

BVT

2024-2025 Program of Studies

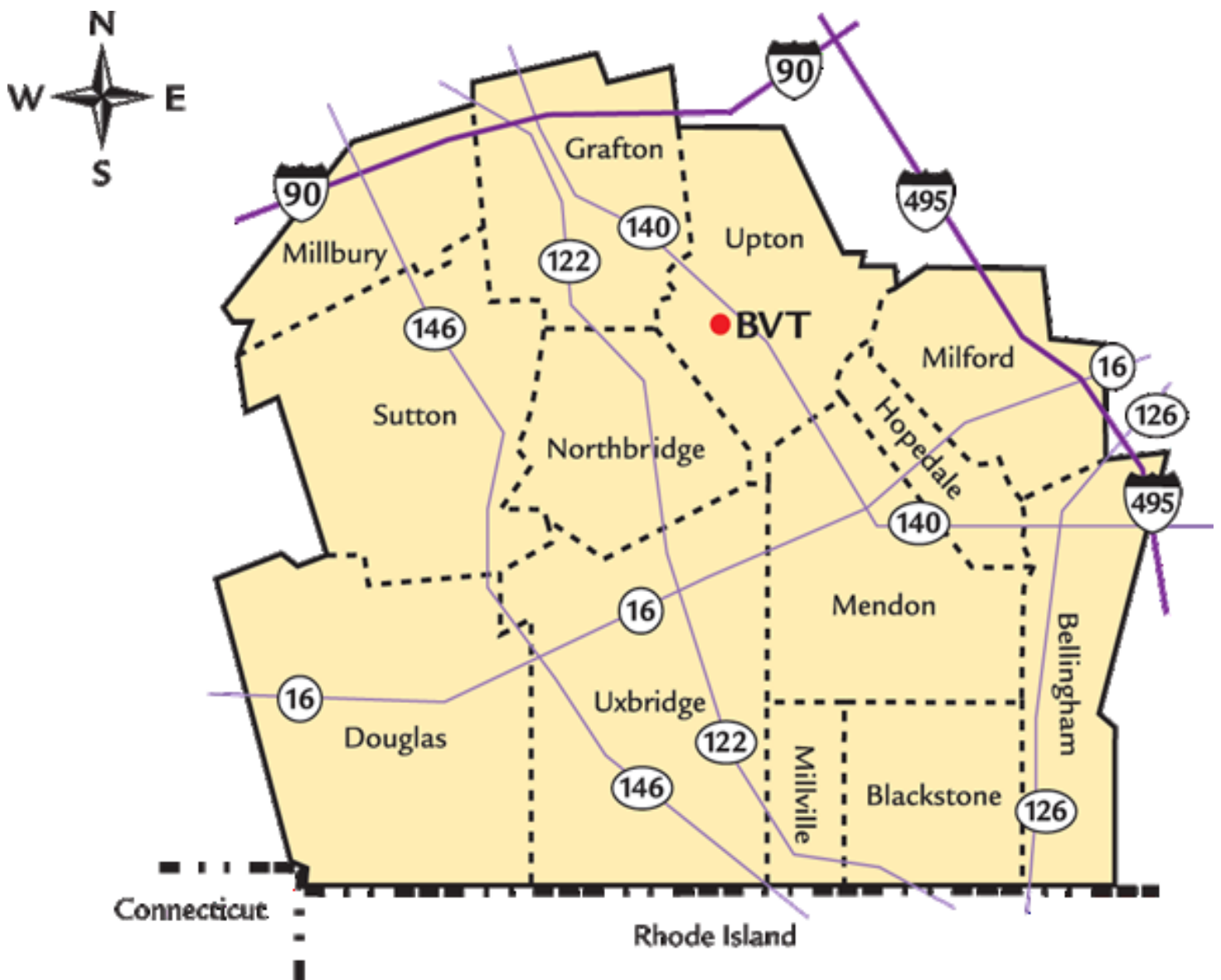


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FOREWORD

This Program of Studies is intended to provide students and parents with a general overview of the courses offered at Blackstone Valley Regional Vocational Technical High School and should be helpful in selecting your program of studies for the coming year. Blackstone Valley Tech recognizes that each student is unique and possesses specific strengths, needs, and learning styles. The courses offered at Blackstone Valley Tech provide all students the opportunity to develop their capabilities in a variety of content areas and at the appropriate and challenging levels of learning.

All courses listed in this catalog are intended to be flexible, adaptable, and responsible in terms of student needs and represent our current efforts to align with the Massachusetts Curriculum Frameworks and the MassCore course of study.

Blackstone Valley Tech staff members are highly qualified in their specific content areas and make practical applications of all academic and technical subjects in order for students to learn the concepts required for success in their skill training or occupation. We are always committed to providing individual assistance necessary to ensure student success.

Non-Discrimination

It is the policy of the Blackstone Valley Vocational Regional School District not to discriminate on the basis of race, color, sex, religion, national origin, gender identity, sexual orientation, homelessness, or disability in its educational policies as required by Title VI, Title IX, Section 504 and Chapter 622.

Translations

Documents:

If you would like a translation of this document, please contact the Main Office 508-529-7758 x3011.

Si desea una traducción de este documento, por favor póngase en contacto con la oficina principal 508-529-7758 x3011.

Se você gostaria de uma tradução deste documento, entre em contato com o Escritório Central 508-529-7758 x3011.

BVT Website:

Our website can be translated using "Language Translator" link at the bottom of the main page!

Nuestro sitio web se puede traducir mediante enlace "Language Translator " en la parte inferior de la página principal!

Nosso website pode ser traduzido usando link " Language Translator " na parte inferior da página principal!

Administration

Dr. Michael F. Fitzpatrick	.....	Superintendent-Director
Anthony E. Steele II	.....	Assistant Superintendent-Director/Principal
Kerri Baltramaitis	.....	Vocational Director
Skye Bomba	.....	Assistant Principal
Dr. Matthew Connors	.....	Vocational Director
Michael Denise	.....	Director of Athletics and Student Life
Michele Denise	.....	Vocational Director
Edward W. Evans III	.....	Academic Curriculum Coordinator
Robert Dolegiewicz	.....	Director of Facilities
Nicole Ferguson	.....	Business Manager
Yvette Martin	.....	Director of Student Services
Joann Monks	.....	Practical Nursing Program Coordinator
Matthew P. Urquhart	.....	Assistant Principal

Mission Statement

To create a positive learning community built on respect and kindness for all that prepares our students for personal and professional success in an internationally competitive society through a fusion of rigorous vocational, technical, and academic skills.

Core Values

Professionalism: Conduct ourselves with integrity and work to generate positive outcomes

Respect & Responsibility: Treat everyone with the respect they deserve and empower each other to create an ideal learning environment

Innovation & Adaptability: Develop skills that allow for lifelong learning and strive for constant improvement

Diversity, Equity & Inclusion: Embrace diversity to foster personal growth and celebrate each other's individuality and uniqueness

Emotional, Physical & Social Wellness: Seek opportunities that enrich our lives with shared experiences that allow us to nurture our well-being

Learning Expectations

We believe that all of our students are capable of acquiring high-level vocational, technical and academic skills regardless of background and using those skills to add positive and productive value to professional, social, and civic pursuits. Our graduates will be able to:

- demonstrate professional behavior
- utilize technology purposefully
- communicate effectively in multiple modalities
- work collaboratively

Core Values



Professionalism

Conduct ourselves with integrity and work to generate positive outcomes



Respect & Responsibility

Treat everyone with the respect they deserve and empower each other to create an ideal learning environment



Innovation & Adaptability

Develop skills that allow for lifelong learning and strive for constant improvement



Diversity, Equity, & Inclusion

Embrace diversity to foster personal growth and celebrate each other's individuality and uniqueness



Emotional, Physical, & Social Wellness

Seek opportunities that enrich our lives with shared experiences that allow us to nurture our well-being

Office of Student Life

(508) 529-7758 x3020

Michael Denise	Director of Athletics	x3213
Michele Denise	Director of Admissions	x3141
Anne-Marie Colonero	Administrative Secretary	x3020
Stephen Grabowski	Assessment Coordinator	x3003

Admissions

Making the decision to attend a vocational technical high school might just be one of the most important decisions of your life thus far! But how do you know whether BVT is right for you?

- Do you love a good challenge?
- Do you learn best when your mind and hands work together?
- Are you interested in a culture of high expectations?
- Are you passionate about academic excellence and life-changing career training?
- Do you believe it's never too soon to begin mapping your professional pathway?

If your answer to any of these questions is an enthusiastic "YES!" please go to the BVT website for details on how to apply.

Athletics

Whether you like to swing a bat, work up a sweat on the basketball court, or cheer our athletes on to victory, BVT is full of opportunities for our students to learn the life-changing practice of taking pride in everything they do. Our nearly 20 athletic teams have grown over the years to be regular contenders for state and national championships and titles. Group sports like field hockey, football, lacrosse, and volleyball give students a chance to be part of a team and support each other. By joining sports like golf, cross-country, and track and field, students develop a strong sense of focus, commitment, and determination.

Student Activities

Whether you like to hit the wintry slopes of New England, are passionate about art, or want to run for class office, BVT is full of opportunities for our students to connect with like-minded people and showcase their talents. Valley Tech offers students numerous extracurricular activities. Drama, A Cappella Chorus, and the Fashion Club give students the opportunity to follow their passion and flex their creative muscles. By joining groups like the National and Technical Honor Societies, LEO Club, and Student Council, students can serve their community and lend their neighbors a helping hand.

For more details on Admissions, Athletics and Student Activities, please go to the BVT website
www.valleytech.k12.ma.us

<i>Student Services Department</i> (508) 529-7758 x3013		
Ms. Yvette Martin	Director of Student Services	x3117
Ms. Jennifer Antonelli	School Counselor	x3023
Ms. Caitlin Forgit	School Counselor	x3118
Ms. Gillian Granger	School Counselor	x3060
Mr. Paul Hassett	School Adjustment Counselor	x3101
Ms. Holly Hollingworth	School Counselor/Extended Leave Liaison	x3258
Ms. Brooke Johnson	School Counselor	x3138
Ms. Danielle LaForce	School Counselor	x3012
Ms. Alicia Lapomardo	School Psychologist	x3189
Ms. Luanne Pehl	School Adjustment Counselor	x3066

School Based Health Center

Blackstone Valley Tech School Based Health Center (SBHC) provides on-site medical, nutrition, and mental health case management services. The Health Center operates in conjunction with Milford Regional Medical Center. The Health Center offers convenient, teen friendly services in a confidential manner and is operational while school is in session.

Our goal is to treat and to prevent health and social problems that often interfere with academic success. Students can use the Health Center to receive preventative health care or treatment for acute/minor illnesses, psychological and emotional support. We are also available for health related questions/concerns or support services if needed. The Health Center will not replace your child's primary care provider.

The Health Center is staffed by a Nurse Practitioner, a Nutritionist, and an Office Coordinator.

School Based Health Center (508) 529-7758 x3702		
Jenna Callahan	Nurse Practitioner	x3711
Brookynn Porter	Community Health Worker	x3702
Martha Pellegrino	Nutritionist	x3710
Brooke Cook	Office Coordinator	x3702

Academic Course Selection Process

Blackstone Valley Regional Vocational Technical High School is committed to providing every student with an education best suited to their individual needs and learning style. Our course offerings have been carefully developed to challenge all students to maximize their academic and vocational experiences at BVT. The academic course selection process is a collaborative event that factors in student interest, parent/guardian concerns, teacher and counselor recommendations, student work ethic, past student performance, as well as data points that may include placement test and standardized test results. Students achieving a grade of 90 or better are encouraged to consider the next higher level of that course. Our primary objective is always to place students appropriately in courses and levels where they will not only be challenged but also successful in attaining their personal goals.

Academic Course Requirements

Every student at Blackstone Valley Tech is required to enroll in four years of English, Mathematics, Science, Social Studies, Career Enrichment and Electives. The Career Enrichment courses deliver curriculum that aligns with Strands IV, V, & VI of the Massachusetts Career Vocational Technical Education (CVTE) frameworks. Elective courses are intended to supplement a student's core academic and technical studies and should be in concert with the student's four-year and post-secondary plan. In addition, all students are required to participate in Occupational Health / Physical Education each year in shop. Please note that some courses may not run during a given school year due to student interest and/or teacher availability. Please refer to *Appendix A* which contains Massachusetts State College admissions requirements and may also serve as a helpful guideline for course selection and post-secondary planning.

Career Vocational Technical Education

The curriculum for Blackstone Valley Tech approved Chapter 74 Career Vocational Technical Education (CVTE) programs, is developed, aligned and revised based on the current Massachusetts CVTE Frameworks. Vocational instruction is designed utilizing the Massachusetts Framework strands, competencies and tasks, as well as local, state, and national licensing and certification requirements. Valuable industry input is derived from the Program Advisory Committees, the General Advisory Committee and subject matter experts in each area of instruction.

Portfolio Requirements

The Student Portfolio Program at Blackstone Valley Regional Vocational Technical High School is an initiative that provides instruction, and provisions for every student to create a portfolio that demonstrates compelling evidence of integrated vocational, academic, and employability skills acquired throughout the high school career. Every student in grades 9 through 12 is required to submit a portfolio at the end of each year to be used as part of the evaluation of the student's annual performance, and promotion/graduation status, as well as employment and/or post-secondary education readiness. Portfolio information along with detailed templates and instructions, are available to students, staff, and parents on-line at <http://www.valleytech.k12.ma.us>.

Grade Point Average and Class Rank Calculation

Grade point averages (GPA) and class rank are important to students seeking scholarships, financial assistance, and other post-secondary endeavors. GPA and class rank are calculated using a system of levels and credits. Each academic course is assigned the appropriate level based on the rigor of the curriculum and performance expectations; AP courses are rated at level one, Honors courses are rated at level two, College Prep Courses are rated at level three and conventional core courses are rated at level four. All other courses, including electives and enrichments, are rated at level five. For the purpose of calculating GPA only, a level one rating elevates a grade average by twenty points, a level two rating elevates a grade average by fifteen points, a level three rating elevates a grade average by ten points, a level four rating elevates a grade average by five points and courses with a level five rating calculate at face value. It is important to note that levels do not affect the grade published on a student's report card—levels provide a means for accurately calculating class rank for a diverse student population. All vocational courses calculate at face value.

Superintendent-Director's Commendation List Criteria

Commendation List students are selected three (3) times per year, at the end of each trimester, based on the following criteria:

1. A student must maintain a grade point average of 88% or above (no incompletes) in each technical, related and academic course for that trimester.
2. A student must maintain an effort and conduct grade average of 2 or better in each technical, related, and academic course for that trimester.
3. A student may not be absent more than six (6) days during the trimester. Consideration will be given to students who exceed six (6) days of absence due to prolonged illness when verified by a physician's note.
4. A student may receive no more than three (3) after sessions and zero (0) suspensions during the trimester.

Minimum Credit and Portfolio Requirements for Promotion / Graduation

Under the provision of the Massachusetts Department of Education and Blackstone Valley Vocational Regional School District, a full high school diploma may be earned at BVT. Blackstone Valley Tech is accredited by the New England Association of Schools and Colleges.

