee associated with this option.

INTRODUCTION TO BUSINESS, ENR

CRS 070192 Grades 10 -12 CR 1 S 1 block

INTRODUCTION TO BUSINESS, HNR

CRS 070193 Grades 10 - 12 1/2Q 1 block

This is an introductory course designed to provide students with a basic understanding of the structures and operations of business and an awareness of social and ethical responsibility as it relates to the environment, consumers, employees, and investors. An appreciation of the global economy will also be explored. Please note that this course is a prerequisite for International Business if you plan on taking that course for college credit, you must take this course for college credit first. Students choosing to enroll in this course at the honors level will be required to complete more rigorous coursework. Note: Students (including sophomores) taking this course at the HONORS LEVEL ONLY will have the option of earning three college credits. There would be a fee associated with this option.

MARKETING ENR (π)

CRS 070212 Grades 11 (Grade 12 on space available basis) CR 1 S 1 block (Spring semester course, CTE Program)

MARKETING HNR (π)

CRS 070653 Grades 11 (Grade 12 on space available basis) CR 1 S 1 block (Spring semester course, CTE Program)

PREREQUISITE: None

Introduce yourself to the exciting work of marketing! This course includes fun activities such as: Buying/ordering merchandise, selling, promoting and displaying merchandise, and operating our schools store, The Raider Shack. This course is valuable for anyone considering a business career and/or business major in college or technical school. Students will learn by doing in this course! The final product will be the development of a business and marketing plan for your own business venture. This satisfies the economics requirement for graduation. Students have the opportunity to become involved in the student organization, Future Business Leaders of America (FBLA), which offers many experiences for community service, leadership, travel and conferences. Students choosing to enroll in this course at the honors level will be required to complete more rigorous coursework Note: This class will fulfill the economics

requirement for graduation. Students taking this course at the HONORS LEVEL ONLY will have the option of earning three college credits. There would be a fee associated with this option.

COMPUTER NETWORKING & TELECOMMUNICATIONS PROGRAM

Program Course Sequence

Year 1 - Computer Technology I (Full-year course)

Year 2 - Computer Technology II (Full-year course)

COMPUTER TECHNOLOGY I ENR (π)

CRS 080252 Grades: 11 (Grade 12 on space available basis) CREDITS 2 (Full-year course, CTE Program)

COMPUTER TECHNOLOGY I HNR (π)

CRS 080253 Grades: 11 (Grade 12 on space available basis) CREDITS 2 (Full-year course, CTE Program)

PREREQUISITE: Acceptance into the Computer Networking & Telecommunications program

Through hands-on activities, tests and laboratory exercises students will learn in depth about PC operating systems, PC maintenance, hardware configuration and installation. The material covered in this course will form a foundation of technical knowledge in troubleshooting hardware and software. In addition we will be exploring an introduction to networking. Students will also aid CIC in maintaining district computers and network.

COMPUTER TECHNOLOGY II ENR- Running Start (π)

CRS 080282 Grade: 12 CREDITS 2 (Full-year course, CTE Program)

COMPUTER TECHNOLOGY II HNR - Running Start (π)

CRS 080272 Grades: 12 CREDITS 2 (Full-year course, CTE Program)

PREREQUISITE: Successful completion of Computer Technology I

Through hands-on activities, tests and laboratory exercises students will acquire a solid foundation in networking, network security, and basic network design. Students will maintain a peer-to-peer local area network within the lab. The LAN will provide students with experience in monitoring overall network operation, troubleshooting basic problems, and implementing administrative functions. Students will design and install a server based network in a virtual environment. Students will also aid CIC in maintaining district computers and network. Running Start credits are available to all students. Students choosing to enroll in this course at the honors level will be required to complete more rigorous coursework and sign an honors contract. Note: Students taking this course will have the option of earning three college credits. There would be a fee associated with this option.

