CAREER AND TECHNICAL EDUCATION

The Career and Technical Education courses provide each student with a comprehensive education that prepares them for gainful employment. Through a solid career and technical/academic education program, each student will be prepared to successfully meet the demands of ever-changing technologies while adapting to current and future occupational and educational trends.

Career and technical studies provide an education that enables students to obtain employment upon graduation or to advance to further educational opportunities. Weymouth endeavors to go beyond skills training to provide each student with a comprehensive education that includes higher level thinking skills, problem-solving skills and the theoretical basis for various technologies.

For more information about the CTE admission process, please visit http://www.weymouthschools.org/weymouth-high-school/career-technical-education/pages/application-process-0

CO-OPERATIVE EDUCATION OPTIONS FOR CAREER AND TECHNICAL EDUCATION STUDENTS

The Weymouth High School Career and Technical Education Program offer a Co-Operative Education Work Training opportunity to all eligible students. This program is designed to give students an opportunity to participate in an on the job work experience in their chosen CTE area.

Students in the Co-Op program receive pay for their time on the job and are covered by Worker's Compensation by the cooperating employer. The students will be required to provide their own transportation to the work site.

Random, periodic on the job observations of each student will be made by staff members to ensure that the most beneficial training is taking place. A student's quarterly grade will reflect the combined input from three sources: the employer's weekly report, staff visitations and the CTE instructor.

Eligibility requirements and criteria can be found in the Weymouth High School Career and Technical Education Co-Operative Education Information Guidelines.

24011 TECHNICAL EXPLORATORY College Prep (.9 credits)
Students who complete an application for admission to the Career and Technical Education Program, and have been approved using the established criteria in the admission policy (based on grades, attendance, discipline and recommendation), will participate in a vocational-technical exploratory program. This program is designed to help them learn about their talents, interests and non-traditional careers relative to a variety of technical programs. During the first cycle students will be assessed in career talent and interest by participating in a career assessment tool. Students will then explore each of the ten programs for approximately 13 days. At the end of this period, students will be assessed again for talent & interest using the career assessment tool. This data will be shared with the student and/or parent(s)/guardian(s) through the Career & Technical Education director, teachers and guidance counselors. The students will then submit their top three choices. Final shop choices for exploration are determined before 4th term. See your guidance counselor for details. All students in Exploratory will be exposed to all 10 technical shop areas.
(Full Year Course, open to CTE Technical Exploratory students only)

CAREER AND TECHNICAL PROGRAMS

Drafting & Design Technology (CAD)
This course will introduce students to the world of Architectural and Engineering Design & Drafting through a series of real world applications. Students will learn basic Hand Drafting techniques and will utilize the computer- drawing program *AutoCAD 2016, and Sketch- Up* in the classroom lab setting. Students will be exposed to career pathways in Architecture, Engineering and Interior Design. This course is designed and recommended for students who are interested in the technical drawing fields and/or plan to continue their education at a Post-Secondary level.

Automotive Technology
Students in this program will learn shop safety and the use of basic hand and power tools as related to the automotive industry. Students will also be introduced to automotive systems such as, wheels and tires, steering and suspension, brakes, fuel systems, cooling systems, exhaust systems and lubrication service.

Early Childhood Education and Teaching
This course provides students the opportunity to explore the childcare profession as a vocation and to prepare for a career working with children. Students learn in a supervised environment working with toddlers, and preschoolers in the on-site child care center. Various topics include toy selection and safety, career opportunities, and curriculum development.

Information Technology
Students will receive a basic introduction and exposure to computers and networking. They will learn about various computer components and associated computer terminology as they disassemble, and then reassemble a working computer. Networking security is explored and an internet cable will be handmade.

Construction Technology
Students will learn basic carpentry techniques as they relate to the construction industry through the use of basic power and hand tools. An emphasis is placed on safety as students build a small project that they bring home.

Cosmetology
This course is designed to expose students to the vigorous tasks in this occupational area. Topics include professional career options and requirements, safety, hygiene, nail art, manicuring, and basic hair styling.