To earn a high school diploma a student must fulfill the following minimum requirements:

All students must enroll in Math, English, Science, History, Shop and Related courses each year.

As a minimum requirement all students must pass the courses listed to the right by earning a final average of 60 or greater.

- 4 years of Vocational Technical Program*
- 2 years of Related
- 4 years of English
- 4 years of Math
- 3 years of Science (including biology, chemistry and physics)
- 3 years of Social Studies
- 3 Additional Elective Courses
- 3 Enrichment Courses

***Additional Requirements for Promotion and Graduation:**

- No student will be **promoted** if he/she fails more than one (1) core course in a school year.
- No student will be **promoted** if he/she fails English or math during any school year.
- No student will be **promoted** if he/she fails in Technical Shop during any school year.
- Students must obtain three (3) credits from Electives to **graduate**.
- Students must obtain three (3) credits from Enrichments to **graduate**.
- Any student who fails to fulfill **promotion** requirements will be subject to an administrative review to determine appropriate placement for the following school year.
- All students must submit a passing Career Portfolio to **graduate**.
- All students must successfully complete all requirements for MCAS Competency Determination to **graduate**.

*Grade 10 students transferring from another district after grade 9 will be the exception, subject to Administrative approval.

Grading System

Superior	90-100	
Very Good	80-89	
Satisfactory	70-79	
Creditable	60-69	
Failure (no credit)	0-59	
I	Incomplete (Make-up work is required)	
M	Medical (Doctor's note is required)	
W	Withdrew	
WF	Withdrew Failed	
	Conduct	Effort
Excellent	1	1
Good	2	2
Fair	3	3
Unsatisfactory	4	4

Student shop performance is assessed daily. A weekly assessment record is maintained and averaged to determine the trimester grade point average. Absenteeism is factored into the weekly assessment record and may reduce the weekly average by five (5) points for each day absent. Absences, fully substantiated for just cause, will not result in a penalty. Absences caused by disciplinary reasons or truancy will be factored in as a zero (0) per day and will be included in the weekly assessment record calculation.

Incomplete Grades

An "I" (incomplete) appearing on a report card in any given subject will indicate that a student has failed to make up missed work. It is expected that students will complete make-up work within two (2) weeks of returning from an extended absence unless other arrangements are made with school officials. This applies to all shop, related or academic classes. A student receiving an incomplete grade is responsible for making arrangements with his/her teacher(s) to make up the work within ten (10) days from the end of the marking period. Failure to make up work within the prescribed time will result in a grade of zero for the missed work and will be factored in the determination of a numerical grade point average.

Extra Help and Web-Based Resources

Students are encouraged to seek support for their course of study by attending a special help period scheduled for after dismissal on Tuesday and Thursday afternoons from 2:15-3:00 P.M. It is the student's responsibility to take the initiative in making arrangements to see teachers for extra help when having difficulty with subject matter or having work to make up after an absence. In addition, the school's website hosts a variety of web-based resources for students. Simply go to www.valleytech.k12.ma.us and follow the links to the ***Student Links & Resources***.

Summer School

All summer school placements must be pre-approved by the Academic Curriculum Coordinator.

Guidelines:

- A maximum of two (2) core courses (academic) may be taken during summer school.
- Vocational courses cannot be made up in summer school.
- Approved lists of local summer school opportunities are available in the School Counseling Office.
- A student must achieve a minimum grade of 75% in summer school to receive credit and a recordable grade of 60% on his/her transcript.
- The original failing grade will still appear on the student's transcript.
- All summer school grades are due to the School Counseling Office prior to the first day of the new school year. Failure to do so may result in retention.

Please Note:

- A student will not be allowed to make up a core course (academic) via online distance learning.
- A student will not be allowed to make up a core course (academic) in summer school if he/she received a combination of "I" and failing numerical grades in that subject for all three trimesters.

Advanced Placement Courses

Blackstone Valley Tech is committed to offering challenging and rigorous coursework to prepare students for the demands of the 21st century. As newly accepted 8th graders, Valley Tech students and parents are guided to create a roadmap to graduation and beyond. Within that on-going process, students and parents are empowered to make decisions about career preparation, course selections, and appropriate levels of rigor. Students are generally encouraged to reach for the most challenging levels of coursework possible.

Blackstone Valley Tech proudly offers Advanced Placement (AP) courses in many subjects including but not limited to mathematics, science, English, social studies, world language and Information Technology. Enrollment is open to all students in those departments; however, students must meet the prerequisite coursework for AP subjects. Please consult the course descriptions in this book for more specific information regarding prerequisites for each AP course offered.

Students who elect to take AP course(s) must also agree to participate in the AP exam(s) at the conclusion of the course(s). Please see the section titled "*Grade Point Average and Class Rank Calculation*" for more information about how Advanced Placement rigor is rewarded in the GPA calculation.

Students interested in Adding/Dropping any Advanced Placement course must do so no later than July 30th, prior to the official start of the school year. The July 30th deadline is vital to allow time to reassess the master schedule regarding seat availability in alternative levels of the course. Add/Drop forms are available in the School Counseling office.

Please note:

Some AP courses may not run during a given school year due to student interest and/or teacher availability.

Cooperative Education Program

The Cooperative Education Program is a continuation of the school program that provides qualified senior students with a vocational occupational employment opportunity in an industrial setting. The work engaged in must be directly related to the vocation in which the student has been trained and Cooperating employers agree to provide additional training as specified by the school. Students participating in this program work rotating weeks according to the school calendar. The employer reports student performance to the school on a regular basis and students are paid for their work.

First Trimester senior year eligibility for the Cooperative Education Program is met during the junior year and is based on the following criteria:

- Completion of at least two years in the Vocational Technical program of study
- Completion of OSHA 10 Certification; General Industry or Construction
- Completion of employability requirements as outlined by the Vocational Department
- Must meet advanced shop competency requirements
- Must be recommended by Vocational-Technical Department Team Leader
- Junior year final grade point average of 70% or higher in all courses
- No individual course grade lower than 60% during the third trimester of junior year
- All Effort and Conduct grades must be 1 (excellent) or 2 (good)
- No more than two (2) aftersessions in the current or previous trimester
- No Saturday School session during the current or previous trimester
- Student Suspensions: Student must wait 1 trimester or 12 school weeks (from the date of the reported incident) to become eligible for Junior Co-op
- Maximum of nine unexcused absences during the junior year

If a student is denied eligibility, the student has the right to submit an appeal to the Cooperative Education Review Team. In the situation where a student is denied eligibility by the Review Team, an individualized contract may be developed whereby the student may become eligible for Co-Op after the first trimester of the senior year is completed.

Second Trimester senior eligibility is based on the following requirements during the first trimester of 12th grade:

- Completion of at least two years in the Vocational Technical program of study
- Completion of OSHA 10 Certification; General Industry or Construction
- Completion of employability requirements as outlined by the Vocational Department
- Must be recommended by Vocational-Technical Department Team Leader
- Must meet advanced shop competency requirements
- Grade point average of 70% or higher during the first trimester in all courses
- All Effort and Conduct grades must be a 1 (excellent) or 2 (good)
- No more than two (2) aftersessions in the current or previous trimester
- No Saturday School session during the current or previous trimester
- Student Suspensions: Student must wait 1 trimester or 12 school weeks (from the date of the reported incident) to become eligible for Senior Co-op
- Maximum of three days absent during the first trimester
- A student may be removed from the Cooperative Education Program if one or more of the following conditions exist:
 - The student receives a failing or incomplete grade in any subject
 - A student receives a conduct grade of 3 (fair) or 4 (unsatisfactory)
 - The student is absent more than three (3) days in a trimester without an acceptable excuse validated by written documentation from the appropriate authority
 - A student participates in behavior leading to disciplinary suspension from school
 - A student fails to submit weekly time cards and all necessary documentation in a timely manner as required.

Refer to the *Student Handbook* for junior year Cooperative Education Program eligibility criteria.

Academic Courses 2024-2025

	Grade 9		Grade 10		Grade 11		Grade 12	
ENGLISH	Honors English I	121	Honors English II	122	AP English Language & Composition	133	AP English Literature & Composition	134
	College Prep English I	101	College Prep English II	102	Honors English III	123	Honors English IV	124
	English I	111	English II	112	College Prep English III	103	College Prep English IV	104
	English I	911	English II	912	English III	113	English IV	114
MATH					English III	913	English IV	914
	Honors Algebra II	223	Honors Geometry	222	Honors Pre-Calculus/Intro to Trig	224	AP Calculus AB	235
	Honors Algebra I	209	College Prep Geometry	212	Honors Algebra II	223	Honors Pre-Calculus	236
	College Prep Algebra I	208	Geometry	202	College Prep Algebra II	220	Honors Statistics	237
	Algebra I	207	Geometry	922	Algebra II Part I	251	College Prep Pre-Calc/Intro to Trigonometry	228
	Algebra I	919			Algebra II Part I	920	College Prep Statistics	217
SCIENCE					College Prep Algebra II	220	Algebra II Part II	252
	Honors Biology (Lab) (1 year course)	345	College Prep Biology Part II (Lab)	315			Algebra II Part II	926
	College Prep Biology (Lab) Part I	310	Biology Part II (Lab)	948	AP Biology (Lab)	370	AP Biology (Lab)	370
	Biology Part I (Lab)	300	College Prep Chemistry (Lab)	332	Honors Biology (Lab)	336	Honors Biology (Lab)	336
	Biology Part I (Lab)	947	Honors Chemistry (Lab)	342	College Prep Biology (Lab)	335	College Prep Biology (Lab)	335
	Honors Physics (Lab) (1 year course)	344	College Prep Intro to Physics II (Lab)	317	AP Chemistry (Lab)	390	AP Chemistry (Lab)	390
	College Prep Intro to Physics I (Lab)	311			Honors Chemistry (Lab)	342	Honors Chemistry (Lab)	342
					College Prep Chemistry (Lab)	332	College Prep Chemistry (Lab)	332
					AP Physics I (Lab)	381	Chemistry (Lab)	958
					Honors Physics (Lab)	338	Honors Environmental Science	339
					College Prep Physics (Lab)	337	AP Physics I (Lab)	381
					Physics (Lab)	957	Honors Physics (Lab)	338
							College Prep Physics (Lab)	337
SOCIAL STUDIES	Honors World History II: 1500-1800	409	Honors U.S. History I	440	Honors US History II	426	AP U.S. History	432
	College Prep World History II: 1500-1800	408	College Prep U.S. History I	415	College Prep US History II	416	Honors American Government	422
	World History II: 1500-1800	407	U.S. History I	429	US History II	425	College Prep American Government	418
	World History II: 1500-1800	936	U.S. History I	946	US History II	935	American Government	421
							American Government	934
ELECTIVE COURSES	GRADE 9 ELECTIVES		GRADE 10 ELECTIVES		GRADE 11 ELECTIVES		GRADE 12 ELECTIVES	
	Band & Chorus 9	158	Band & Chorus 10	159	Intro to Piano + Pop Music	148	Movie Music	149
	Ukulele	146	Music Appreciation	147	AP Music Theory	152	Advanced Art Studio	173
	Writer's Voice	171	Vision and Revision	172	College Bound Writing	173	Workplace Writing	174
	Art Studio 9	175	Art Studio 10	176	Art Studio 11	177	Art Studio 12	178
	Spanish I	501	Accelerated Algebra II	266	AP Psychology	306	AP Psychology	306
	Spanish II	503	Spanish I	501	Current Events	406	Spanish II	503
	Honors Immersion Spanish II	523	Spanish II	503	Spanish I	501	Spanish III	506
	Literary Lab	915	Spanish III	506	Spanish II	503	Spanish IV	508
			Honors Immersion Spanish III	525	Spanish III	506	Spanish V	509
			Literary Strategies	916	Spanish IV	508	AP Spanish Language	529
					Honors Immersion Spanish IV	527	Culture & Civilizations	570
					Literary Workshop	917	Literary Roundtable	918

English Course Offerings

The English Department strives to provide a coordinated and integrated English program that nurtures intellectual capabilities and fosters an understanding that learning is a lifelong process. The curriculum provides students with communication competencies through the writing process and through oral presentations. classroom-based discussions. In addition, we offer formal approaches common to areas of fiction, non-fiction, technical, and business writing. Students read the works of various noted authors for analysis of style, form, and historical significance. We encourage an appreciation of literature as a source of enjoyment, social commentary, inquiry, and critical analysis. Students use open-response questions, various sources of information, and appropriate techniques in the refinement of their critical thinking and research skills.

Grade 9 English Courses

- | | | |
|--|--------------------------------------|------------------------|
| 121 | <i>Honors English I</i> | Credits: 2 Level: 2 |
| <hr/> | | |
| <i>This course prepares students for a 4 year college program.</i> | | |
| <hr/> | | |
| <p>This accelerated college and career focused course is centered on developing, extending, and improving communication competency. Students write coherent compositions, displaying proficiency in sentence, paragraph and vocabulary development. They practice specific techniques for revising and editing their own work to add depth to their arguments and analysis. Students periodically make oral presentations to experience speaking before a critical audience. Students demonstrate an understanding of the structure, elements, and meaning of non-fiction or informational material. Readings may include works such as <i>The Pearl</i>, <i>Animal Farm</i>, <i>Old Man and the Sea</i>, <i>The house on Mango Street</i>, or <i>The Tragedy of Romeo and Juliet</i>.</p> | | |
| <hr/> | | |
| 101 | <i>College Prep English I</i> | Credits: 2 Level: 3 |
| <hr/> | | |
| <i>This course prepares students for a 4 year college program.</i> | | |
| <hr/> | | |
| <p>This college and career focused course is an introduction to written and oral communication. Students write compositions with a focus on literary analysis. for a variety of purposes: description, narration, and exposition. Emphasis is placed on how the writing process develops greater proficiency in sentence and paragraph development. Written and spoken vocabulary expands to express a developing thought process. Students demonstrate an understanding of the structure, elements, and meaning of non-fiction or informational material. Readings may include works such as <i>The Pearl</i>, <i>Animal Farm</i>, <i>Old Man and the Sea</i>, <i>The house on Mango Street</i>, or <i>The Tragedy of Romeo and Juliet</i>.</p> | | |
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| 111 | <i>English I</i> | Credits: 2 Level: 4 |
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| <i>This course prepares students for a 2 year college program, continued vocational training, or direct entry into the workforce upon graduation.</i> | | |
| <hr/> | | |
| <p>This course is an introduction to written and oral communication. Students write compositions with a focus on literary analysis for a variety of purposes: description, narration, and exposition. Emphasis is placed on how the writing process develops greater proficiency in sentence and paragraph development. Written and spoken vocabulary expands to express a developing thought process. Students demonstrate an understanding of the structure, elements, and meaning of non-fiction or informational material. Readings may include works such as <i>The Pearl</i>, <i>Animal Farm</i>, <i>Old Man and the Sea</i>, <i>The house on Mango Street</i>, or <i>The Tragedy of Romeo and Juliet</i>.</p> | | |

This course prepares students for a 2 year college program, continued vocational training, or direct entry into the workforce upon graduation.