CRIMINAL JUSTICE & HOMELAND SECURITY PROGRAM

Program Course Sequence

Year 1 – Intro to Criminal Justice and Criminology (Two semester-long courses)

Year 2 – Criminal Law & Procedures and Juvenile Justice (Two semester-long courses)

INTRO TO CRIMINAL JUSTICE ENR

CRS 080102 Grades: 11 (Grade 12 on space available basis) CREDITS 2

INTRO TO CRIMINAL JUSTICE HNR- Running Start

CRS 080104 GRADE 11 (juniors only unless not filled) CREDITS 1 (fall semester course, CTE Program)

This course covers the components of the justice system in American society. Although civil law will be discussed, the emphasis will be on the criminal justice system. The influence and pressures of changing social, political, technological, and economic factors on the agencies of justice will be studied. Much of the focus will compare ideals with realities of the system. Law enforcement, the courts, and correctional aspects will be examined. Students choosing to enroll in this course at the honors level will be required to complete more rigorous coursework. Note: Students taking this course at the HONORS LEVEL ONLY will have the option of earning three college credits. There would be a fee associated with this option.

CRIMINOLOGY ENR

CRS 080112 Grades 11-12 CREDIT 1 (spring semester course, CTE Program)

CRIMINOLOGY HNR – Running Start

CRS 080114 GRADE 11-12 CREDIT 1 (spring semester course, CTE Program)

PREREQUISITE: Intro to Criminal Justice

This course explores the question of crime causation from a number of theoretical perspectives in the social sciences. The nature and extent of crime in American society, theories of factors and influences that are related to criminal behavior, and the impact of crime on society. Students choosing to enroll in this course at the honors level will be required to complete more rigorous coursework. Note: Students taking this course at the HONORS LEVEL ONLY will have the option of earning three college credits. There would be a fee associated with this option.

CRIMINAL LAW & PROCEDURE ENR

CRS 080122 Grades:11-12 CREDIT 1 (fall semester course, CTE Program)

CRIMINAL LAW & PROCEDURE HNR– Running Start

CRS 080124 Grades:11-12 CREDIT 1 (fall semester course, CTE Program)

PREREQUISITE: Intro to Criminal Justice

This course provides an in-depth review of substantive criminal law in the federal and state systems including analysis of the essential elements of all major crimes, the concepts of constitutional review and judicial scrutiny and the principles governing legal challenges to the constitutionality of laws. This course will also analyze the constitutional issues in the United States which have direct bearing on the role and policies of criminal justice agencies. Application of these issues as they relate to investigation, arrest, pre trial and appeal will be emphasized. Students choosing to enroll in this course at the honors level will be required to complete more rigorous coursework. Note: Students taking this course at the HONORS LEVEL ONLY will have the option of earning three college credits. There would be a fee associated with this option.

JUVENILE JUSTICE ENR

CRS 080182 Grades:11-12 CREDIT 1 (spring semester course, CTE Program)

JUVENILE JUSTICE HNR – Running Start

CRS 080134 Grades:11-12 CREDIT 1 (spring semester course, CTE Program)

PREREQUISITE: Intro to Criminal Justice

An examination of causative factors in the development of youthful offenders and the development and philosophy behind treatment and rehabilitative practices are covered. The course also covers legal, procedural, and substantive issues pertaining to the juvenile justice system. Students choosing to enroll in this course at the honors level will be required to complete more rigorous coursework. Note: Students taking this course at the HONORS LEVEL ONLY will have the option of earning three college credits. There would be a fee associated with this option.

ENVIRONMENTAL SCIENCE & SUSTAINABLE STUDIES PROGRAM

Program Course Sequence

Year 1 – Environmental Science I and Environmental Science II (Two semester-long courses)

Program Description: Environmental Science is the study of nature and how it is influenced by humans.

This program is designed for students interested in environmental issues, ecology and sustainability. You will develop your creative problem-solving skills needed to design and bring about solutions to environmental problems at local, regional, and global scales. Through community-based projects you will gain practical experience and make a positive impact while you are still in school. The topics will combine hands on science with current environmental issues and prepare you for a variety of career paths. You will develop and apply your skills for experimental design, data analysis, and scientific writing.