Culinary Arts
Students will learn basic culinary terminology, safety, and sanitation procedures. The goals and objectives for this course are to assess and evaluate students' interest and aptitude as they rotate through the curriculum and workstations in the kitchen.

Graphic Communications
This program will introduce students to the Graphic Communications industry and the career opportunities available in graphic design, advertising, and printing (digital, traditional offset, and screen printing). Students will also be introduced to some of the basic processes and perform basic operations on the latest printing and design software technology.

Allied Health Careers
This program introduces students to routine medical and nursing-related services for patients under the training and supervision of a registered nurse. Students in this program will explore employment opportunities in hospitals, clinics, HMO's, assisted-living and nursing homes, home health care agencies and physician's offices.

Metal Fabrication
Students in this program will be exposed to basic metal skills while learning to use hand tools and shop equipment safely. These skills will be used to fabricate and weld small projects such as: metal roses, metal dice and a sheet metal box.

Robotics and Automation Technology
Students will work with computer aided drafting, 3-D printing and both induct rail control theory and relay ladder logic circuits to gain an understanding of the field as well as career pathways. ***Program pending approval from the State.***

ARTICULATION AGREEMENTS
An Articulation Agreement is a written contract between the high school and a post-secondary institution regarding a specific career or technical program. The high school and the post-secondary institution faculty meet to determine similarities in the curriculum and develop a program pathway. Some agreements may grant guaranteed placement in a program while others may grant college credit for courses successfully completed in high school. Each agreement is individually developed to assure a sequence of progressive achievement leading to degrees or certificates in a program.

The following is a list of Articulation Agreements in place for Career and Technical Education students at WHS. Details for each agreement may be found on the high school web page.

Information Technology
- Central Maine Community College
- Quincy College
- Bunker Hill Community College
- New England Institute of Technology
- Benjamin Franklin Institute of Technology

Culinary
- Johnson and Wales University
- Central Maine Community College
- Massasoit Community College
- Culinary Institute of America
- Newbury College

Architectural Drafting
- New England Institute of Technology
- Benjamin Franklin Institute of Technology
- All Massachusetts Community Colleges

Early Childhood Education
- Massasoit Community College
- Quincy College

Graphic Communication
- Central Maine Community College
- Quincy College

Automotive Technology
- Central Maine Community College
- Benjamin Franklin Institute of Technology
- Mass Bay Community College
- Universal Technical Institute
- New England Technical Institute

Construction Technology
- New England Institute of Technology
- Carpenters Union

Metal Fabrication
- Massasoit Community College
- Sheet Metal Local

Allied Health
- Quincy College

DRAFTING AND DESIGN TECHNOLOGY

The Drafting and Design Technology program will provide young people with the skills needed to function in the modern architectural/engineering environment. This program will prepare students to communicate design ideas via architectural drawings, construction documents and visual presentations. Students will analyze past and modern construction methods and materials. Design documentation will include construction specifications utilizing CSI Standards, cost estimations and project scheduling. This course will identify all aspects of training/courses students will be required to take in college. The classroom is set up to imitate a modern architectural office. Students will advance through the program based on

competency, production, responsibility and accuracy. All courses utilize the computer drawing program, AutoCAD 2016 and Google Sketch –Up

24241 DRAFTING AND DESIGN TECHNOLOGY I College Prep (1.9 credits)
First year drafting students will be introduced to the design process through a series of "real world" problems. Students will study the phases of design with an emphasis on schematic and design development. Fundamental drawing requirements of the trade are defined including but not limited to scale, two and three dimensional drawings and orthographic projection. Presentation skills will also be developed within the classroom. The computer drawing program AutoCAD& Google Sketch-Up will be introduced during the second semester. *Prerequisite*: 75% or better in Technical Exploratory (Full year course, meeting two periods a day)

24251 DRAFTING AND DESIGN TECHNOLOGY II College Prep (2.9 credits)
Second year students will study building construction materials and methods with a focus on residential construction. National (BOCA), Mass. State and local building codes will be introduced as well as ADA regulations. Students will focus on the construction drawing phase. All drawings will be prepared utilizing the architectural drawing program, AutoCAD & Google Sketch-Up. An emphasis on "Design/Build" will include interaction with the Construction Technology Program and visits to local construction projects. Presentation skills will be expanded