The course is an introduction to written and oral communication. This course is designed for students whose English skills are significantly below grade level and who benefit from specialized instruction in a small group setting. Students write compositions with a focus on literary analysis for a variety of purposes: description, exposition, and comparison/contrast. Emphasis is placed on how the writing process develops greater proficiency in sentence and paragraph development. Written and spoken vocabulary expands to express a developing thought process. Students demonstrate an understanding of the structure, elements, and meaning of non-fiction or informational material. Readings include the short story, novel, and periodicals. Readings may include works such as *The Pearl*, *Animal Farm*, *Old Man and the Sea*, *The house on Mango Street*, or *The Tragedy of Romeo and Juliet*.

Grade 10 English Courses

122	<i>Honors English II</i>	Credits: 2 Level: 2
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<i>This course prepares students for a 4 year college program.</i>		
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This accelerated college and career focused course reinforces and expands communication competencies initiated in Honors English I. Students receive greater emphasis on organization, syntax, precision of expression, and wider use of vocabulary. The focus of instruction is to encourage students to demonstrate an understanding of English grammar and standard English conventions and use this knowledge to edit their writing. Students become comfortable using open-response questions, drawing on different sources of information, and effectively integrating and citing sources via MLA format. appropriate research methods in gathering information for projects. Students make oral presentations that demonstrate considerations of audience, purpose, and the information conveyed. Students read fiction and non-fiction works of various noted authors for analysis of style, form, and historical significance. Readings may include works such as <i>The Tragedy of Julius Caesar</i> , <i>Fahrenheit 451</i> , <i>To Kill a Mockingbird</i> , <i>The Catcher in the Rye</i> , or <i>Of Mice and Men</i> .		
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102	<i>College Prep English II</i>	Credits: 2 Level: 3
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<i>This course prepares students for a 4 year college program.</i>		
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This college and career focused course reviews and expands the communication skills introduced in English I with greater emphasis on organization, syntax, precision of expression, and wider use of vocabulary. Through revision exercises students become more aware of the writing and thinking process. Students make oral presentations to experience speaking before a critical audience. Students become more comfortable and confident in various research techniques. Students read various works of fiction and non-fiction to analyze style, form and historical context. Readings may include works such as <i>The Tragedy of Julius Caesar</i> , <i>Fahrenheit 451</i> , <i>To Kill a Mockingbird</i> , <i>The Catcher in the Rye</i> , or <i>Of Mice and Men</i> .		
<hr/>		
112	<i>English II</i>	Credits: 2 Level: 4
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<i>This course prepares students for a 2 year college program, continued vocational training, or direct entry into the workforce upon graduation.</i>		
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This course reviews and expands the communication skills introduced in English I with greater emphasis on organization, syntax, precision of expression, and wider use of vocabulary. Through revision exercises students become more aware of the writing and thinking process. Students make oral presentations to experience speaking before a critical audience. Students become more comfortable and confident in various research techniques. Students read various works of fiction and non-fiction to analyze style, form, and historical context. Readings may include works such as <i>The Tragedy of Julius Caesar</i> , <i>Fahrenheit 451</i> , <i>To Kill a Mockingbird</i> , <i>The Catcher in the Rye</i> , or <i>Of Mice and Men</i> .		
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912	<i>English II</i>	Credits: 2 Level: 5
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<i>This course prepares students for a 2 year college program, continued vocational training, or direct entry into the workforce upon graduation.</i>		
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This course reviews and expands the communication skills introduced in English I. It is designed for students with English skills significantly below grade level and who benefit from specialized instruction in a small group setting. Through revision exercises students become more aware of the writing and thinking process. Students make oral presentations to experience speaking before a critical audience. Students read various works of fiction, non-fiction, and poetry to begin to analyze style, form, and/or historical context. Readings may include works such as <i>The Tragedy of Julius Caesar</i> , <i>Fahrenheit 451</i> , <i>To Kill a Mockingbird</i> , <i>The Catcher in the Rye</i> , or <i>Of Mice and Men</i> .		

Grade 11 English Courses

133	<i>AP English Language and Composition</i>	Credits:2	Level: 1
	<i>This course prepares students for a 4 year college program.</i>		
	<p>AP English Language and Composition enables students to read complex texts with understanding, while also teaching them to write prose of sufficient richness and complexity to communicate effectively with mature readers. The ultimate goal of building the rhetorical skills the class fosters is to help mold students into individuals who will actively and intelligently engage with the world around them. The AP English Language and Composition course helps students move beyond reading for mere comprehension, and it moves them past composing programmatic responses; it encourages them to think critically and purposefully about the rhetorical choices that authors make, and it leads them to consider the choices they make when deciding to add their voice into any given discourse: civil or academic. Students must take the AP exam in May to receive AP credit on their transcript. A qualifying score of three (3) or better on the AP exam may earn a student college credit. . It is strongly recommended that students who enroll in this course have an average of an 85 or higher in their sophomore honors class or an average of a 93 or higher in their college-prep class.</p>		
123	<i>Honors English III</i>	Credits:2	Level: 2
	<i>This course prepares students for a 4 year college program.</i>		
	<p>This Honors level of junior English maintains an accelerated pace, preparing students for college and career readiness, as they explore American literary topics in greater depth, including additional course work and lengthier essays. Students participate in a rich variety of activities that bolster abstract reasoning, promote proper research techniques, and develop reading, writing, and oral fluency. Students interpret the meaning of fiction and nonfiction works, films, and media by using different critical and analytic techniques. This American Literature course traces the development of the nation from its Native American roots to the present. Students study the connections between history, government, literature, and culture in the United States. Readings may include essays, novels, short stories, poems, or plays by authors such as Anne Bradstreet, Thomas Jefferson, Ralph Waldo Emerson, Frederick Douglass, Herman Melville, Emily Dickinson, Walt Whitman, T.S. Elliot, Tennessee Williams, F. Scott Fitzgerald, Ernest Hemingway, John Steinbeck, Dr. Martin Luther King, Jr., and Arthur Miller.</p>		
103	<i>College Prep English III</i>	Credits: 2	Level: 3
	<i>This course prepares students for a 4 year college program.</i>		
	<p>This course maintains a rigorous pace, preparing students for college and career readiness, and requires students to explore American Literary topics in greater depth. Students participate in a rich variety of activities directed toward improving written and oral communication. Students interpret the meaning of fiction and nonfiction works, films, and media by using different critical and analytic techniques. Students interpret the meaning of fiction and nonfiction works, films, and media by using different critical and analytic techniques. This American Literature course traces the development of the nation from its Native American roots to the present. Students study the connections between history, government, literature, and culture in the United States. Readings may include essays, novels, short stories, poems, or plays by authors such as Anne Bradstreet, Thomas Jefferson, Ralph Waldo Emerson, Frederick Douglass, Herman Melville, Emily Dickinson, Walt Whitman, T.S. Elliot, Tennessee Williams, F. Scott Fitzgerald, Ernest Hemingway, John Steinbeck, Dr. Martin Luther King, Jr., and Arthur Miller.</p>		

This course prepares students for a 2 year college program, continued vocational training, or direct entry into the workforce upon graduation.

This course is designed to promote literacy and to help create informed, freethinking citizens who are lifelong learners. Students study the various practical uses and expressions of language relevant in American society today. Students interpret the meaning of fiction and nonfiction works, films, and media by using different critical and analytic techniques. This American Literature course traces the development of the nation from its Native American roots to the present. Students study the connections between history, government, literature, and culture in the United States. Readings may include essays, novels, short stories, poems, or plays by authors such as Anne Bradstreet, Thomas Jefferson, Ralph Waldo Emerson, Frederick Douglass, Herman Melville, Emily Dickinson, Walt Whitman, T.S. Elliot, Tennessee Williams, F. Scott Fitzgerald, Ernest Hemingway, John Steinbeck, Dr. Martin Luther King, Jr., and Arthur Miller.

This course prepares students for a 2 year college program, continued vocational training, or direct entry into the workforce upon graduation.

This course is designed for students with English skills significantly below grade level. and who have yet to pass the ELA MCAS exam. Students review and develop the skills practiced in English III with emphasis on English skills necessary for their transition to the work force. Students use self-generated questions, note taking, summarizing, paraphrasing, and outlining in their learning activities. Students interpret the meaning of fiction and nonfiction works, films, and media by using different critical and analytic techniques. Through a variety of hands-on activities, students develop business and technical writing skills. This American Literature course traces the development of the nation from its Native American roots to the present. Students study the connections between history, government, literature, and culture in the United States. Readings may include essays, novels, short stories, poems, or plays by authors such as Anne Bradstreet, Thomas Jefferson, Ralph Waldo Emerson, Frederick Douglass, Herman Melville, Emily Dickinson, Walt Whitman, T.S. Elliot, Tennessee Williams, F. Scott Fitzgerald, Ernest Hemingway, John Steinbeck, Dr. Martin Luther King, Jr., and Arthur Miller.

Grade 12 English Courses

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| 134 | <i>AP English Literature & Composition</i>
<hr/> <i>This course prepares students for a 4 year college program.</i> <hr/> | Credits: 2 | Level: 1 |
| <p>The AP English Literature and Composition course is designed to engage students in the careful reading and critical analysis of literature. Through the close reading of selected texts, students can deepen their understanding of the ways writers use language to provide both meaning and pleasure for their readers. As they read, students should consider a work's structure, style, and themes, in conjunction with elements such as figurative language, imagery, symbolism, and tone. It is strongly recommended that students who have not taken the AP English Language and Composition course during junior year, have an average of 90 or higher in their junior honors class or an average of a 95 or higher in their junior college-prep class. Students must take the AP exam in May to receive AP credit on their transcript. A qualifying score of three (3) or better on the AP exam may earn a student college credit.</p> | | | |
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| 124 | <i>Honors English IV</i>
<hr/> <i>This course prepares students for a 4 year college program.</i> <hr/> | Credits: 2 | Level: 2 |
| <p>This Honors level of senior English course maintains an accelerated pace, preparing students for college and career readiness, by developing and refining communication competencies. Students build upon foundational writing and speaking skills mastered during prior years of study. Students improve organization, content, paragraph development, level of detail, style, voice, and word choice in their writing by drawing from a variety of revision strategies. In addition, they learn formal writing techniques common to areas of fiction and non-fiction while demonstrating clear and effective writing skills. Students read fiction and nonfiction works of various noted authors from around the world for analysis of style, form, and historical significance. Students interpret the meaning of fiction and nonfiction works through the use of critical lenses. Readings may include works such as <i>The Tragedy of Macbeth</i>, <i>Lord of the Flies</i>, <i>Brave New World</i>, <i>Things Fall Apart</i>, <i>The Time Machine</i>, <i>Before We Were Free</i>, <i>Life of Pi</i>, <i>Wide Sargasso Sea</i>, or <i>The Alchemist</i>. Readings will include Trevor Noah's <i>Born a Crime</i>, <i>The Alchemist</i>, and various short stories and supplemental readings.</p> | | | |
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| 104 | <i>College Prep English IV</i>
<hr/> <i>This course prepares students for a 4 year college program.</i> <hr/> | Credits: 2 | Level: 3 |
| <p>This College Prep level of senior English course maintains a rigorous pace, preparing students for college and career readiness, by developing and refining communication competencies. Students build upon foundational writing and speaking skills mastered during prior years of study. Students improve organization, content, paragraph development, level of detail, style, voice, and word choice in their writing by drawing from a variety of revision strategies. In addition, they learn formal writing techniques common to areas of fiction and non-fiction while demonstrating clear and effective writing skills. Students read fiction and nonfiction works of various noted authors from around the world for analysis of style, form, and historical significance. Students interpret the meaning of fiction and nonfiction works through the use of critical lenses. , films, and media by using different critical and analytic techniques. Readings may include works such as <i>The Tragedy of Macbeth</i>, <i>Lord of the Flies</i>, <i>Brave New World</i>, <i>Things Fall Apart</i>, <i>The Time Machine</i>, <i>Before We Were Free</i>, <i>Life of Pi</i>, <i>Wide Sargasso Sea</i>, or <i>The Alchemist</i>. Readings will include Trevor Noah's <i>Born a Crime</i>, <i>The Alchemist</i>, and various short stories and supplemental readings.</p> | | | |

This course prepares students for a 2 year college program, continued vocational training, or direct entry into the workforce upon graduation.

This senior English course is designed to promote literacy and to help create informed, freethinking citizens who are lifelong learners. Students build upon foundational writing and speaking skills mastered during prior years of study. Students improve organization, content, paragraph development, level of detail, style, voice, and word choice in their writing by drawing from a variety of revision strategies. In addition, they learn formal writing techniques common to areas of fiction and non-fiction while demonstrating clear and effective writing skills. Students will read and analyze works of fiction and nonfiction from noted authors. Students read fiction and nonfiction works of various noted authors from around the world for analysis of style, form, and historical significance. Students interpret the meaning of fiction and nonfiction works through the use of critical lenses, films, and media by using different critical and analytic techniques. Readings may include works such as *The Tragedy of Macbeth*, *Lord of the Flies*, *Brave New World*, *Things Fall Apart*, *The Time Machine*, *Before We Were Free*, *Life of Pi*, *Wide Sargasso Sea*, or *The Alchemist*. Readings will include Trevor Noah's *Born a Crime*, *The Alchemist*, and various short stories and supplemental readings

This course prepares students for a 2 year college program, continued vocational training, or direct entry into the workforce upon graduation.

This course is designed for students with English skills significantly below grade level and who have yet to pass the ELA MCAS exam. Students review and develop the skills practiced in English III with emphasis on English skills necessary for their transition to the work force. Students use self-generated questions, note taking, summarizing, paraphrasing, and outlining in their learning activities. Students interpret the meaning of fiction and nonfiction literacy works through the use of critical lenses, films, and media by using different critical and analytic techniques. Through a variety of hands-on activities, students develop business and technical writing skills. Students read fiction and nonfiction works of various noted authors from around the world for analysis of style, form, and historical significance. Students interpret the meaning of fiction and nonfiction works, films, and media by using different critical and analytic techniques. Readings may include works such as *The Tragedy of Macbeth*, *Lord of the Flies*, *Brave New World*, *Things Fall Apart*, *The Time Machine*, *Before We Were Free*, *Life of Pi*, *Wide Sargasso Sea*, or *The Alchemist*. Readings will include Trevor Noah's *Born a Crime*, *The Alchemist*, and various short stories and supplemental readings

Math Course Offerings

Grade 9 Math Courses

223 *Honors Algebra II* Credits: 2 Level: 2

Note: Completion of Algebra I is required and a grade of 90 or better is strongly recommended. In addition, student should score “Honors Algebra II Ready” on the BVT Placement Exam.

This course prepares students for a 4 year college program.

This is an accelerated course with an emphasis on modeling as it expands upon the topics developed in Algebra I. Students will study a variety of functions with both a graphical and algebraic approach, including quadratic, polynomial, exponential, logarithmic, rational, radical functions and matrices. A graphing calculator is required as its use is emphasized throughout instruction. Applications include problems relating to the students’ technical areas and everyday life.

209 *Honors Algebra I* Credits: 2 Level: 2

Note: This course is appropriate for students who scored “Honors Algebra I Ready” on BVT Placement Exam.