A significant amount of time will be spent outside (during all seasons) both on and off of school grounds setting up study sites, collecting data and samples and learning about the natural systems of the community. Students will go on several local and regional field trips to visit relevant ecosystems and research facilities, as well as hearing from several guest speakers who will share their work and research experience with you. The Environmental Science CTE program is year-long, which requires you to register for Environmental Science 1 and 2 in consecutive semesters.

ENVIRONMENTAL SCIENCE I ENR (π)

CRS 030072 Grades: 11-12 CREDIT 1 (fall semester course)

ENVIRONMENTAL SCIENCE I HNR (π)

CRS 030073 Grades: 11-12 CREDIT 1 (fall semester course)

PREREQUISITE: Must pass Biology and be accepted into the Environmental Science and Sustainability program.

This course will focus on the biogeochemical cycles, climate change, environmental health and pollution, sustainability and food production (hydroponics and aquaculture), as well as stream and watershed ecology. Class projects involving a study of the local forest, water quality of the Cocheco River watershed, as well as hydroponics and aquaculture will be conducted. Long term projects will also be researched, proposed and started at this time. Students choosing to enroll in this course at the honors level will be required to complete more rigorous coursework. Note: Students taking this course at the HONORS LEVEL ONLY will have the option of earning three college credits. There would be a fee associated with this option.

ENVIRONMENTAL SCIENCE II ENR (π)

CRS 030412 Grades: 11-12 CREDIT 1 (spring semester course)

ENVIRONMENTAL SCIENCE II HNR (π)

CRS 030413 Grades: 11-12 CREDIT 1 (spring semester course)

PREREQUISITE: Must successfully complete Environmental Science and Sustainability 1

This semester will focus on winter ecology, air quality, human population, marine ecosystems, natural resources and alternative energy sources. Spatial data will be collected, mapped and analyzed using ArcGIS software. Aquaculture and hydroponic systems will continue to be studied and the year-long projects will be completed and presented. Students choosing to enroll in this course at the honors level will be required to complete more rigorous coursework. Note: Students taking this course at the HONORS LEVEL ONLY will have the option of earning three college credits. There would be a fee associated with this option

FOUNDATIONS OF EDUCATION PROGRAM

Program Course Sequence

Year 1 – Foundations of Education I (One full-year course)

Year 2 – Foundations of Education II (One full-year course)

Foundations of Education I ENR

CRS 080462 Grades: 10-11 (Grade 12 on space available basis) CREDITS 2 (full-year course, CTE Program)

Foundations of Education I HNR – Running Start

CRS 080463 Grades: 10-11 (Grade 12 on space available basis) CREDITS 2 (full-year course, CTE Program)

PREREQUISITE: Acceptance into the Foundations of Education program

This course is designed for students interested in pursuing a career in education or other field associated with working with children. Foundation of Education 1 introduces students to basic teaching skills, such as classroom management, lesson planning, guidance and discipline techniques. Students divide their time between classroom instruction and student-teaching in the laboratory school, Small Wonders Preschool or other Field site placement. Classroom instruction includes lectures, notes, handouts, projects, hands-on activities, and unit tests. Foundation of Education units include: Differentiated Instruction, Instructional Practices, Curriculum Planning, Classroom Management, Educational Psychology, and Growth and Development. As part of Foundations of Education you will be part of a leadership organization, Educators Rising, which offers many opportunities for community service, leadership, trips and conferences. There is a course fee to take this program; this fee covers membership dues and course shirt (scholarship available upon request). For those furthering their education, articulation credits are available with some of the two-year colleges in NH. Students choosing to enroll in this course at the honors level will be required to complete more rigorous coursework and sign an honors contract. Note: Students taking this course at the HONORS LEVEL ONLY will have the option of earning three college credits. There would be a fee associated with this option.

Foundations of Education II ENR

CRS 0800052 Grades: 11-12 CREDITS 2 (full-year course, CTE Program)

Foundations of Education II HNR– Running Start

CRS 0800053 Grades: 11-12(Grade 12 on space available basis) CREDITS 2 (full-year course, CTE Program)

PREREQUISITE: Successful completion of Foundations of Education I and recommendation from program instructor.