24261 DRAFTING AND DESIGN TECHNOLOGY III College Prep (2.9 credits)
Third year students will study building construction materials and methods with a focus on commercial construction. National (BOCA), Mass. State and local building codes will be introduced as well as ADA regulations. Students will focus on the construction drawing phase. All drawings will be prepared utilizing the architectural drawing program, AutoCAD & Google Sketch-Up. An emphasis on "Design/Build" will include interaction with the Construction Technology Program and visits to local construction projects. Presentation skills will be expanded.
(Full year course, meeting three periods a day)

AUTOMOTIVE TECHNOLOGY
The Automotive Technology program is designed to provide instruction in all phases of automotive repair. Students will acquire the basic knowledge and skills required to diagnose malfunctions in mechanical and electrical systems, and make necessary repairs. Completion of this program will qualify the student as an entry-level automotive technician. Upon completion of the program, students will have attained 1280 hours toward their NATEF AST Certification (National Automotive Technical Education Foundation – Automotive Service Technician) and 2 ½ years toward their 3-year requirement for ASE (Automotive Service Excellence).The Automotive Technology department prides itself on having the ability to train students on the most up-to-date equipment and procedures used in automotive technology today.

24301 AUTOMOTIVE TECHNOLOGY I College Prep (1.9 credits)
Automotive Technology I will cover the basic fundamentals of auto repair including, shop safety, tools and equipment, lubrication service, exhaust service, and tire and brake service. Students will acquire 80 hours toward their ATech basic electrical competencies. The focus will be on the entry-level technician skillset.
Prerequisite: 75% or better in Technical Exploratory (Full year course, meeting two periods a day)

24311 AUTOMOTIVE TECHNOLOGY II College Prep (2.9 credits)
In the second year, the Automotive Technology Program will concentrate on advanced level troubleshooting and diagnostics in several areas, such as engine tune-up, electrical systems, front end and chassis service, as well as fuel injection service.
Prerequisite: 75% or better in Automotive Technology I (Full year course, meeting three periods a day)

24321 RELATED AUTOMOTIVE TECHNOLOGY II College Prep (1 credit)
The Related Automotive Technology II Program is designed to complement and support instruction given to career and technical education students and this instruction is correlated as much as possible with activities currently being taught in the shop. Topics include: safety training, related academic instruction in math, science and English, technical program-related theory instruction, and electrical diagnostics. Required course for all Level II students.
Prerequisite: 75% or better in Automotive Technology I (Full year course, meeting one period a day)

24331 AUTOMOTIVE TECHNOLOGY III College Prep (2.9 credits)

The Automotive Technology student can expect the work to become more specific and difficult. Seniors will engage in drivetrain diagnosis and overhaul, communication data BUS circuits, emissions control systems, powertrain and HVAC. An emphasis will be placed on customer service and satisfaction.
Prerequisite: 75% or better in Automotive Technology II (Full year course, meeting three periods a day)

24341 RELATED AUTOMOTIVE TECHNOLOGY III College Prep (1 credit)
The Related Automotive Technology III Program is designed to complement and support all aspects of the Automotive Technology III lab activities. Topics include but are not limited to: safety training, related academic instruction in math, science and English, 21st Century Skills and other NATEF activities to enhance student knowledge. This is a required course for all Level III students.
Prerequisite: 75% or better in Automotive Technology II (Full year course, meeting one period a day)

EARLY CHILDHOOD EDUCATION AND TEACHING
Students successfully completing the Early Childhood Education and Teaching Program may apply to the Commonwealth of Massachusetts Department of Early Education and Care for infant, toddler, and/or preschool teacher licensure. All aspects of child development, curriculum planning, health and wellness, nutrition, and the operation of a licensed Early Education and Care Center are explored.