This course prepares students for a 4 year college program.

This is an accelerated course with an emphasis on modeling as it expands upon the topics developed in Pre-Algebra. Students will study equations, inequalities, linear functions, systems of equations and inequalities, exponents, polynomials, and factoring with an emphasis on applications. This course also introduces quadratic and exponential functions. Applications include problems relating to the students’ technical areas and everyday life.

208 *College Prep Algebra I* Credits: 2 Level: 3

Note: This course is appropriate for students who scored “College Prep Algebra I Ready” on BVT Placement Exam.

This course prepares students for a 4 year college program.

This is a college preparatory course with an emphasis on modeling as it expands upon the topics developed in Pre-Algebra. Students will study equations, inequalities, linear functions, systems of equations and inequalities, exponents, polynomials, and factoring. This course also provides a brief introduction to quadratic functions. Applications include problems relating to the students’ technical areas and everyday life.

207 *Algebra I* Credits: 2 Level: 4

Note: This course is appropriate for students who scored “Algebra I Ready” on BVT Placement Exam.

This course prepares students for some college programs, continued vocational training, or direct entry into the workforce upon graduation. Students will study equations, inequalities, linear functions, systems of equations and inequalities, exponents, polynomials, and factoring. Applications include problems relating to the students’ technical areas and everyday life.

919 Algebra I

Credits: 2 Level: 5

This course prepares students for some college programs, continued vocational training, or direct entry into the workforce upon graduation.

This course is intended for students who have an IEP that requires specialized instruction in a small group setting. The course introduces a selected number of the topics developed in Algebra I, providing more time between topics to strengthen concept development. Students will study equations, inequalities, linear functions, and systems of equations. This course also provides an introduction to exponents, polynomials, and factoring quadratic functions. Applications include problems relating to the students' technical areas and everyday life.

Grade 10 Math Courses

222	<i>Honors Geometry</i>	Credits: 2 Level: 2
<i>Prerequisite: Successful completion of Honors Algebra II, or Honors Algebra I with a grade of 80 or better</i>		
<i>This course prepares students for a 4 year college program.</i>		
This course is an accelerated course with an emphasis on geometric reasoning and proof. Students analyze the characteristics of two and three-dimensional geometric figures and their properties. The topics of study include parallel and perpendicular lines, triangles, polygons and quadrilaterals, similarity, trigonometry, spatial reasoning, circles, statistics and probability. Applications include problems relating to the students' technical areas and everyday life.		
212	<i>College Prep Geometry</i>	Credits: 2 Level: 3
<i>Prerequisite: Successful completion of College Prep Algebra I, or Algebra I with a grade of 90 or better.</i>		
<i>This course prepares students for a 4 year college program.</i>		
This course emphasizes geometric reasoning and proof. Students analyze the characteristics of two and three-dimensional geometric figures and their properties. The topics of study include parallel and perpendicular lines, triangles, polygons and quadrilaterals, similarity, trigonometry, spatial reasoning, circles, statistics and probability. Applications include problems relating to the students' technical areas and everyday life.		
202	<i>Geometry</i>	Credits: 2 Level: 4
<i>Prerequisite: Successful completion of Algebra I.</i>		
<i>This course prepares students for some college programs, continued vocational training, or direct entry into the workforce upon graduation.</i>		
This course provides more time between topics to strengthen concept development. Students analyze the characteristics of two and three-dimensional geometric figures and their properties in an applied manner. The topics of study include parallel and perpendicular lines, triangles, polygons and quadrilaterals, similarity, trigonometry, spatial reasoning, circles and probability. Applications include problems relating to the students' technical areas and everyday life.		
922	<i>Geometry</i>	Credits: 2 Level: 5
<i>Prerequisite: Successful completion of Algebra I.</i>		
<i>This course prepares students for some college programs, continued vocational training, or direct entry into the workforce upon graduation.</i>		
This course is intended for students who have an IEP that requires specialized instruction in a small group setting. The course introduces a selected number of the topics developed in Geometry, but provides more time between topics to strengthen concept development. The topics of study include parallel and perpendicular lines, triangles, polygons and quadrilaterals, similarity, trigonometry, spatial reasoning, circles, and probability. Applications include problems relating to the students' technical areas and everyday life.		

Prerequisite: Completion of Honors or College Prep Algebra I with a grade of 90 or better.

This course prepares students for a successful transition to Pre-Calculus.

This accelerated supplemental course is designed for grade 10 students who showed above average achievement in Honors Algebra I and who would like the opportunity to obtain the skills necessary to be prepared for Pre-Calculus their junior year. This course places emphasis on modeling as it expands upon the topics developed in Honors Algebra I. Students will study a variety of functions with both a graphical and algebraic approach, including quadratic, polynomial, exponential, logarithmic, rational, and radical functions. This course also investigates important concepts in data analysis and statistics. Use of the graphing calculator is emphasized throughout instruction. Applications include problems relating to the students' technical areas and everyday life.

Grade 11 Math Courses

- 224** ***Honors Pre-Calculus/Intro to Trigonometry*** Credits: 2 Level: 2

Prerequisite: Completion of Honors Algebra II or Accelerated Algebra II with a grade of 80 or better.

This course prepares students for a 4 year college program.

This course is an accelerated course designed to prepare students for AP Calculus AB or Honors Statistics. The topics of study include a further examination of functions: linear, polynomial, rational, exponential, logarithmic, and trigonometric functions. The study of these functions will include examination of their graphs, asymptotes, limits, continuity, symmetry, domain and range, and roots. Use of the graphing calculator is emphasized throughout instruction.
- 223** ***Honors Algebra II*** Credits: 2 Level: 2

Prerequisite: Completion of CP Algebra I with a grade of 90 or better, or Honors Algebra I.

This course prepares students for a 4 year college program.

This is an accelerated course with an emphasis on modeling as it expands upon the topics developed in Algebra I. Students will study a variety of functions with both a graphical and algebraic approach, including quadratic, polynomial, exponential, logarithmic, rational, radical functions and matrices. Use of the graphing calculator is emphasized throughout instruction. Applications include problems relating to the students' technical areas and everyday life.
- 220** ***College Prep Algebra II*** Credits: 2 Level: 3

Prerequisite: Completion of Algebra I with a grade of 90 or better, Honors Algebra I or College Prep Algebra I.

This course prepares students for a 4 year college program.

This is an accelerated course with an emphasis on modeling as it expands upon the topics developed in Algebra I. Students will study a variety of functions with both a graphical and algebraic approach, including quadratic, polynomial, exponential, logarithmic, rational, and radical functions. This course also investigates important concepts in data analysis and statistics. Use of the graphing calculator is emphasized throughout instruction. Applications include problems relating to the students' technical areas and everyday life.
- 251** ***Algebra II Part I*** Credits: 2 Level: 4

Prerequisite: Completion of Algebra I or College Prep Algebra I.

This course prepares students for some college programs, continued vocational training, or direct entry into the workforce upon graduation.

This course introduces a selected number of the topics developed in Algebra I, but provides more time between topics to strengthen concept development. Students will study linear, quadratic and polynomial functions. Use of the graphing calculator is emphasized throughout instruction. Applications include problems relating to the students' technical areas and everyday life.

920 *Algebra II Part I*

Credits: 2 Level: 5

Prerequisite: Completion of Algebra I or College Prep Algebra I.

This course prepares students for some college programs, continued vocational training, or direct entry into the workforce upon graduation.

This course is intended for students who have an IEP that requires specialized instruction in a small group setting. The course introduces a selected number of the topics developed in Algebra I, but provides more time between topics to strengthen concept development. Students will study linear, quadratic and polynomial functions. Use of the graphing calculator is emphasized throughout instruction. Applications include problems relating to the students' technical areas and everyday life.

Grade 12 Math Courses

235	<i>AP Calculus AB</i>	Credits: 2	Level: 1
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<i>Prerequisite: Completion of Pre-Calculus</i>			
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<i>Note: Students should check with prospective colleges to determine math requirements before choosing their grade 12 math course.</i>			
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<i>This course prepares students for a 4 year college program.</i>			
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This is an accelerated course with an emphasis on the AP Calculus AB Exam. Students enrolled in this course prepare to take the Advanced Placement AB Calculus Exam and seek college credit and/or placement from institutions of higher learning. Course study includes properties of functions, graphs, limits, differential calculus, integral calculus, and applications. Regular use of a graphing calculator is required in the course work. A qualifying score of three (3) or better on the AP exam may earn a student college credit.			
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236	<i>Honors Pre-Calculus</i>	Credits: 2	Level: 2
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<i>Prerequisite: Completion of Algebra II</i>			
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<i>Note: Students should check with prospective colleges to determine math requirements before choosing their grade 12 math course.</i>			
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<i>This course prepares students for a 4 year college program.</i>			
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This rigorous course is designed for students planning to continue their education after graduation and will require students to spend extensive time at home and/or after school in order to be successful. The topics of study include a further examination of functions: linear, polynomial, rational, exponential and logarithmic functions. The study of these functions will include examination of their graphs, asymptotes, continuity, symmetry, domain and range, and roots. A graphing calculator is required as its use is emphasized throughout instruction.			
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237	<i>Honors Statistics</i>	Credits:2	Level:2
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<i>Prerequisite: Completion of Pre-Calculus or Algebra II.</i>			
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<i>Note: Students should check with prospective colleges to determine math requirements before choosing their grade 12 math course.</i>			
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<i>This course prepares students for a 4 year college program.</i>			
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This rigorous course is designed for students planning to continue their education after graduation and will require students to spend extensive time at home and/or after school in order to be successful. This course will introduce students to statistics and the major concepts and tools for collecting, analyzing, and drawing conclusions from data. The topics of study include exploring data, sampling and experimentation, anticipating patterns and statistical inference.			
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XXX	<i>College Prep Statistics</i>	Credit: 2	Level: 3
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<i>Prerequisite: Completion of Pre-Calculus or Algebra II.</i>			
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<i>Note: Students should check with prospective colleges to determine math requirements before choosing their grade 12 math course.</i>			
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<i>This course prepares students for a 4 year college program.</i>			
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This course is designed for students planning to continue their education after graduation. The course will introduce students to statistics and the major concepts and tools for collecting, analyzing, and drawing conclusions from data. The topics of study include exploring data, sampling and experimentation, anticipating patterns and statistical inference.			

228	<i>College Prep Pre-Calculus/Intro into Trigonometry</i>	Credits: 2	Level: 3
<i>Prerequisite: Completion of College Prep Algebra II.</i>			
<i>Note: Students should check with prospective colleges to determine math requirements before choosing their grade 12 math course.</i>			
<i>This course prepares students for a 2 or 4 year college program.</i>			
This course will emphasize the study of functions, function notation, domain and range, quadratic, polynomial, rational functions. The course will also include analytical trigonometry, right triangle and circular trigonometric functions, and applications of trigonometric functions. Applications focus on problems relating to the students' technical areas and everyday life.			
252	<i>Algebra II Part II</i>	Credits: 2	Level: 4
<i>Prerequisite: Completion of Algebra II Part I.</i>			
<i>This course prepares students for a 2 year college program.</i>			
This course expands upon the topics developed in Algebra II Part I. Students will study a variety of functions with both a graphical and algebraic approach, including rational, radical, exponential and logarithmic functions. Use of the graphing calculator is emphasized throughout instruction. Applications include problems relating to the students' technical areas and everyday life.			
926	<i>Algebra II Part II</i>	Credits: 2	Level: 5
<i>Prerequisite: Completion of Algebra II Part I.</i>			
<i>This course prepares students for a 2 year college program.</i>			
This course is intended for students who have an IEP that requires specialized instruction in a small group setting. This course expands upon the topics developed in Algebra II Part I. The course introduces a selected number of the topics developed in Algebra II Part II, but provides more time between topics to strengthen concept development. Students will study a variety of functions with both a graphical and algebraic approach, including rational, radical, exponential and logarithmic functions. Use of the graphing calculator is emphasized throughout instruction. Applications include problems relating to the students' technical areas and everyday life.			

Science Course Offerings

Grade 9 Science Courses

Prior to the start of school, students are enrolled in either Honors Physics, CP Intro to Physics I, Honors Biology, CP Biology I, or Biology I for preparation of the State-required MCAS Exam. To provide the solid scientific background required to succeed on MCAS exams, these courses are completed during the freshman or freshmen/sophomore years. Honors Physics and Honors Biology are courses for the accelerated student and will prepare the student to take the MCAS exam in their Freshmen year. Students who successfully complete the one year science courses will enroll in Chemistry in their sophomore year. Students taking the two-year science in grades 9 and 10 will have the opportunity to study the life sciences or physics and/or chemistry in their junior and senior years.

345	<u>Honors Biology (Lab)</u>	Credits: 2	Level: 2
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This course prepares students for a 4 year college program.

This accelerated course is designed for the motivated student in preparation for advanced science courses. The course is designed to complete the biology curriculum frameworks in one year so that grade 9 students can participate in the biology MCAS by the end of the school year. Students will engage in a variety of activities such as laboratories, on-line activities, and class discussions. Topics include chemistry of life, the cell and its processes, genetics, anatomy and physiology, evolution and ecology. This course is considered a lab science for college admissions and is a prerequisite for AP Biology.

310	<u>College Prep Biology Part I (Lab)</u>	Credits: 2	Level: 3
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This course prepares students for a 4 year college program.

This course is the first half of a two-year sequence designed to follow the Massachusetts State Frameworks for Biology and prepare students for success on the Biology MCAS exam in the spring of the student's sophomore year. This course is designed for the college bound student. The course is structured to include the biology curriculum frameworks during the academic year. Students will engage in a variety of activities such as laboratories, on-line activities, and class discussions. Topics include chemistry of life, the cell and its processes, anatomy and physiology. This course is considered a lab science for college admissions.

300	<u>Biology Part I (Lab)</u>	Credits: 2	Level: 5
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This course prepares students for a 2 year college program, continued vocational training, or direct entry into the workforce upon graduation.

This course provides more time between topics to strengthen concept development. This is the first half of a two-year sequence designed to follow the Massachusetts State Frameworks for Biology and prepare students for success on the Biology MCAS exam in the spring of the student's sophomore year. This course concentrates on the cell, including its structure, functions, and variety and introduces Anatomy and Physiology. Students learn through a variety of “hands on” activities and labs that facilitate teamwork and improve problem-solving skills. This course is considered a lab science for college admissions.

This course prepares students for a 2 year college program, continued vocational training, or direct entry into the workforce upon graduation.

This course is the first half of two-year sequence designed to follow the Massachusetts State Frameworks for Biology and prepare students for success on the Biology MCAS exam in the spring of the student's sophomore year. This course concentrates on the cell, including its structure, functions, and variety and introduces Anatomy and Physiology. This course is designed for students on an IEP and offers specialized instruction in a small group setting. Students learn through a variety of “hands on” activities and labs that facilitate teamwork and improve problem-solving skills. This course is considered a lab science for college admissions.

This course prepares students for a 4 year college program.