Students entering Foundation of Education 2 are expected to have mastered or be proficient in the basic teaching skills learned in Foundation of Education 1. Students divide their time between classroom instructions, student teaching in

the laboratory preschool, Small Wonders Preschool and participation in internships. Classroom instruction includes lectures, notes, handouts, projects, hands-on activities, and unit tests. Foundation of Education 2 units include: Curriculum Planning using Understanding by Design, Special Education, Advanced Instructional Practices, and Observation Skills. At the conclusion of Foundation of Education 2, students will create a professional portfolio to demonstrate the competencies they have achieved.

As part of Foundations of Education 2 you will be part of a leadership organization, Educators Rising, which offers many opportunities for community service, leadership, trips and conferences. There is a course fee to take this program; this fee covers membership dues and course shirt (scholarship available upon request). For those furthering their education, articulation credits are available with some of the two-year colleges in NH. Students choosing to enroll in this course at the honors level will be required to complete more rigorous coursework and sign an honors contract. Note: Students taking this course at the HONORS LEVEL ONLY will have the option of earning three college credits. There would be a fee associated with this option.

Foundations of Education III ENR – Independent Study

Foundations of Education III HNR – Independent Study

Grade 12 CREDITS 2 (Full-year course)

PREREQUISITE: Successful completion of the Foundations of Education II and recommendation from program instructor. Students entering the Foundations of Education 3 are expected to have mastered or be proficient in the advanced teaching skills learned in Foundations of Education 2. Students divide their time between independent management of tasks and participation in internships. The students will create a plan, alongside the instructor's guidance, to demonstrate and apply the State Competencies and Performance Indicators into their internships. There is a course fee to take this program; this fee covers membership dues and course shirt (scholarship available upon request). Students choosing to enroll in this course at the honors level will be required to complete more rigorous coursework and sign an honors contract. Note: Students taking this course at the HONORS LEVEL ONLY will have the option of earning three college credits. There would be a fee associated with this option.

GRAPHIC DESIGN PROGRAM

Program Course Sequence

Year 1 – Graphic Design/Printing Technology I (One full-year course)

Year 2 – Graphic Design/Printing Technology II (One full-year course)

GRAPHIC DESIGN I ENR (π)

CRS 080502 Grade 11 (Grade 12 on space available basis) 2 CREDITS (Full-year course, CTE Program)

GRAPHIC DESIGN I HNR (π)

CRS 080503 Grade 11 (Grade 12 on space available basis) 2 CREDITS (Full-year course, CTE Program)

PREREQUISITE: Acceptance into the Graphic Design program.

Explore the ever-growing world of Graphic Design through the study of the design process using the latest cutting-edge technology including Photoshop, Illustrator, InDesign, scanners, digital cameras, and Wacom tablets. The course covers ideas and methodologies shared across the design world, the history of communication, legal restrictions, and career opportunities. All activities are focused on developing creative thinking and problem solving skills with individual designs being a major emphasis in all activities. Career opportunities will be explored in the fields of graphic design, illustration, web design, package design, UX and UI design, industrial design and interior design. Just a few of the projects include logos, business cards, seasonal products, product packaging, posters, and more! Students choosing to enroll in this course at the honors level will be required to complete more rigorous work and sign an honors contract. Note: This course will fulfill the fine arts requirement for graduation.

GRAPHIC DESIGN II ENR - Running Start (π)

CRS 080522 Grade 12 CREDITS 2 (Full-year course, CTE Program)

GRAPHIC DESIGN II HNR - Running Start (π)

CRS 050523 Grade 12 CREDITS 2 (Full-year course, CTE Program)

PREREQUISITE: Successful completion of Graphic Design/Printing Technology I

Expanding upon skills developed in Graphic Design I, learn more about the finer points of the Design industry including larger scale projects, professional skills such as client relations, and broader design-related experiences including product design, interior design, illustration, and fashion design. Learn about the print technologies used to support these avenues including Fusion 360 CAD software in unison with MakerBot 3D printers. Work with other students studying photography, engineering, marketing and business to simulate real-world collaboration. Take advantage of the opportunity to participate in Running Start while in the class to earn 3 college credit hours in Photoshop, as well as an additional opportunity to earn an industry-recognized Adobe Certification. Students choosing to enroll in this course at the honors level will be required to complete more rigorous work and sign an honors contract. Note: Students taking this course will have the option of earning three college credits. There would be a fee associated with this option.