24411 EARLY CHILDHOOD I College Prep (1.9 credits)
The emphasis of Early Childhood Education and Teaching I is the development and care for children birth through age 2. Students study theories of child development and child care techniques for infants and toddlers through both the related classroom and the onsite Childcare Center. Instructional strategies incorporate 21st Century Skills such as reading, writing, research, problem-solving, collaboration and communication.
Prerequisite: Grade of 75% or better in Technical Exploratory (Full year course, meeting two periods a day)

24441 EARLY CHILDHOOD II College Prep (3.9 credits)
Building on the foundation of Early Childhood Education and Teaching I, students will further develop an understanding of child development, child guidance and curriculum planning. Early Childhood Education and Teaching II will study the three and four year old child. In the classroom and the onsite Childcare Center, students will implement and facilitate developmentally appropriate activities and practice classroom management skills. Instructional strategies incorporate 21st Century Skills such as reading, writing, research, problem-solving, collaboration and communication
Prerequisite: 75% or better in Early Childhood I (Full year course, meeting four periods a day)

24461 EARLY CHILDHOOD III College Prep (3.9 credits)
Early Childhood Education and Teaching III is designed for students who have successfully completed Early Childhood Education and Teaching I and II. While studying the five and six year old child, a significant component of the course is an internship in a local preschool, pre-k or kindergarten classroom. Students will become familiar with administrative and supervisory duties and communicate with families. Students examine career opportunities and prepare for entry into the field of early childhood education. Reading, writing, research and curriculum development are required.
Prerequisite: 75% or better in Early Childhood Education II. (Full year course, meeting four periods a day)

CONSTRUCTION TECHNOLOGY
Students are prepared for the many career pathways in the construction industry through several projects using equipment found in most quality woodworking shops including modern technology such as the CNC router. Beyond shop projects, Construction Tech II and III students learn as they work on live construction projects within our community. There are countless opportunities for employment and promotion in this growing career path.

24541 CONSTRUCTION TECHNOLOGY I College Prep (1.9 credits)
This course introduces students to machinery and power tools used in today's woodworking shops as they build various projects. Sheds are also produced in the shop exposing the first year students to layout and techniques used in the building of additions and homes. Related coursework occurs in a classroom setting where construction theory and embedded academics are integrated. The blending of shop and related classes provides students the opportunity to explore technology and learn safe work habits to gain an appreciation for good workmanship and design and to work both independently and cooperatively with others.
Prerequisite: Grade of 75% or better in Technical Exploratory (Full year course, meeting two periods a day)

24551 CONSTRUCTION TECHNOLOGY II College Prep (3.9 credits)
This program is a continuation of Construction Technology I. Emphasis is placed on the fundamentals of construction including foundations, floor framing, wall construction and sheathing. Instruction is given on all hand and power tools related to on-site construction. Hands-on training includes projects such as additions, garages, decks and handicapped ramps that are built within the community. Students are exposed to on-site work conditions and are expected to arrive in proper dress and exhibit good work habits with an emphasis on safety. Students study math and science related to the trade including estimating costs and quantities of materials related to the job. The Related Construction Technology II Program is correlated as much as possible with activities occurring in the shop or on the job site. Topics include: safety training, related academic instruction in math, science and English, technical program-related theory instructions, and other classroom activities to enhance student knowledge.
Prerequisite: 75% or better in Construction Technology I (Full year course, meeting four periods a day including Related Theory)

24571 CONSTRUCTION TECHNOLOGY III College Prep (3.9 credits)
Third year students take a more aggressive and advanced skills development program, working on roof layouts, staircases and interior finish work on outside projects. Students will also study more advanced math and science in the related classroom. After completion of Construction Technology I, II, and III, students are well prepared to enter the workforce or post-secondary education. The Related Construction Technology III Program is correlated as much as possible with activities currently being taught in the shop or on the job site. Topics include: safety training, related academic instructions in math, science and English, technical program-related theory instructions, and other classroom activities to enhance student knowledge.
Prerequisite: 75% or better on Construction Technology II (Full year course, meeting four periods a day including Related Theory)

COSMETOLOGY
The Cosmetology program is designed to provide students with the ability to meet the requirements of the Commonwealth of Massachusetts State Board of Hairdressing written and practical examination.