This is an intensive science course for highly motivated students with high level math skills, especially those interested in majoring in science, engineering, or mathematics related fields. The course focuses on building the knowledge and skills for conceptual, mathematical, and hands-on application of physics concepts. The course serves as a prerequisite for AP Physics I, and moves at an accelerated pace since students will be prepared to take the Introductory Physics MCAS exam in June of their freshmen year. Having succeeded in an 8th grade algebra course is strongly recommended. Topics include the Massachusetts State Frameworks for Introductory Physics, as well as selected pre-AP topics. Topics include dimensional analysis, one-dimensional kinematics, motion graphs, forces and Newton’s laws of motion, energy, work and power, waves, thermal physics, nuclear physics, and electrical circuits. This course is considered a lab science for college admissions, and serves as a prerequisite for AP Physics I.

This course prepares students for a 4 year college program.

This course is the first half of a two-year sequence designed to follow the Massachusetts State Frameworks for Introductory Physics and prepare students for success on the Introductory Physics MCAS exam in June of their sophomore year. The course focuses on building the knowledge and skills for conceptual, mathematical, and hands-on application of physics concepts. Topics include dimensional analysis, one-dimensional kinematics, motion graphs, forces and Newton’s laws of motion, energy, work and power, thermal physics, and introductory nuclear physics. This course is considered a lab science for college admissions.

Grade 10 Science Courses

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| 315 | <i>College Prep Biology II (Lab)</i>
<i>Prerequisite: CP Biology Part I or teacher recommendation.</i>
<i>This course prepares students for a 4 year college program.</i> | Credits: 2 | Level: 3 |
| <p>This course is the second half of two-year sequence designed to prepare students for continued proficiency in Biology and laboratory skills and prepare students for success on the Biology MCAS exam in the spring of the student's sophomore year. This course is designed for the college bound student. The course is structured to include the biology curriculum frameworks during the academic year. Students will engage in a variety of activities such as laboratories, on-line activities, and class discussions. Topics include genetics, evolution and ecology followed by a review of the topics covered in Biology I and II to prepare students for the MCAS exam taking place in June. This course is considered a lab science for college admissions.</p> | | | |
| 948 | <i>Biology II (Lab)</i>
<i>This course prepares students for a 2 year college program, continued vocational training, or direct entry into the workforce upon graduation.</i> | Credits: 2 | Level: 5 |
| <p>This course is the second half of two-year sequence designed to follow the Massachusetts State Frameworks for Biology and prepare students for success on the Biology MCAS exam in the spring of the student's sophomore year. This course introduces genetics, evolution, biodiversity, and ecology. This course is designed for students on an IEP and offers specialized instruction in a small group setting. Students learn through a variety of hands-on activities and labs that facilitate teamwork and improve problem-solving skills. This course is considered a lab science for college admissions.</p> | | | |
| 342 | <i>Honors Chemistry (Lab)</i>
<i>Prerequisite: Completion of Honors Biology or Honors Physics during Freshman year</i>
<i>This course prepares students for a 4 year college program.</i> | Credits: 2 | Level: 2 |
| <p>Honors Chemistry is an accelerated Chemistry course designed to offer students the opportunity to master the conceptual and mathematical principles of chemistry. Students interested in attending college or pursuing a science related career, such as medical professions, engineering, lab technology, or research should consider taking this course. The course includes classroom and laboratory instruction including proper use of laboratory equipment, use of appropriate investigation techniques, current theories and established laws, and conceptual and mathematical ideas as related to chemistry. This course is considered a lab science for college admissions and will serve as a prerequisite for AP Biology and AP Chemistry.</p> | | | |
| 332 | <i>College Prep Chemistry (Lab)</i>
<i>This course prepares students for a 4 year college program.</i> | Credits: 2 | Level: 3 |
| <p>This lab course is presented in the context of chemical influences in contemporary life. Classroom instruction examines chemical theories while students gain knowledge of chemical techniques and analysis through lab experimentation and reporting. Areas of study include descriptive chemistry, classes of matter, chemical reactions, acids and bases, atomic theory, the periodic table, covalent and ionic bonding, and quantitative chemical analysis. Classroom and laboratory instruction includes the proper use of laboratory equipment, use of appropriate investigative techniques, current theories and established laws, and conceptual and mathematical ideas as related to chemistry topics as stated in the Massachusetts Curriculum Framework. This course is considered a lab science for college admissions.</p> | | | |

Prerequisite: CP Physical Science Part I

This course prepares students for a 4 year college program.

This course is the first half of a two-year sequence designed to follow the Massachusetts State Frameworks for Introductory Physics and prepare students for success on the Introductory Physics MCAS exam in June of their sophomore year. The course focuses on building the knowledge and skills for conceptual, mathematical, and hands-on application of physics concepts. Topics include dimensional analysis, one-dimensional kinematics, motion graphs, forces and Newton's laws of motion, energy, work and power, waves, thermal physics, nuclear physics, and electrical circuits. This course is considered a lab science for college admissions.

Grade 11 Science Courses

370 *AP Biology (Lab)*

Credits: 2 Level:1

Prerequisite: Successful completion of chemistry and 1 or more high school biology courses

Students enrolled in this course are required to complete summer assignments designed to refine specialized skills applicable to this course.

On-line Biology Courses without a LAB component will not be accepted as a prerequisite. Any courses that are taken outside of BVT that are servicing as a prerequisite MUST have prior approval by the Academic Curriculum Coordinator and AP teacher.

This course prepares students for a 4 year college program.

The goal of AP Biology is to provide students with an experience equivalent to an introductory college-level Biology course. The AP Biology course is designed to be taken by students after the successful completion of a first course in high school biology and one in high school chemistry. It aims to provide students with the conceptual framework, factual knowledge, and analytical skills necessary to deal critically with the rapidly changing science of biology. The AP Biology Class is presented in four big ideas: Evolution; the process of evolution drives the diversity and unity of life, Energy: Biological systems utilize free energy and molecular building blocks to grow, to reproduce, and to maintain dynamic homeostasis, Information: Living systems store, retrieve, transmit and respond to information essential to life processes, System: Biological systems interact, and these systems and their interactions possess complex properties. The two main objectives of AP Biology are to help students develop a conceptual framework for modern biology and to help students gain an appreciation of science as a process. Primary emphasis in an AP Biology course should be on developing an understanding of concepts rather than memorization of terms and technical details. Essential to this conceptual understanding are the following: a grasp of science as a process rather than as an accumulation of facts; personal experience in scientific inquiry; recognition of unifying themes that integrate the major topics of biology; and application of biological knowledge and critical thinking to environmental and social concerns. Students should be prepared to devote a significant amount of time to master vocabulary and concepts presented in class, writing lab reports, and working on projects outside of class. Students must take the AP exam in May to receive AP credit on their transcript. A qualifying score of three (3) or better on the AP exam may earn a student college credit. This course is considered a lab science for college admissions. Please note: Successful completion of this course, and all AP courses, will require completion of summer assignment and at least 1 hours of preparation/study per night.

336 *Honors Biology (Lab)*

Credits: 2 Level:2

This course prepares students for a 4 year college program.

This course is designed for the motivated student in preparation for advanced science courses. This course is structured to include the biology curriculum frameworks during the academic year. Students will engage in a variety of activities such as laboratories, on-line activities, and class discussions. Topics include chemistry of life, the cell and its processes, genetics, anatomy and physiology evolution and ecology. This course is considered a lab science for college admissions and serves as a prerequisite for AP Biology.

335 *College Prep Biology (Lab)*

Credits: 2 Level:3

This course prepares students for a 4 year college program.

This course is designed for the college bound student. The course is structured to include the biology curriculum frameworks during the academic year. Students will engage in a variety of activities such as laboratories, on-line activities, and class discussions. Topics include chemistry of life, the cell and its processes, genetics, anatomy and physiology, evolution and ecology. This course is considered a lab science for college admissions.

390 ***AP Chemistry (Lab)*** Credits: 2 Level: 1

Prerequisite: Completion of honors chemistry and teacher recommendation.

Students enrolled in this course are required to complete summer assignments designed to refine specialized skills applicable to this course.

Online Chemistry courses without a LAB component will not be accepted as a prerequisite. Any courses that are taken outside of BVT that are serving as a prerequisite MUST have prior approval by the Academic Curriculum Coordinator and AP teacher.

This course prepares students for a 4 year college program.

The goal of AP Chemistry is to provide students with an experience equivalent to an introductory college-level Chemistry course. The AP Chemistry course is designed to be taken by students after the successful completion of a first course in high school chemistry. It aims to provide students with the conceptual framework, factual knowledge, and analytical skills necessary to deal critically with the rapidly changing science of chemistry. AP Chemistry requires a serious commitment from students. The two main objectives of AP Chemistry are to help students develop a conceptual framework for modern chemistry and to help students gain an appreciation of science as a process. AP Chemistry will include instruction in each of the following eight content areas: atomic theory, chemical bonding, states of matter, reaction types, stoichiometry, kinetics, and thermodynamics. Laboratory experiments will be used to enhance students understanding of AP Chemistry content. Students should be prepared to devote a significant amount of time to master vocabulary and concepts presented in class, writing lab reports, and working on projects outside of class. Students must take the AP exam in May to receive AP credit on their transcript. A qualifying score of three (3) or better on the AP exam may earn a student college credit. This course is considered a lab science for college admissions. Please note: Successful completion of this course, and all AP courses, will require completion of summer assignments and at least 1 hour of preparation/study per night

342 ***Honors Chemistry (Lab)*** Credits: 2 Level: 2

This course prepares students for a 4 year college program.

Honors Chemistry is a fast-paced Chemistry course designed to offer students the opportunity to master the conceptual and mathematical principles of chemistry. Students interested in attending college or pursuing a science related career, such as medical professions, engineering, lab technology, or research should consider taking this course. The course includes classroom and laboratory instruction including proper use of laboratory equipment, use of appropriate investigation techniques, current theories and established laws, and conceptual and mathematical ideas as related to chemistry topics as stated in the Massachusetts Curriculum Framework. This course is considered a lab science for college admissions and will serve as a prerequisite for AP Biology and AP Chemistry.

332 ***College Prep Chemistry (Lab)*** Credits: 2 Level: 3

This course prepares students for a 4 year college program.

This lab course is presented in the context of chemical influences in contemporary life. Classroom instruction examines chemical theories while students gain knowledge of chemical techniques and analysis through lab experimentation and reporting. Areas of study include descriptive chemistry, classes of matter, chemical reactions, acids and bases, atomic theory, the periodic table, covalent and ionic bonding, and quantitative chemical analysis. Classroom and laboratory instruction includes the proper use of laboratory equipment, use of appropriate investigative techniques, current theories and established laws, and conceptual and mathematical ideas as related to chemistry topics as stated in the Massachusetts Curriculum Framework. This course is considered a lab science for college admissions.

381 ***AP Physics I (Lab)*** Credits: 2 Level: 1

Prerequisites: Completion Physics I & II or Physics. Completion or concurrent enrollment in Algebra II is strongly recommended, or teacher recommendation.

Students enrolled in this course are required to complete summer assignments designed to refine specialized skills applicable to this course.

Online Physics courses without a LAB component will not be accepted as a prerequisite. Any courses that are taken outside of BVT that are serving as a prerequisite MUST have prior approval from the Academic Curriculum Coordinator and AP teacher.

This course prepares students for a 4 year college program.

The goal of AP Physics I is to provide students with an experience equivalent to a first-semester college course in algebra-based Physics. The AP Physics I course is designed to be taken by students after the successful completion of a 2-year course in Intro to Physics or a 1-year Honors Physics course. AP Physics I requires a serious commitment from students. This class will focus on the curriculum determined by the CollegeBoard for AP Physics I. It is expected that students taking this course will have strong algebra skills. Students are expected to take the AP Physics I exam in May as a condition of enrolling in the course. A qualifying score of three (3) or better on the AP exam may earn a student up to 8 college credits. This course is considered a lab science for college admissions.

338 ***Honors Physics (Lab)*** Credits: 2 Level: 2

Prerequisite: Completion or concurrent enrollment in Algebra II is strongly recommended, or teacher recommendation.

This course prepares students for a 4 year college program.

This is an intensive science course for highly motivated students with high level math skills, especially those interested in majoring in science, engineering, or mathematics related fields. The course focuses on building the knowledge and skills for conceptual, mathematical, and hands-on application of physics concepts. Topics include dimensional analysis, one- and two-dimensional kinematics, motion graphs, forces and Newton's laws of motion, energy, work and power, waves, thermal physics, nuclear physics, and electrical circuits. This course is considered a lab science for college admissions, and serves as a prerequisite for AP Physics I.

337 ***College Prep Physics (Lab)*** Credits: 2 Level: 3

This course prepares students for a 4 year college program.

This is a science course for college prep students, with a focus on building the knowledge and skills for conceptual, mathematical, and hands-on application of physics concepts in an effort to discover the relationship of why and how all things work in our universe. Topics include dimensional analysis, one-dimensional kinematics, motion graphs, forces and Newton's laws of motion, energy, work and power, waves, thermal physics, nuclear physics, and electrical circuits. This course is considered a lab science for college admissions.

This course prepares students for a 2 year college program, continued vocational training, or direct entry into the workforce upon graduation.

Classroom and laboratory instruction includes the proper use of laboratory equipment, use of appropriate investigative techniques, current theories and established laws, and conceptual and mathematical ideas as related to fundamental Physics topics. Through the study of these and other topics, students discover the relationship of how all things work in our universe. Students participate in frequent labs and projects designed to test a solution to a specific task. Students learn through a variety of hands-on activities and labs that facilitate teamwork and improve problem-solving skills. This course is designed for students on an IEP and offers specialized instruction in a small group setting.

Grade 12 Science Courses

370	<i>AP Biology (Lab)</i>	Credits: 2	Level:1
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<i>Prerequisite: Completion of chemistry and 1 or more high school biology courses</i>			
<i>Students enrolled in this course are required to complete summer assignments designed to refine specialized skills applicable to this course.</i>			
<i>Online Biology courses without a LAB component will not be accepted as a prerequisite. Any courses that are taken outside of BVT that are serving as a prerequisite MUST have prior approval by the Academic Curriculum Coordinator and AP teacher.</i>			
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<i>This course prepares students for a 4 year college program.</i>			
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<p>The goal of AP Biology is to provide students with an experience equivalent to an introductory college-level Biology course. The AP Biology course is designed to be taken by students after the successful completion of a first course in high school biology and one in high school chemistry. It aims to provide students with the conceptual framework, factual knowledge, and analytical skills necessary to deal critically with the rapidly changing science of biology. The AP Biology course is divided into the following 8 units: ecology, evolution, biochemistry, cells, enzymes/metabolism, structure/function, heredity, and molecular genetics. The two main objectives of AP Biology are to help students develop a conceptual framework for modern biology and to help students gain an appreciation of science as a process. Primary emphasis in an AP Biology course should be on developing an understanding of concepts rather than memorization of terms and technical details. Essential to this conceptual understanding are the following: a grasp of science as a process rather than as an accumulation of facts; personal experience in scientific inquiry; recognition of unifying themes that integrate the major topics of biology; and application of biological knowledge and critical thinking to environmental and social concerns. Students should be prepared to devote a significant amount of time to master vocabulary and concepts presented in class, writing lab reports, and working on projects outside of class. Students must take the AP exam in May to receive AP credit on their transcript. A qualifying score of three (3) or better on the AP exam may earn a student college credit. This course is considered a lab science for college admissions. Please note: Successful completion of this course, and all AP courses, will require completion of summer assignment and at least 1 hours of preparation/study per night.</p>			
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336	<i>Honors Biology (Lab)</i>	Credits: 2	Level:2
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<i>This course prepares students for a 4 year college program.</i>			
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<p>This course is designed for the motivated student in preparation for advanced science courses. This course is structured to include the biology curriculum frameworks during the academic year. Students will engage in a variety of activities such as laboratories, on-line activities, and class discussions. Topics include chemistry of life, the cell and its processes, genetics, anatomy and physiology, evolution and ecology. This course is considered a lab science for college admissions and serves as a prerequisite for AP Biology.</p>			
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335	<i>College Prep Biology (Lab)</i>	Credits: 2	Level:3
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<i>This course prepares students for a 4 year college program.</i>			
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<p>This course is designed for the college bound student. The course is structured to include the biology curriculum frameworks during the academic year. Students will engage in a variety of activities such as laboratories, on-line activities, and class discussions. Topics include chemistry of life, the cell and its processes, genetics, anatomy and physiology, evolution and ecology. This course is considered a lab science for college admissions.</p>			

390 AP Chemistry (Lab) Credits: 2 Level: 1

Prerequisite: Completion of honors chemistry and teacher recommendation

Students enrolled in this course are required to complete summer assignments designed to refine specialized skills applicable to this course.