HEALTH SCIENCE TECHNOLOGY PROGRAM

Program Course Sequence

Year 1 - Health Science Technology I (Full year course)

Year 2 - Health Science Technology II (Full year course)

HEALTH SCIENCE TECHNOLOGY I ENR (π)

CRS 080551 Grade 11 (Grade 12 on space available basis) 2 CREDITS (Full year course, CTE Program)

HEALTH SCIENCE TECHNOLOGY I – HNR (π)

CRS 080553 Grade 11 (Grade 12 on space available basis) 2 CREDITS (Full year course, CTE Program)

PREREQUISITE: Acceptance into the Health Science Technology Program, Recommendation: enrolled in Anatomy and Physiology course or equivalent.

During the first year of this course, students are introduced to the field of health care. Students will have the opportunity to earn their CPR & AED certification. Students develop a basic understanding of health care concepts focusing on the patient centered model and specific career paths within the industry. Students study history and trends in healthcare, healthcare systems, medical terminology, ethical and legal aspects, safety and infection control, anatomy and physiology, nutrition, CPR and first aid. Students will learn hands-on skills in our simulated hospital environment. Students are encouraged to shadow health care professionals in the field. Upon successful completion of HST I, students will have the opportunity to take the HST II program to continue with their studies and gain college credit for medical terminology and participate in clinical setting. Students choosing to enroll in this course at the honors level will be required to complete more rigorous coursework and sign an honors contract. Note: Students taking this course will have the option of earning three college credits. There would be a fee associated with this option.

HEALTH SCIENCE TECHNOLOGY II ENR – Running Start (π)

CRS 080571 Grade 12 CREDITS 2 (Full year course, CTE Program)

HEALTH SCIENCE TECHNOLOGY II HNR – Running Start (π)

CRS 080573 Grade 12 CREDITS 2 (Full year course, CTE Program)

PREREQUISITE: Successful completion of Health Science Technology I, Understanding of Anatomy & Physiology, recommendation from program instructor and guidance

There is a more in-depth study of body systems as it pertains to disease and nursing processes. Students will be required to apply all information taught in HST 1. Students will learn nursing assistant skills and procedures with hands on training in our classroom lab. They will be required to travel to healthcare agencies in our community for hands on clinical experience in the spring. After 110+ hours of nursing assistant training, students will sit for their State Licensed Nursing Assistant exam. Students will incur costs taking HST 2. There are extra fees incurred by the student for both the LNA Exam and Clinical. Students taking this course will have the option of earning three college credits for Medical Terminology through Great Bay Community College. Please NOTE: There is a limit of 16 students accepted into the program. Students MUST be committed to the program and will sign a commitment agreement before the end of year 1. Clinical runs for C and D block for quarter 4 so students need to have room in their schedule for this commitment. Students that are interested in job internships can take an ELO through Mr. Graziano and will NOT be enrolled in HST 2. Students choosing to enroll in this course at the honors level will be required to complete more rigorous coursework and sign an honors contract. Note: Students taking this course will have the option of earning three college credits. There would be a fee associated with this option.

HEATING, VENTILATION, AIR CONDITIONING, AND REFRIGERATION HVACR

Program Course Sequence

Year 1 – HVACR Technology I (One full-year course)

Year 2 – HVACR Technology II (One full-year course)

Program Description: HVAC program is designed to provide students with an understanding of theoretical information covering the sciences of matter, heat, fluids and pressure. Theory information also includes the components of a basic refrigeration system and how they operate to move heat from where it is not wanted to where it is desirable. Students successfully completing this program will be able to pursue a two year or a four year degree at a college or university. Students can obtain immediate employment in the heating, ventilation and air conditioning field, which include: residential and commercial heating, ventilation, and air conditioning apprenticeship in installation and service; refrigeration technician; sheet metal apprentice; sheet metal design; gas system technician; oil burner technician; heating, ventilation and air conditioning sales representative; wholesale supply representative; and, appliance repair technician.