24601 COSMETOLOGY I College Prep (1.9 credits)
This course is designed for sophomore students interested in obtaining a Massachusetts license in cosmetology. As a first year student you will learn the basics of manicuring, fingerwaves, rollers, pincurls, marcel curling iron, haircutting, basic perm winding, color, facials, makeup, and scalp treatments. Hands-on practice and classroom instructions directed toward the written part of the license test are also required.
Prerequisite: Grade of 75% or better in Technical Exploratory**.** Purchase of a cosmetology kit and lab coat through the Weymouth Cosmetology Department ($450.00, Kit prices subject to change) Kit/lab coat must be purchased before entering in September. (Full year course, meeting two periods a day)

24611 COSMETOLOGY II College Prep (2.9 credits)
Generally taken by, but not limited to, juniors who have successfully completed Cosmetology I in their sophomore year. This course provides more detailed classroom instruction and introduces advanced technology in haircutting, perming, color and highlighting, chemical relaxing, and nail technology. When students have earned a sufficient number of hours towards their license, they will be required to work on actual clients. Students will be required to purchase a mannequin at the cost of $30.00 - $50.00.
Prerequisite: 75% or better in Cosmetology I (Full year course, meeting three periods a day)

24621 RELATED COSMETOLOGY II College Prep (1 credit)
The Related Cosmetology II Program is designed to complement and support instruction given to career and technical education students and this instruction is correlated as much as possible with activities currently being taught in the lab. Topics include: safety training, related academic instruction in math, science and English, technical program-related theory instruction, and other classroom activities to enhance student knowledge. This is a required course for all Level II students.
Prerequisite: 75% or better in Cosmetology I (Full year course, meeting one period a day)

24631 COSMETOLOGY III College Prep (2.9 credits)
This course is for seniors who have completed Cosmetology II and are working towards finishing the requirements for a license. As a senior, more emphasis is placed on working with actual customers and on perfecting the necessary skills

required for a license as introduced in the previous year(s). This course also includes advanced instruction and, whenever possible, an effort is made to bring guest speakers and specialized technicians in to demonstrate their expertise.
Prerequisite: 75% or better in Cosmetology II (Full year course, meeting three periods a day)

24641 RELATED COSMETOLOGY III College Prep (1 credit)
The Related Cosmetology III Program is designed to complement and support instruction given to career and technical education students and this instruction is correlated as much as possible with activities currently being taught in the lab. Topics include: safety training, related academic instruction in math, science and English, technical program-related theory instruction, and other classroom activities to enhance student knowledge. This is a required course for all Level III students.
Prerequisite: 75% or better in Cosmetology II (Full year course, meeting one period a day)

CULINARY ARTS
The Culinary Arts Program at Weymouth High School is designed to prepare students to work in a variety of positions in the culinary arts and hospitality industry or to go on to post-secondary education within the field. Students will be trained in the techniques of restaurant operations and other commercial food service establishments. Students will also be given instruction in recipe and menu planning, preparing and cooking foods, supervising and training in kitchen assistance, and management of supplies and kitchen resources. Students will participate in all aspects of the kitchen including the dining room, proper service techniques, pastry preparation and bakery sales, restaurant food preparation, safety and sanitation.

24901 CULINARY ARTS I College Prep (1.9 credits)
The focus of Culinary Arts I is culinary terminology along with equipment, ingredient and product identification. Students will develop a basic understanding of the skills needed to work in a commercial bakery and retail environment as they develop and apply the theory of basic cooking, baking, sanitation, and kitchen safety skills.
Prerequisite: Grade of 75% or better in Technical Exploratory. (Full year course, meeting two periods a day)

24911 CULINARY ARTS II College Prep (3.9 credits)
Students will build on the training from Culinary Arts I as they work in the Wildcat Café striving toward the common goal of providing gourmet quality food as well as exemplary guest service. Students in Culinary Arts II will start taking a leadership role in menu design, working positions such as Sous Chef, dining room manager, and responsibilities such as expediting lunch tickets. Students will assume all upper management positions in the kitchen and have an opportunity to achieve their OSHA 10 and Allergen Awareness certificates. *Prerequisite*: Completion of Culinary Arts I with a 75% or better (Full year course, meeting four periods a day including related theory)