Online Chemistry courses without a LAB component will not be accepted as a prerequisite. Any courses that are taken outside of BVT that are serving as a prerequisite MUST have prior approval by the Academic Curriculum Coordinator and AP teacher.

This course prepares students for a 4 year college program.

The goal of AP Chemistry is to provide students with an experience equivalent to an introductory college-level Chemistry course. The AP Chemistry course is designed to be taken by students after the successful completion of a first course in high school chemistry. It aims to provide students with the conceptual framework, factual knowledge, and analytical skills necessary to deal critically with the rapidly changing science of chemistry. AP Chemistry requires a serious commitment from students. The two main objectives of AP Chemistry are to help students develop a conceptual framework for modern chemistry and to help students gain an appreciation of science as a process. AP Chemistry will include instruction in each of the following eight content areas: atomic theory, chemical bonding, states of matter, reaction types, stoichiometry, kinetics, and thermodynamics. Laboratory experiments will be used to enhance students understanding of AP Chemistry content. Students should be prepared to devote a significant amount of time to master vocabulary and concepts presented in class, writing lab reports, and working on projects outside of class. Students must take the AP exam in May to receive AP credit on their transcript. A qualifying score of three (3) or better on the AP exam may earn a student college credit. This course is considered a lab science for college admissions. Please note: Successful completion of this course, and all AP courses, will require completion of summer assignments and at least 1 hour of preparation/study per night.

342 Honors Chemistry (Lab) Credits: 2 Level: 2

This course prepares students for a 4 year college program.

Honors Chemistry is a fast-paced Chemistry course designed to offer students the opportunity to master the conceptual and mathematical principles of chemistry. Students interested in attending college or pursuing a science related career, such as medical professions, engineering, lab technology, or research should consider taking this course. The course includes classroom and laboratory instruction including proper use of laboratory equipment, use of appropriate investigation techniques, current theories and established laws, and conceptual and mathematical ideas as related to chemistry topics as stated in the Massachusetts Curriculum Framework. This course is considered a lab science for college admissions.

332 College Prep Chemistry (Lab) Credits: 2 Level: 3

This course prepares students for a 4 year college program.

This lab course is presented in the context of chemical influences in contemporary life. Classroom instruction examines chemical theories while students gain knowledge of chemical techniques and analysis through lab experimentation and reporting. Areas of study include descriptive chemistry, classes of matter, chemical reactions, acids and bases, atomic theory, the periodic table, covalent and ionic bonding, and quantitative chemical analysis. Classroom and laboratory instruction includes the proper use of laboratory equipment, use of appropriate investigative techniques, current theories and established laws, and conceptual and mathematical ideas as related to chemistry topics as stated in the Massachusetts Curriculum Framework. This course is considered a lab science for college admissions.

958 ***Chemistry (Lab)*** Credits: 2 Level: 5

This course prepares students for a 2 year college program, continued vocational training, or direct entry into the workforce upon graduation.

This lab course is presented in the context of chemical influences in contemporary life. Classroom instruction examines fundamental chemical theories while students gain essential knowledge of chemical techniques and analysis through lab experimentation and reporting. Classroom and laboratory instruction includes the proper use of laboratory equipment, use of appropriate investigative techniques, current theories and established laws, and conceptual and mathematical ideas as related to chemistry topics. This course is designed for students on an IEP and offers specialized instruction in a small group setting. Students learn through a variety of hands-on activities and labs that facilitate teamwork and improve problem-solving skills.

381 ***AP Physics I (Lab)*** Credits: 2 Level: 1

Prerequisites: Completion Physics I & II or Physics. Completion of or concurrent enrollment in Algebra II is strongly recommended.

Students enrolled in this course are required to complete summer assignments designed to refine specialized skills applicable to this course.

*Online Physics courses without a LAB component will not be accepted as a prerequisite. Any courses that are taken outside of BVT that are serving as a prerequisite **MUST** have prior approval by the Academic Curriculum Coordinator and AP teacher.*

This course prepares students for a 4 year college program.

The goal of AP Physics I is to provide students with an experience equivalent to a first-semester college course in algebra-based Physics. The AP Physics I course is designed to be taken by students after the successful completion of a 2-year course in Intro to Physics or a 1-year Honors Physics course. AP Physics I requires a serious commitment from students. This class will focus on the curriculum determined by the CollegeBoard for AP Physics I. It is expected that students taking this course will have strong algebra skills. Students are expected to take the AP Physics I exam in May as a condition of enrolling in the course. A qualifying score of three (3) or better on the AP exam may earn a student up to 8 college credits. This course is considered a lab science for college admissions.

338 ***Honors Physics (Lab)*** Credits: 2 Level: 2

Prerequisite: Algebra II or must take Algebra II concurrently

This course prepares students for a 4 year college program.

This is an intensive science course for highly motivated students with high level math skills, especially those interested in majoring in science, engineering, or mathematics related fields. The course focuses on building the knowledge and skills for conceptual, mathematical, and hands-on application of physics concepts. Topics include dimensional analysis, one- and two-dimensional kinematics, motion graphs, forces and Newton's laws of motion, energy, work and power, waves, thermal physics, nuclear physics, and electrical circuits. This course is considered a lab science for college admissions, and serves as a prerequisite for AP Physics I.

337 College Prep Physics (Lab)

Credits: 2 Level: 3

This course prepares students for a 4 year college program.

This is a science course for college prep students, with a focus on building the knowledge and skills for conceptual, mathematical, and hands-on application of physics concepts in an effort to discover the relationship of why and how all things work in our universe. Topics include dimensional analysis, one-dimensional kinematics, motion graphs, forces and Newton's laws of motion, energy, work and power, waves, thermal physics, nuclear physics, and electrical circuits. This course is considered a lab science for college admissions

339 Honors Environmental Science (Lab)

Credits: 2 Level: 2

Prerequisite: Completion of biology, chemistry, and physics

This course prepares students for a 4 year college program.

This course is designed for the motivated student in preparation for advanced science courses. The course is interdisciplinary focusing on the frameworks of earth science and biology. Students will also connect how their vocational, technical trades aid in the field of environmental science. Major themes will address global issues that affect the well-being of our planet. Topics will include population change, global change, energy resources and consumption, land and water use, and sustainability throughout the world. Students will engage in activities such as discussions, fieldwork, laboratory activities, research, and projects.

This lab-based science course is intended for the motivated students who is interested in learning more about the interrelationships between the natural world, the environment, and impacts from the humans. Students will explore the relationships among biology, chemistry, physics, geology, and Earth science to better understand how we impact the world today and the reasons behind it. This course will require students to critically analyze and communicate about current research studies, ideas, and include laboratory investigations. Major topics will include: individual good vs. common good, environmental laws and policies, greenhouse gases, climate change, global warming, Earth's atmosphere, renewable and non-renewable energy resources, land management, agriculture, GMO and waste concerns, pollution, water uses and treatment, overconsumption, and sustainability, and conservation.

Social Studies Course Offerings

Grade 9 Social Studies Courses

The 9th grade curriculum examines the development of “Man” from the Middle Ages to the Industrial Revolution. Students acquire insights into relationships among peoples, ideas, and events as they develop an interpretive framework based on the significant trends in World History. Students develop a global perspective of the forces and movements that have made the past contiguous with and relevant to the present. This course stresses the Massachusetts framework core knowledge that includes the Middle Ages, Renaissance, Scientific Revolution, Protestant Reformation, Age of Absolutism, Age of Exploration, Enlightenment, and Industrial Revolution. Topics such as; countries ruled by monarchs, countries opposed to absolutism, the important causes and events of the French Revolution, the Enlightenment, and the influence of the American Revolution are introduced. Students study the origins and consequences of the Industrial Revolution, the rise of the middle class, 19th century political reform in Western Europe, and imperialism in Africa, Asia, and South America. A strong focus on the geography of each section has been included into the curriculum. The students will develop an understanding of how geography shapes historical events and how these events in turn can influence the development of political borders. Emphasis is placed on aligning this course with the Massachusetts State Frameworks for World History.

409	<i>Honors World History II: 1500 - 1800</i>	Credits: 2	Level: 2
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This course prepares students for a 4 year college program.

This Honors level course maintains an accelerated pace while exploring topics in greater depth. Students are evaluated through traditional testing, note taking, required research and compositions as well as a major project each trimester. Supplemental materials are assigned on an as needed basis. An emphasis is placed on public speaking and the integration of technology.

408	<i>College Prep World History II: 1500-1800</i>	Credits: 2	Level: 3
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This course prepares students for a 4 year college program.

Students maintain a rigorous pace while studying these topics in great depth. Evaluation is based on traditional quizzes, tests, projects, research and writing assignments and discussions.

407	<i>World History II: 1500-1800</i>	Credits: 2	Level: 4
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This course prepares students for a 2 year college program, continued vocational training, or direct entry into the workforce upon graduation.

This course requires students to be involved in traditional note taking and testing. In addition, activities are directed toward the development of oral and written reports.

936	<i>World History II: 1500-1800</i>	Credits: 2	Level: 5
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This course prepares students for a 2 year college program, continued vocational training, or direct entry into the workforce upon graduation.

This class is designed for students with an IEP requiring specialized instruction in a small group setting. Through reading, class discussion, hands-on-projects and writing exercises, students are encouraged to develop a more thorough understanding of the periods studied. This course also utilizes a wide variety of assessment strategies so that students may demonstrate their understanding of subject matter.

Grade 10 Social Studies Courses

The sophomore year social studies course reviews the development of the United States from its early settlement through Reconstruction of the South after the Civil War. Students examine the historical and intellectual origins of the United States during the Revolutionary and Constitutional eras. After determining the political and economic factors that contributed to the outbreak and consequences of the Revolution, students are introduced to the writing and key ideas of the U.S. Constitution. Students also study the basic framework of American democracy and those fundamental concepts of American government such as popular sovereignty, federalism, separation of powers, and individual rights. Students study America's westward expansion, the establishment of political parties, and economic and social change. Finally, students learn about the growth of sectional conflict, how sectional conflict led to the Civil War, and the consequences of the Civil War, including Reconstruction. The origins and impact of sectionalism on American life and politics is addressed. Students develop an understanding of the political, economic, social, and cultural forces involved in the cause and effect of historical change. A strong focus on the geography of each section has been included into the curriculum. The students will be able to identify how geography shapes historical events and how these events in turn can influence the development of political borders. The reading of primary source documents is an integral part of this course. Emphasis is placed on aligning this course with the Massachusetts State Frameworks for U.S. History.

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| 440 | <i>Honors U.S. History I</i> | Credits: 2 | Level: 2 |
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| <i>This course prepares students for a 4 year college program.</i> | | | |
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| The Honors level of U.S. History I maintains an accelerated pace as students explore topics in greater depth through additional course work and the integration of technology. Students participate in a rich variety of activities including public speaking assignments, term projects, oral and written reports, and supplemental reading. Supplemental materials are assigned on as needed basis. Traditional note taking and testing are a vital component of this course. | | | |
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| 415 | <i>College Prep U.S. History I</i> | Credits: 2 | Level: 3 |
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| <i>This course prepares students for a 4 year college program.</i> | | | |
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| This course maintains a rigorous pace and requires students to explore topics in greater depth including additional course work and projects. Students participate in a rich variety of activities directed toward the development of oral and written reports. Traditional note taking and testing are a vital component of this course. | | | |
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| 429 | <i>U.S. History I</i> | Credits: 2 | Level: 4 |
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| <i>This course prepares students for a 2 year college program, continued vocational training, or direct entry into the workforce upon graduation.</i> | | | |
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| Students in this course are challenged to develop an understanding of those events that comprise our special role in the world at large. Emphasis is placed on aligning this course with the Massachusetts State Frameworks for U.S. History I. | | | |
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| 946 | <i>U.S. History I</i> | Credits: 2 | Level: 5 |
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| <i>This course prepares students for a 2 year college program, continued vocational training, or direct entry into the workforce upon graduation.</i> | | | |
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| This class is designed for students with an IEP requiring specialized instruction in a small group setting. Through reading, class discussion, hands-on-projects and writing exercises, students are encouraged to develop a more thorough understanding of the periods studied. This course also utilizes a wide variety of assessment strategies so that students may demonstrate their understanding of subject matter. | | | |

Grade 11 Social Studies Courses

More than any other nation, The United States has envisioned itself as an ever-changing landscape with a vision of pure possibility for the individual. The 10th grade curriculum discusses that which is the American vision, and why and how Americans commemorate history. From a review of America's Division and Uneasy Reunion (1848-1877), to The Era of Expansion Rewards and Costs (1850-1915), through a United States on the brink of change precipitated by Progressive Reform and World War I this course evaluates that which is our heritage. The Twenties, The Great Depression, World War II, the Cold War, The Civil Rights Movement and other social movements are considered. Students develop an understanding of those events that comprise our special role in the world at large. A strong focus on the geography of each section has been included into the curriculum. The students will be able to identify how geography shapes historical events and how these events in turn can influence the development of political borders. Emphasis is placed on aligning this course with the Massachusetts State Frameworks for U.S. History.

426	<i>Honors U.S. History II: Imagining the American Nation</i>	Credits: 2	Level: 2
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This course prepares students for a 4 year college program.

Students at this Honors level explore topics at an accelerated pace and in great depth through additional course work that includes the integration of technology. Students participate in a rich variety of activities including required research and compositions, a major project each trimester, and supplemental reading assignments. Traditional note taking and testing are a vital component of this course.

416	<i>College Prep U.S. History II: Imagining the American Nation</i>	Credits: 2	Level: 3
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This course prepares students for a 4 year college program.