HVACR TECHNOLOGY I ENR (π)

CRS 0800062 GRADE 11 (Grade 12 on space available basis) 2 CREDITS (Full-year course, CTE Program)

PREREQUISITE: Acceptance into the HVACR Technology program.

The students will receive instruction in safety requirements and demonstrate sound safety practices. Students will demonstrate electrical fundamentals including electrical circuits, Ohm's law and meter use. Students will identify heating fuels (natural gas, propane and heating oil), and explain how they burn and how to safely control the burn. Laboratory skills practiced include servicing and testing heating equipment and basic electrical circuits including identifying electrical motors and system schematics. Students will demonstrate their ability to use code books and apply code requirements at apprentice entry level. Technology related reading, writing, vocabulary, mathematics, blueprint reading, and science are integrated throughout the curriculum.

HVACR TECHNOLOGY II ENR (π)

CRS 0800002 GRADE 12 CREDITS 2 (Full-year course, CTE Program)

PREREQUISITE: Successful completion of HVACR Technology I

Students continue to receive instruction in safety requirements and demonstrate sound safety practices. Students will demonstrate theoretical competency in HVAC/R electrical controls, refrigeration systems, such as air conditioning, and refrigeration, both domestic and commercial.

The students will have an understanding of Environmental Protection Agency (EPA) certification requirements with refrigeration systems and the proper handling of refrigerants, including recovery, recycling and reclaiming are studied and practiced. Students will be able to calculate building heating and cooling loads. Laboratory skills practiced include servicing and testing refrigeration equipment and basic electrical circuits including reading and writing electrical schematics. Students will demonstrate the skills needed for installation of HVAC systems. Students will demonstrate the ability to complete a job application, resume, interview, and to perform entry level job readiness and trade skills. Technology related reading, writing, vocabulary, mathematics, blueprint reading and science are integrated throughout the curriculum.

PRECISION MACHINING PROGRAM

Program Course Sequence

Year 1 – Precision Machining I (One full-year course)

Year 2 – Precision Machining II (One full-year course)

PRECISION MACHINING I ENR (π)

CRS 080672 GRADE 11(Grade 12 on space available basis) CREDITS 2 (Full-year course, CTE program)

PREREQUISITE: Acceptance into the Precision Machining Program

Students enrolled in the first year of this two-year program will demonstrate technical ability on machine tool equipment and hand tools related to the machine tool. Attention to detail, precise measurement and focus are highly recommended skills that will be developed and expanded through this course. Students will gain a complete understanding of the CNC machine tool's operation, metal working industry and requirements expected from a

production machinist. Students will develop knowledge and understand of CNC machine tool operation and G-Code and M-Code terminology. Students will learn advanced machining competencies requiring lab hands on participation to meet and complete lab assigned projects. Student safety is held at the highest level of priority.

PRECISION MACHINING II ENR– Running Start (π)

CRS 080692 GRADE 12 CREDITS 2 (Full-year course, CTE Program)

PREREQUISITE: Successful completion of Precision Machining I.

Students continuing their enrollment in this two year program will gain understanding of industry standard CNC machine tool's operation, and a full understanding of G-Code and M-Code terminology and application. Students will understand the metal working industry and requirements expected from a production machinist. Students will meet advanced machining competencies requiring 97% shop hands on participation consisting of real time machining on a production level for both manual and CNC machining. Following all safety procedures will be continually enforced. Students will demonstrate personal growth / student professionalism through applied knowledge and skills in resume writing, job application writing, and job interviewing. Note: Students taking this course will have the option of earning college credits. There would be a fee associated with this option.

RESTAURANT MANAGEMENT PROGRAM

Program Course Sequence

Year 1 – Restaurant Management I (One full-year course)

Year 2 – Restaurant Management II (One full-year course)

RESTAURANT MANAGEMENT I ENR – Running Start (π)

CRS 080792 GRADE 11(Grade 12 on space available basis) 2 CREDITS (Full year course, CTE Program)

PREREQUISITE: Acceptance into the Restaurant Management program.