24931 CULINARY ARTS III College Prep (3.9 credits)
Students will rotate through the **Wildcat Bakery, pastry production, and retail areas as they** refine their skills and knowledge working in a commercial baking environment. Added to their basic knowledge will be plated desserts and advanced cake decorating principles. Students have the opportunity to secure a ServeSafe Management Certificate, which is required by employers throughout the industry.
Prerequisite: Completion of Culinary Arts II with a 75% or better

INFORMATION TECHNOLOGY
The Information Technology Program at Weymouth High School is intended to prepare students for a career in the IT field as well as to continue on to post-secondary education. Students will be trained in PC hardware repair, installing and configuring modern operating systems, network installation and configuration, and other minor training in game programming, Active Directory configuration and real-life projects.

As a member of the CISCO Networking Academy, students will be prepared for CompTIA A+ and Cisco CCENT/CCNA certifications. This industry recognized certifications will enhance the students employability in today's competitive job market. Some of the jobs that students will be prepared for are: PC technician, help desk technician, network technician, Jr. System administrator and Jr. Network administrator. In addition, the IT curriculum has been aligned with Massachusetts DESE frameworks to be eligible for college credit articulations with every community college in Massachusetts.

24501 INFORMATION TECHNOLOGY I College Prep (1.9 credits)
Students will be enrolled in our Authorized Cisco Academy and go through the Cisco Academy IT Essentials course. Through a combination of classroom instruction, hands-on labs, virtual labs and reading on-line, students will be prepared for the CompTIA A+ certification. (Full year course, meeting two periods a day)

24511 INFORMATION TECHNOLOGY II College Prep (2.9 credits)
Students will continue in the Cisco Networking Academy and go through the Cisco Routing and Switching curriculum to prepare for the Cisco ICND1 (CCENT) Industry certification. They will also work with various real-life projects and begin to explore System administration functions including Active directory, DNS and DHCP server configurations.
Prerequisite: Grade of 75% or better in Information Technology I (Full year course, meeting three periods a day)

24510 INFORMATION TECHNOLOGY II Honors (2.9 credits)
Students will continue in the Cisco Networking Academy and go through the Cisco Routing and Switching curriculum to achieve the Cisco ICND1 (CCENT) Industry certification. They will also work with various real-life projects and begin to explore System administration functions including Active directory, DNS and DHCP server configurations. *Prerequisite:* Grade of 80% or better in Information Technology I (Full year course, meeting three periods a day) and receiving the CompTIA A+ certification.

24521 INFORMATION TECHNOLOGY III College Prep (2.9 credits)
Students will build on the previous years' training and finish preparing for the CCENT Certification. They will also participate in real-life projects and begin to explore network security. Students may participate in internship and coop programs as they become available and if eligible. They will develop their Senior Capstone project by exploring specific IT areas in depth.
Prerequisite: Grade of 75% or better in Information Technology II (Full year course, meeting three periods a day)

24520 INFORMATION TECHNOLOGY III Honors (2.9 credits)

Students will build on the previous years' training and prepare for the Cisco ICND2 certification. Both the ICND1 and ICND2 certifications become the CCNA industry certification. They will also participate in real-life projects and begin to explore network security. Students may participate in internship and coop programs as they become available and if eligible. They will develop their Senior Capstone project by exploring specific IT areas in depth.
Prerequisite: Grade of 80% or better in Information Technology II (Full year course, meeting three periods a day) and receiving the CCENT certification.

GRAPHIC COMMUNICATIONS
This program introduces the Graphic Communications industry. Students will learn the concepts of graphic design using the latest design technology **o**n Adobe Creative Suite software. They will also learn about the printing processes in a business type environment. Students will develop their own projects working towards a final portfolio and certification.