At the college prep level, students maintain a rigorous pace while they are challenged to develop an understanding of the complexities of this course through traditional testing, required compositions, note taking, and research projects. Emphasis is placed on aligning this course with the Massachusetts State Frameworks for U.S. History II.

425	<i>U.S. History II: The American Nation</i>	Credits: 2	Level: 4
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This course prepares students for a 2 year college program, continued vocational training, or direct entry into the workforce upon graduation.

Students in this course are challenged to develop an understanding of those events that comprise our special role in the world at large. Emphasis is placed on aligning this course with the Massachusetts State Frameworks for U.S. History II.

935	<i>U.S. History II</i>	Credits: 2	Level: 5
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This course prepares students for a 2 year college program, continued vocational training, or direct entry into the workforce upon graduation.

This course is designed for students with an IEP requiring specialized instruction in a small group setting. Students study the time period from the Civil War to the present and are exposed to such topics as; the Industrial Revolution, Imperialism, World War I, The Great Depression, World War II, The Cold War. This course expands understanding of the United States' role in world affairs. Students learn to do research and to create oral and written presentations that demonstrate their understanding of world events. Emphasis is placed on aligning this course with the Massachusetts State Frameworks for U.S. History II.

Grade 12 Social Studies Courses

The 12th grade curriculum is designed to give the student an understanding of the workings of local, state, and federal governments. Students study and discuss the role of the citizen in government, the American political party system as well as past and present elections. The focus is on the three branches of the federal government and how they influence the lives of all citizens. Students examine the workings of Congress, the role of the President and his cabinet, and the need for the judicial system. Students develop the understanding that they live not only under the laws of the federal government, but also under the laws of the state and local governments as they learn about the workings of all three. Students continue their study of the Constitution of the United States and its amendments. This course focuses on those important Supreme Court cases that have had an impact on our lives. A major emphasis during the senior year is to interest students in becoming involved citizens and active participants in their government. An emphasis will be placed on the role of the United States in the world today.

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|---|--|------------------------|
| 432 | <i>AP U.S. History</i> | Credits: 2 Level: 1 |
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| <i>Prerequisite: Two years of previous honors course work is required.</i> | | |
| <i>Successful completion of summer work is required. This course prepares students for a 4 year college program.</i> | | |
| <hr/> | | |
| AP United States History is intended for highly motivated and serious students who are ready for the challenge of a college level course. Students making a commitment to Advanced Placement should expect the reading and writing demands equivalent to a college course. This course provides an overview of the American experience from the pre-Columbian through the post-Vietnam eras together with the close examination of problems or themes through supplementary readings of documents, essays, and specialized writing by historians. Students must take the AP exam in May to receive AP credit on their transcript. A qualifying score of three (3) or better on the AP exam may earn a student college credit. | | |
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| 422 | <i>Honors American Government</i> | Credits: 2 Level: 2 |
| <hr/> | | |
| <i>This course prepares students for a 4 year college program.</i> | | |
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| In this Honors course students study the topics in greater depth while maintaining an accelerated pace. Students are evaluated through traditional testing, note taking, required research and compositions as well as a major project each trimester. An emphasis is placed on public speaking and the integration of technology. Students will complete a Civics Project during senior year in accordance with Chapter 296 of the Acts of 2018, <i>An Act to promote and enhance civic engagement</i> . | | |
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| 418 | <i>College Prep American Government</i> | Credits: 2 Level: 3 |
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| <i>This course prepares students for a 4 year college program.</i> | | |
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| Students maintain a rigorous pace while studying these topics in great depth. Evaluation is based on traditional quizzes, tests, projects, research and writing assignments, and discussions. Students will complete a Civics Project during senior year in accordance with Chapter 296 of the Acts of 2018, <i>An Act to promote and enhance civic engagement</i> | | |
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| 421 | <i>American Government</i> | Credits: 2 Level: 4 |
| <hr/> | | |
| <i>This course prepares students for a 2 year college program, continued vocational training, or direct entry into the workforce upon graduation.</i> | | |
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| This course requires students to be involved in traditional note taking and testing as well as projects, research and writing assignments, and discussions. Students will complete a Civics Project during senior year in accordance with Chapter 296 of the Acts of 2018, <i>An Act to promote and enhance civic engagement</i> | | |

This course prepares students for a 2 year college program, continued vocational training, or direct entry into the workforce upon graduation.

This class is designed for students with an IEP requiring specialized instruction in a small group setting. Through reading, class discussion, hands-on-projects and writing exercises, students are encouraged to develop a more thorough understanding of the periods studied. This course also utilizes a wide variety of assessment strategies so that students may demonstrate their understanding of subject matter. Students will complete a Civics Project during senior year in accordance with Chapter 296 of the Acts of 2018, *An Act to promote and enhance civic engagement*

World Language

The World Language department works collaboratively with the intention of utilizing cross-disciplinary content to motivate and empower students to communicate effectively in the target language and to act with cultural competence and critical consciousness. All language courses have been carefully aligned to national standards set forth by ACTFL (The American Council on the Teaching Foreign Languages) and the Massachusetts World Language Curriculum Framework. At all levels, students employ the target language to advance their interpretive, interpersonal, presentational and intercultural communication skills through an exploration of cultures and comparisons. World Language courses at BVT also delve into the lifelong learning practices of making connections, building communities, social and emotional well-being and social justice. Course sequencing options allow for students with varied previous exposure to the Spanish language to maximize their capacity for growth. There are courses offered to students without previous language experience, as well as to those advanced and/or native and heritage speakers who wish to have a total linguistic immersion, thus preparing them for the AP Spanish Language and Culture exam and for further Spanish studies at the college level.

501 *Spanish I*

Credits: 1 Level: 5

This is an introductory course in the Spanish instructional sequence appropriate for students with little or no prior language learning experience. Students will utilize authentic resources such as interviews, articles and video blogs to explore the cultures of the Spanish-speaking world with a focus on the countries of Paraguay, Costa Rica and Spain. Students will explore the themes of self-identity, school activities and family with the goal of reaching at least the novice-mid language proficiency range as defined by the ACTFL standards within the interpretive, interpersonal, presentational and intercultural communicative modes so that they are able to communicate about topics that are personally connected to them. This course is closed to heritage and native Spanish speakers. Spanish I is not part of the course sequence leading to the AP Spanish Language and Culture course.

503 *Spanish II*

Credits: 1 Level: 5

Prerequisites: Completion of Spanish I at the high school level or as determined by placement exam.

This course is a continuation of Spanish I and begins with a comprehensive review of the curriculum taught in Spanish I. Students will utilize authentic resources such as songs, websites and commercials to explore the cultures of the Spanish-speaking world with a focus on the countries of Mexico, Dominican Republic and Colombia. Students will explore the themes of food as culture, leisure activities and descriptions of the world in which they live with the goal of reaching at least the novice-high language proficiency range as defined by the ACTFL standards within the interpretive, interpersonal, presentational and intercultural communicative modes so that they are able to communicate about topics that are personally connected to them and begin to express information about their familiar environment. This course is closed to heritage and native Spanish speakers. Spanish II is not part of the course sequence leading to the AP Spanish Language and Culture course.

506 ***Spanish III*** Credits: 1 Level: 5

*Prerequisites: Completion of Spanish II (with a 75 or above). Teacher's recommendation must be considered for placement at this level. *Native or heritage speakers must have approval from the Spanish Team Leader prior to registration if he/she is interested in this course.*

This course is designed for students who have successfully completed Spanish I and II and are prepared to continue their instruction beyond the two introductory years. Spanish III begins with a comprehensive review of the curriculum taught in Spanish I and II. Students will utilize authentic resources such as promotional videos, radio programs and news reports to explore the cultures of the Spanish-speaking world with a focus on the countries of Ecuador, Mexico and Nicaragua. Students will explore the themes of school and extra-curricular activities, the culture of a family and communities throughout the world with the goal of reaching at least the intermediate-low language proficiency range as defined by the ACTFL standards within the interpretive, interpersonal, presentational and intercultural communicative modes so that they are able to communicate about topics that are connected to them and their familiar environment. Spanish III is not part of the course sequence leading to the AP Spanish Language and Culture course.

508 ***Spanish IV*** Credits: 1 Level: 5

*Prerequisites: Completion of Spanish III (with an 80 or above). Teacher's recommendation must be considered for placement at this level. *Native or heritage Spanish speakers must have approval from the Spanish Team Leader prior to registration if he/she is interested in this course.*

This course is designed for students who have successfully completed Spanish III and are prepared to take on the challenge of an advanced language course. Spanish IV begins with a comprehensive review of the curriculum taught in Spanish III. Students will utilize authentic resources such as speeches, recipes and newspaper articles to explore the cultures of the Spanish-speaking world with a focus on the countries of Cuba, Peru and Argentina. Students will explore the themes of food preparation throughout the world, social life and international travel with the goal of reaching at least the intermediate-mid language proficiency range as defined by the ACTFL standards within the interpretive, interpersonal, presentational and intercultural communicative modes so that they are able to communicate about topics that are connected to them and their familiar environment and begin to touch upon topics of general, social, academic or professional interest. Spanish IV is not part of the course sequence leading to the AP Spanish Language and Culture course.

509 ***Spanish V*** Credits: 1 Level: 5

*Prerequisites: Completion of Spanish IV (with an 80 or above). Teacher's recommendation must be considered for placement at this level. * Native or heritage Spanish speakers must have approval from the Spanish Team Leader prior to registration if he/she is interested in this course.*

This course is designed for students who have successfully completed Spanish IV and are prepared to continue the challenge of an advanced language course. Spanish V begins with a comprehensive review of the curriculum taught in Spanish IV. Students will utilize authentic resources such as videos, blogs and podcasts to explore the cultures of the Spanish-speaking world with a focus on the countries of Spain, Chile and Colombia. Students will explore the themes of young people today, digital citizenship and a healthy and balanced lifestyle with the goal of reaching at least the intermediate-high language proficiency range as defined by the ACTFL standards within the interpretive, interpersonal, presentational and intercultural communicative modes so that they are able to communicate about topics that are connected to them and their familiar environment as well as topics of general, social, academic or professional interest.

523 ***Honors Immersion Spanish II*** Credits: 1 Level: 2

Prerequisites: Participation in a Spanish Immersion program prior to enrollment at BVT or is a native/heritage speaker. (Open to grade 9 only.) Students may be required to take a placement exam to show mastery at a pre-intermediate-mid level as defined by ACTFL performance guidelines)

This course is the first in a series that prepares students for the AP Spanish Language and Culture course their senior year. This course engages students in authentic communicative activities in a cultural context with emphasis on the development of language skills within the four modes of communication: interpretive, presentational, interpersonal and intercultural. Through the use of authentic audio, visual and written material, students will further develop the skills necessary to communicate meaningfully, effectively and accurately in Spanish, with the goal of attaining an intermediate-mid level of proficiency as defined by the ACTFL standards. This course has been designed for students who have participated in a Spanish Immersion program, or is a native/ heritage speaker that choose to continue their instruction entirely in Spanish. This course requires the use of Spanish exclusively and grades will reflect that students use Spanish almost exclusively in the classroom.

525 ***Honors Immersion Spanish III*** Credits: 1 Level: 2

Prerequisites: Completion of Honors Spanish Immersion II at BVT or is a native/heritage speaker with approval from the Spanish Team Leader. (Open to Grade 10 only.)

This course continues to focus on vocabulary expansion, mastery of advanced grammar and reading comprehension through the study of various themes. Emphasis is placed on the understanding of more complex language structures that will continue to prepare students to demonstrate their level of Spanish proficiency within the four modes of communication - interpretive, presentational, interpersonal and intercultural with the goal of attaining a proficiency level of intermediate-high as defined by the ACTFL proficiency standards. This course is the second in a series that prepares students for the AP Spanish Language and Culture course their senior year. Through the use of authentic texts, including videos, audios, articles, blogs, interviews, and literature gathered from Spain and Latin America, students will continue to strengthen the skills necessary to communicate meaningfully, effectively and accurately in Spanish. This course requires the use of Spanish exclusively and grades will reflect that students use Spanish almost exclusively in the classroom.

527 ***Honors Immersion Spanish IV*** Credits: 1 Level: 2

Prerequisites: Completion of Honors Spanish Immersion III at BVT or is a native/heritage speaker with approval from the Spanish Team Leader. (Open to Grade 11 only.)

This is a Pre-AP course composed of thematic units using intermediate/advanced authentic text and media resources with emphasis on the development of language skills within the four modes of communication - interpretive, presentational, interpersonal and intercultural with the goal of attaining a proficiency level of advanced-low as defined by the ACTFL proficiency standards. Students will be accountable for readings and presentations in Spanish. Hispanic history and culture will be further examined through the study of history, literature, art, music and current events. The class is taught exclusively in Spanish. This junior course is the third in a series that prepares students for the AP Spanish Language and Culture course their senior year.

529 ***AP Spanish Language and Culture***

Credits: 2 Level: 1

Prerequisites: Completion of Honors Spanish Immersion IV at BVT or is a native/heritage speaker with approval from the Spanish Team Leader. (Open to Grade 12 only.)*

The AP Spanish Language & Culture course emphasizes communication (understanding and being understood by others) by applying interpretive, interpersonal, and presentational skills in real-life situations. This includes vocabulary usage, language control, communication strategies, and cultural awareness. The AP Spanish Language & Culture course strives not to overemphasize grammatical accuracy at the expense of communication. To best facilitate the study of language and culture, the course is taught almost exclusively in Spanish. The AP Spanish Language & Culture course engages students in an exploration of culture in both contemporary and historical contexts. The course develops students' awareness and appreciation of cultural products (e.g., tools, books, music, laws, conventions, institutions); practices (patterns of social interactions within a culture); and perspectives (values, attitudes, and assumptions). This course is designed to continue to prepare students to take the AP Spanish Language and Culture exam and for more advanced Spanish studies at the college level.

Students *must* take the AP exam in May in order to receive AP credit on their transcript. A qualifying score of three (3) or better on the exam may earn a student college credit.

*If a non-immersion student wishes to take this course after successful completion of Spanish IV, a placement test consisting of a written, listening and speaking component (at an intermediate-pre-advanced level defined by ACTFL performance guidelines) will be administered prior to entering the class and supplementary coursework outside of school will be necessary.

Career Enrichments

Career Enrichment is a required course for all students enrolled at Blackstone Valley Vocational Technical High School. The Career Enrichment department is responsible for covering three strands 4 (Employability), 5 (Management & Entrepreneurship) and 6 (Technology) within the Massachusetts Vocational Technical Education Framework.: Strand 4- Employability and Career Readiness; Strand 5- Management and Entrepreneurship; and Strand 6- Technology Literacy. In addition, the curriculum includes elements of the Massachusetts High School Standards for Personal Financial Literacy, Massachusetts Career Development Education Benchmarks, and the National Standards for Family & Consumer Science. The purpose of this program is to prepare students to flourish as adults — at work, at home and in society. We accomplish this with a carefully crafted curriculum designed specifically for the BVT student. One that focuses on each individual and empowers them to think critically, make calculated decisions and take action.applied learning, interesting project work, relevant classroom activities and guided peer interactions – all with a focus on personal and social growth & development.