This course offers students the chance to work in a restaurant atmosphere while learning the different tasks of various professionals in the food and restaurant industry. Students will learn about safety and sanitation, professional cooking, the duties and responsibilities of the chef, prep cook, baker, host, server, and manager, as well as industry job seeking and keeping skills. Students will be responsible for the successful management of the Raider House Restaurant. Careers related to food service will be presented from a management perspective. This program has articulation agreements with Lakes Region Community College, CIA and New Hampshire Culinary Institute.

RESTAURANT MANAGEMENT II ENR – (π)

CRS 080812 GRADE 12 CREDITS 2 (Full year course, CTE Program)

PREREQUISITE: Successful completion of Restaurant Management I

This course continues students' experience to work in a restaurant atmosphere while learning the different tasks of various professionals in the food and restaurant industry. Students will learn about safety and sanitation, professional cooking, the duties and responsibilities of the chef, prep cook, baker, host, server, and manager, as well as industry job seeking and keeping skills. Students will be responsible for the successful management of the Raider House Restaurant. Careers related to food service will be presented from a management perspective. This program has articulation agreements with Lakes Region Community College, CIA and New Hampshire Culinary Institute. Note: Students taking this course will have the option of earning three college credits. There would be a fee associated with this option.

VIDEO & PHOTOGRAPHIC ARTS

Program Course Sequence

Year 1 – Digital Photography & Video Production Technology I (One full-year course)

Year 2 – Digital Photography & Video Production Technology II (One full-year course)

DIGITAL PHOTOGRAPHY & VIDEO PRODUCTION TECHNOLOGY I ENR (π)

CRS 080912 Grades 10-11 CREDITS 2 (full-year course, CTE Program)

DIGITAL PHOTOGRAPHY & VIDEO PRODUCTION TECHNOLOGY I HNR (π)

CRS 080913 Grades 10-11 CREDITS 2 (full-year course, CTE Program)

PREREQUISITE: Acceptance into the Video & Photographic Arts program.

During the first year students will be introduced to the Photography and Video field. It is a hands on/project based class. Students will complete a series of activities, utilizing the basic techniques necessary for the production of photographs and videos. Topics to be covered are treatment development, storyboarding, scripting, proper camera technique, composition, lighting and editing. Class time will focus on working with a variety of photographic and video equipment. Classes will run very independently and the goal is to provide each student with the opportunity to learn at his/her own pace and in his/her own style. Students, who choose this course, will be responsible for creating digital print artwork, slide presentations and motion graphics. Students will develop their own style in photography and video while building a portfolio of images and short videos demonstrating what they are learning and how their style is evolving. Students are required to obtain and keep an SD memory card of 2GB capacity or larger. Students choosing to enroll in this course at the honors level will be required to complete more rigorous work and sign an honors contract.

DIGITAL PHOTOGRAPHY & VIDEO PRODUCTION TECHNOLOGY II ENR (π)

CRS 080922 GRADE 11 -12 CREDITS 2 (Full-year course, CTE Program)

DIGITAL PHOTOGRAPHY & VIDEO PRODUCTION TECHNOLOGY II - HNR (π)

CRS 080923 GRADE 11 -12 CREDITS 2 (Full-year course, CTE Program)

PREREQUISITE: Successful completion of Digital Photography & Video Production. Students in the second year will be immersing themselves into various fields of photography and video. Students will be involved in more complex projects using advance lighting, editing technique, macro, time lapse, multi camera shoots are just some of the areas to explore. Focus on visual workflow, exploring what they see and how best to record it. Emphasis will be on composition and telling a story with their images. Students will be working on individual self-designed projects and gallery exhibits while building a complete portfolio of their work. Students choosing to enroll in this course at the honors level will be required to complete more rigorous work and sign an honors contract. *Note: This is a Running Start course and students are eligible to receive college credit. There is a fee associated with this option.*