24701 GRAPHIC COMMUNICATION I College Prep (1.9 credit)
This course introduces graphic production practices and principles of design. Students will learn the specific processes used to create quality graphics using the latest technology, and use the basic principles of electronic graphic imaging using the Adobe Creative Suite. The program utilizes live work to produce graphics in a digital workflow and operate modern graphic communications equipment.
Prerequisite: Grade of 75% or better in Exploratory Technology (Full year course, meeting two periods a day. It is recommended that students enroll in an introductory art class.)

24711 GRAPHIC COMMUNICATION II College Prep (2.9 credits)
This course continues instruction in the processes used to design and create quality graphics. Instruction encompasses the electronic prepress, screen printing, digital and offset printing and bindery. Print shop management and skills in the commercial design industry are incorporated as well as instruction is safety and business management.
Prerequisite: Grade of 75% or better in Graphic Communication Design I (Full year course, meeting three periods a day)

24721 GRAPHIC COMMUNICATION TECHNOLOGY III College Prep (2.9 credits)

This course is advanced instruction in the PRINTED curriculum. Graphic Communication students at this level use their skills to produce live work in the graphic arts shop and may specialize in specific areas with an emphasis on a college or industry major. This course offers advanced instruction in technology and design. Students will create and produce products in the shop and may specialize in specific areas. Independent work will allow for creativity and completion of personal projects. Industry related software will provide practical experience to carry over into the workplace and/or post graduate study. Individual portfolios are completed.
Prerequisite: 75% or better in Graphic Communication Technology II (Full year course, meeting three periods a day)

24731 GRAPHIC DESIGN I College Prep (.5 Credit)
This class is an introduction to visual communications in the field of graphic design. Classes will cover graphic design topics and information ranging from typographic terminology, elements and principles of design, and methods of visual design. Students will utilize the Mac Lab to learn about aesthetics, graphic form and structure, concept development and visual organization. Students will refine their computer skills through applications requiring a digital format.
Prerequisite: Successful completion of an art class at the high school level (Half year, open to grades 10, 11, 12)
*This course is also listed in the Art portion of the Program of Studies

24741 GRAPHIC DESIGN II College Prep (.5 Credit)
This class is a continuation of the visual communications in the field of graphic design. Classes will continue to develop concepts in graphic design such as typographic terminology, elements and principles of design, and methods of visual design. Students will utilize the Mac Lab to learn about aesthetics, graphic form and structure, concept development and visual organization. Students will refine their computer skills through applications requiring a digital format.
Prerequisite: Successful completion Graphic Design I. (Half year, open to grades 10, 11, 12)
*This course is also listed in the Art portion of the Program of Studies

ALLIED HEALTH PROFESSIONS
This program prepares students to perform routine medical and nursing-related services for patients under the training and supervision of a registered nurse. Students in this program will be prepared for employment in hospitals, clinics, HMO's, assisted-living and nursing homes, home health care agencies and physician's offices. Students, upon completion of this course, will be prepared to pursue post-secondary education in the health care service industry.

24101 ALLIED HEALTH I College Prep (1.9 credits)
Students will develop a basic understanding of the healthcare industry and the careers within the healthcare field. This course will emphasize the inclusion of the Massachusetts Executive Office of Health & Human Services Core Competency Curriculum for direct care workers which would certify students completing this class as Home Health Aides and/or Personal Care Aides. Topics include, but are not limited to, communication skills, culture and diversity, health care support, infection control, basic restorative skills, personal care skills, nutrition, and housekeeping. Prerequisite: Grade of 75% or better in Technical Exploratory and students must be enrolled in, or have already completed a full year biology class offered through the Science Department (Full year course, meeting two periods a day)

24111 ALLIED HEALTH II College Prep (2.9 credits)
Students will expand upon their knowledge of the healthcare industry by caring for the geriatric/long term care/rehab population at a local facility. Qualified students who meet the requirements will be eligible to sit for the Massachusetts Certified Nursing Assistant (CNA) Certification exam through the American Red Cross.
Prerequisite: Grade of 75% or better in Allied Health I (Full year course, meeting three periods a day including Related Theory)

24121 ALLIED HEALTH III College Prep (2.9 credits)
Students will expand their knowledge of advanced healthcare practices as they work on resumes, interview skills and job performance techniques. Clinical experiences in the Allied Health Lab as well as local health care agencies, when available, will provide real world application of gained knowledge. Upon successful completion of both course sections, students may sit for the National Healthcare Association tests for EKG and Phlebotomy Technicians for both EKG technician and Phlebotomy technician.
Prerequisite: Grade of 75% or better in Allied Health II and students must be enrolled in college prep Anatomy & Physiology (Full year course, meeting three periods a day)

24151 MEDICAL ETHICS AND LAW College Prep (.5 credit)
Medical ethics and law are two areas that have particular interest for the general public as well as for the medical practitioner, and issues concerning medical ethics and law seem to be constantly in the headlines today. This semester introductory course provides an invaluable tool with which to think about ethical, legal, moral and social values that lie at the heart of medicine. Issues that this course will cover include: laws in health care, euthanasia and the morality of killing, political views on health care, genetics, modern reproductive technologies, trauma emergencies, mental health, medical research, organ donation, criminal punishment, abortion, racism, animal rights, the environment and hunger. This class will be graded on participation in group discussion, debating, attendance, test grades, and 2 term papers. (Semester course, open to all students grades 10, 11, 12)

24141 INTRODUCTION TO MEDICAL TERMINOLOGY College Prep (.25 credit)
A course designed to develop a working knowledge of the language of medicine. Students acquire word-building skills by learning prefixes, suffixes, roots, and abbreviations. By relating terms to body systems, students identify proper use of words in a medical environment. Knowledge of medical terminology enhances the student's ability to successfully secure employment or pursue advanced education in health care. This course is aimed at anyone wanting to learn the basics of medical terminology or who is interested in understanding more about the language of medicine. (Quarter course, Open to grades 9-12)

METAL FABRICATION
Utilizing theoretical, as well as a practical hands on approach coupled with the latest CAD software, students will be engaged in the study of personal, shop and manufacturing safety principles, material engineering and selection all current production welding and cutting practices and the use of state of the art manufacturing tools and equipment used in the metal fabrication industry. It is recommended and encouraged to work in groups for nearly all assignments. Exams, such as midterms, finals and weekly tests to assess individual talents will be completed by each student.

24851 METAL FABRICATION I College Prep (1.9 credits)
Using the sophomore year of Metal Fabrication, students will be introduced to different types of hand tools, layout tools, manufacturing equipment, and welders. They will have to work well with each other and follow the proper safety precautions to achieve tasks. The students will work to complete multiple sections of the AWS S.E.N.S.E. program in order to acquire certificates in each type of welding. They will be introduced to many different aspects of the Metal Fabrication trade. They will use this knowledge to help them decide which career path is best suited for them.
Prerequisite: Grade of 75% or better in Technical Exploratory. (Full year course, meeting two periods a day)

24861 METAL FABRICATION II College Prep (2.9 credits)
During the junior year of Metal Fabrication, students will use different types of hand tools, layout tools, manufacturing equipment, and welders to complete complex projects. They will have to work well with each other and follow the proper safety precautions to achieve tasks. The students will focus on fabrication and job planning skills. Using the skills they have learned in the first two years, they will be assigned projects that will challenge their fabrication skills, 21st century skills, and require them to work with upper classmen.
Prerequisite: 75% or better in Metal Fabrication I (Full year course, meeting three periods a day, includes Related Theory)

24881 METAL FABRICATION III College Prep (2.9 credits)
Students will design, draw, engineer and build a project of their choosing. The goal of this project is to highlight the student's skill-set. Included this year will be the FCAW welding and carbon arc gouging processes.
During the senior year of Metal Fabrication, students will use all the skills they have learned to complete complex jobs. They will have to work well with each other and follow the proper safety precautions to achieve tasks. The students will focus on fabrication and job planning skills. Students will also be working towards the completion of their Capstone Project. This project will test their fabrication, 21st Century, and organization skills.
Prerequisite: 75% or better in Metal Fabrication II (Full year course, meeting three periods a day, includes Related Theory)