Students complete interdisciplinary projects progressing that range from career awareness, to career exploration to career navigation. Topics include 21st Century (soft) Skills, career development, employability, management & entrepreneurship, financial literacy, strengths-based guidance counseling, and technological skills. All classes are made available through web-based learning management system Canvas, maximizing the one-to-one technology provided by the district. The coursework is delivered appropriately between a healthy mix of individual assignments and collaborative group work. Most projects are digital and all classes are held in computer labs. Career Enrichments program is taught by a team of cross-disciplinary team of teachers, with experience in both private and public sectors; including 2 licensed school counselors. With access to the entire student body, the program truly serves as a backbone of support for Valley Tech education, providing support and content for various groups including school counseling, academic and vocational staff, BVT administrators and technology department. to all students at BVT in each of the across all four grade levels course taught in conjunction with school counselors, allowing the school to address certain standards outlined by the American School Counselor Association.

611 *Career Enrichment 9*

Credits: 1 Level:5

As new students at Blackstone Valley Tech, Freshmen are provided classroom support and instruction for basic functionality of school issued devices and the programs and applications used universally such as Canvas, PowerSchool, Microsoft 365, and Naviance. In addition to this, students are guided through their vocational exploratory process throughout their first term in Career Enrichment. During the exploratory process, students will reflect on their vocational exploratory experiences, explore potential career paths, and begin the process of self-discovery. Through guided, and individual activities, students determine their career interests and strengths, and work to make personal connections to potential career pathways. Students are introduced to positive and professional workplace behavior – a theme that underlies all four years in Career Enrichment. As the year advances, Freshmen expand their learning within the topics of Freshman year topics of study include: employability, technology use, digital citizenship, career exploration, goal setting, health and wellness for career success, as well as an introduction as a crash course to financial literacy.

612 Career Enrichment 10

Credits: 1 Level: 5

This course continues to reinforce the development of student's employability and technology skills, and professional workplace behavior while concentrating on management and entrepreneurship. Students work individually and in small groups to conceptualize and develop ideas around starting, managing, and operating a business. Projects and activities revolve around different aspects of the business management process including include operational, financial, marketing, organizational, and human resource management. Additionally, students will begin thinking about entering the workforce as they learn how to find part-time employment, the job application process, and write their first professional resume. concepts, entrepreneurship and innovation, marketing, financial literacy, technology, employability, health and wellness and transitioning to employment. Students continue to discover who they are, grow and become ready for college, work and society, while developing 21st Century Skills critical to future success in a dynamic world economy.

613 Career Enrichment 11

Credits: 1 Level: 5

Junior year in Career Enrichment is when students turn their attention to their role in the professional world. This class will focus on career exploration and navigation, preparing students for co-op employment and full-time careers. while continuing to develop their positive and professional workplace habits. Students work on the practical aspects of securing a job by learning to write writing professional cover letters and resumes, developing interview skills, and conducting mock interviews, and developing real interviewing skills. Focused projects on aptitude, interest and strengths identification and awareness are central to the research that Students will conduct in-depth research regarding on post-graduate pathways including entering the workforce, joining the military, and continuing education post-secondary education options. Here, students will gain the knowledge that enables them to start mapping a future of their own. As they develop a sound understanding of the possibilities available to them, they begin to recognize the costs, benefits, and opportunity costs of decision making and are now becoming empowered to make decisions and take action on their individual career goals. Throughout the year, students will continue to develop their financial literacy skills, with projects focusing on earning power and debt. Project and activity topics include: aptitude assessments, post-graduation pathway research, strengths evaluation, financial literacy and health and wellness. Students continue to discover who they are, grow and become ready for college, work and society, while further developing their 21st Century Skills.

Seniors further their career planning with projects that focus on career navigation as they continue to develop positive workplace behavior and professionalism. Senior year focuses on students finalizing and taking action on their career plans. Students planning on going entering the workforce to work after graduation - and those enlisting in the military – Students planning on entering the workforce are assisted with updating resumes and cover letters as well as finding employment. Students joining the military after graduation receive specific guidance in understanding their options, obligations and responsibilities. Seniors choosing to continue education as part of their career path are given hands-on assistance and guidance by their Career Enrichment instructors on the college application process including help with SAT/ACT testing, filling out applications, writing college essays, and the financial aid process including FAFSA and scholarships. Seniors choosing a career pathway that includes college receive guidance through the college application process including SATs/ACTs, Common Application, Financial Aid, Scholarships and FAFSA filings. A project central to senior year is that of Students will then complete their capstone project by performing an informational interview, where students are challenged to utilize professional networking skills to find identify someone who holds the career they are pursuing. currently interested in. They are then tasked with interviewing Students will then interview this individual industry expert to gain personal and professional insight and knowledge into the career. Seniors also receive a large dose of a sequence of financial literacy lessons throughout the majority of the year. As they students look forward to life after high school,. we prepare them with personal budgeting for independent living, responsible use and management of credit and the importance and vehicles of investing for retirement.

Senior year in Career Enrichment is the culmination of a four-year effort. The goal has been for students to discover who they are, grow into who they want to be and become develop the knowledge and skills to be ready for college, work and society., and to acquire the 21st Century Skills that are so crucial to their success as adults.

Elective Course Offerings

Electives are offered to supplement a student's core academic and technical studies at Valley Tech.

NOTE: Some Electives may not run during a given school year due to student interest and/or teacher availability.

158 *Band & Chorus (Grade 9)* Credits: 1 Level: 5

These ensembles are for students who want to continue their chorus or band experience. With daily rehearsals during your academic schedule, the chorus and band will perform 2-3 concerts per year, feature selected soloists/ensembles for school functions, sing at sporting and other events around the area, and more. The ensembles will work with the other grade levels to fill out full instrument/vocal sections. Additionally, students will be able to audition for statewide festivals and area honor ensembles.

146 *Class Ukulele (Grade 9)* Credits: 1 Level: 5

This course is designed to provide freshmen, with or without a musical background, a chance to apply music and history of the ukulele, learn one-string melodies, multi-chord songs, and even prepare a full-length song as a group project. Additionally, students will study the fundamentals of music and history in genres popular amongst young adults, such as rap/hip-hop, country and rock and roll.

159 *Band & Chorus (Grade 10)* Credits: 1 Level: 5

These ensembles are for students who want to continue their chorus or band experience. With daily rehearsals during your academic schedule, the chorus and band will perform 2-3 concerts per year, feature selected soloists/ensembles for school functions, sing at sporting and other events around the area, and more. The ensembles will work with the other grade levels to fill out full instrument/vocal sections. Additionally, students will be able to audition for statewide festivals and area honor ensembles.

147 *Music Appreciation (Grade 10)* Credits: 1 Level: 5

This course allows students to take a music appreciation course geared towards general music topics without prior knowledge or experience. Students will study music theory fundamentals, the history of the Baroque through Romantic periods, and the lives of key musicians and composers, and learn basic music composition skills. Students will begin to see how the music of those periods has influenced popular music of the 20th and 21st centuries by looking into various modern day genres. The majority of this class is studying applied music aimed at music theory, which will prepare sophomores to take Advanced Placement Music Theory during their junior year (optional).

- 148** ***Introduction to Piano & Pop Music (Grade 11)*** Credits: 1 Level: 5
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- This course is open to any student who wishes to learn the piano. Students will learn basic keyboard skills, which includes reading music and performing basic songs to gain a hands-on musical instrument experience. Additionally, students will listen to and analyze popular music from the 20th century and beyond. This course takes an in-depth look at the music that has influenced today's popular music by studying the history, foundations, and key musicians of many different styles and types of music from 1900 to present. Students will be exposed to genres such as jazz, the blues, rock n' roll, and country. The important social, political, and cultural elements of popular music will also be studied, analyzed, and discussed along with the impact certain historical events have had on pop music.
- 152** ***Advanced Placement Music Theory (Grade 11)*** Credits: 2 Level: 1
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- This class is meant for all students who are interested in music composition and song writing, whether they are college-bound or not. Students should be able to read music, and previous instrumental or singing experience is highly recommended. Topics such as music theory, aural skills, and sight singing are all covered in this course and are required for the spring AP Music Theory exam. These concepts are studied through heard and notated music with an emphasis on identification and analysis of musical features, relationships, and procedures in full musical contexts. Musicianship skills through melodic and harmonic dictation, sight singing, and error detection exercises are also mastered and included on the exam. Students must take the AP exam in May to receive AP credit on their transcript. A qualifying score of three (3) or better on the AP exam may earn a student college credit and/or help a student into advanced classes.
- 149** ***Movie Music (Grade 12)*** Credits: 1 Level: 5
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- Ever wondered where or when movie soundtracks began? What about sound effects, or even gaming music? This is the class for you! In this class, students take the entire school year to listen to (and watch) movie music from its earliest forms to their favorite modern movies and shows. Students will learn about the history of film music, key composers, historical and cultural events, and even studio recording. Additionally, students will hear from actual recording artists and receive hands-on experience of studio life. Alongside movie music, students will also study how gaming music has changed the world of computer and personal device games.
- 175** ***Art Studio 9 (Grade 9)*** Credits: 1 Level: 5
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- In this course, students will have access to an array of 2D and 3D materials to make open creative projects based on their interests. The class will learn about a variety of materials and techniques, as well as elements and principles of art and design. Along with creative work, students will explore a diverse array of historical and contemporary artists from all regions of the world and practice skills for viewing and understanding art. This class is open to all skill levels.
- 176** ***Art Studio 10 (Grade 10)*** Credits: 1 Level: 5
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- In this course, students will have access to an array of 2D and 3D materials to make open creative projects based on their interests. The class will learn about a variety of materials and techniques, as well as elements and principles of art and design. Along with creative work, students will explore a diverse array of historical and contemporary artists from all regions of the world and practice skills for viewing and understanding art. This class is open to all skill levels.

- 177 ***Art Studio 11*** (Grade 11) Credits: 1 Level: 5
In this course, students will have access to an array of 2D and 3D materials to make open creative projects based on their interests. The class will learn about a variety of materials and techniques, as well as elements and principles of art and design. Along with creative work, students will explore a diverse array of historical and contemporary artists from all regions of the world and practice skills for viewing and understanding art. This class is open to all skill levels.
- 178 ***Art Studio 12*** (Grade 12) Credits: 1 Level: 5
In this course, students will have access to an array of 2D and 3D materials to make open creative projects based on their interests. The class will learn about a variety of materials and techniques, as well as elements and principles of art and design. Along with creative work, students will explore a diverse array of historical and contemporary artists from all regions of the world and practice skills for viewing and understanding art. This class is open to all skill levels.
- 179 ***Advanced Art Studio*** (Grade 12) Credits: 1 Level: 5
This honors level class is for dedicated art students interested in more advanced content and skill-building. Each student will develop a unique series of artwork that reflects their creative interests and original vision. Students interested in applying to art school and developing a portfolio are encouraged to take this course, but it is not required. This class is open to seniors who have previously taken two art classes or have received permission from the art teacher.
- 171 ***Writer's Voice*** (Grade 9) Credits: 1 Level: 5
This class will provide a vehicle for grade 9 students to learn to shape facts, theory, beliefs, and opinion into cogent, compelling communications. Students will investigate different styles and forms of writing that provide a range of models for approaching thinking, writing, and speaking. The course will integrate a review of writing conventions such as subject-verb agreement, use of transitions, run-ons vs. incomplete sentences and proper punctuation. Students will apply these grammar conventions to writing assignments including urban legends, poetry, journalism and blogging. This course will provide a place for students to improve grammar standards while also serving as an outlet for their creative writing aspirations. Emphasis will be on learning to refine thinking and discovering one's own voice through editing, rewriting, and publishing.
- 172 ***Vision and Revision*** (Grade 10) Credits: 1 Level: 5
This course is designed to help grade 10 students develop their writing voice utilizing description, narration, and exposition. Students will expand their writing styles through critical thinking and the logical development of ideas. The course includes short story writing, ancestry research for historical fiction writing, writing children's books, blogging, as well as an introduction to film analysis, enabling students to write more thoughtfully and critically. Emphasis will be placed on the writing process to improve the student's ability to communicate in writing.
- 173 ***College Bound Writing*** (Grade 11) Credits: 1 Level: 5
This class will introduce grade 11 students to the many elements of rhetoric and style typically taught in college freshman writing seminars. Topics will include rhetorical analysis, argument writing, critical analysis of media advertising and speech and debate. This course will address aspects of college admission such as preparation for the SAT I verbal and essay sections, expanding college level vocabulary, research and evaluation of colleges of interest, and improving reflective entries and personal narratives within the student's portfolio.

174	<i>Workplace Writing</i> (Grade 12)	Credits: 1	Level: 5
<p>This course is designed to help grade 12 students develop practical and informational writing skills for the workplace. These non-fictional topics include writing conventions in the areas of concise instructions, email etiquette, online media, and refining college application essays. Additionally, the course will introduce students to a variety of writing career paths. including advertising, marketing and branding, and critiquing (books, film, music, television, food, and art). This course is ideal for students who are bound for the workforce and is beneficial for those pursuing post-high school educations.</p>			
263	<i>MCAS Math III</i>	Credits: 1	Level: 5
<p><i>Prerequisite: Teacher recommendation</i></p> <p>This course is offered to juniors who scored less than Proficient on the MCAS math exam. It is a supplement to their core math course. The focus of MCAS Math III is to review and reinforce concepts developed in Algebra I Part I and Geometry. Emphasis in this course is based specifically on topics presented in the Massachusetts Curriculum Framework and on the MCAS, such as number sense, patterns, algebra, geometry, measurement, statistics, and probability. Test taking strategies and techniques are presented and practiced by completing previous MCAS test questions on a topic by topic basis. The objective of this course is to better prepare students to take the MCAS Retest or the MCAS EPP Test.</p>			
264	<i>MCAS Math IV</i>	Credits: 1	Level: 5
<p><i>Prerequisite: Teacher recommendation</i></p> <p>This course is offered to seniors who scored less than Proficient on the MCAS math exam. It is a supplement to their core math course. The focus of MCAS Math IV is to review and reinforce concepts developed in Algebra I Part I and Geometry. Emphasis in this course is based specifically on topics presented in the Massachusetts Curriculum Framework and on the MCAS, such as number sense, patterns, algebra, geometry, measurement, statistics, and probability. Test taking strategies and techniques are presented and practiced by completing previous MCAS test questions on a topic by topic basis. The objective of this course is to better prepare students to take the MCAS Retest or the MCAS EPP Test.</p>			
266	<i>Accelerated Algebra II</i> (Grade 10)	Credits: 1	Level:3
<p><i>Prerequisite: Completion of Honors or College Prep Algebra I with a grade of 90 or better.</i></p> <p><i>This course prepares students for a successful transition to Pre-Calculus.</i></p> <p>This accelerated supplemental course is designed for grade 10 students who showed above average achievement in Honors Algebra I and who would like the opportunity to obtain the skills necessary to be prepared for Pre-Calculus their junior year. This course places emphasis on modeling as it expands upon the topics developed in Honors Algebra I. Students will study a variety of functions with both a graphical and algebraic approach, including quadratic, polynomial, exponential, logarithmic, rational, and radical functions. This course also investigates important concepts in data analysis and statistics. Use of the graphing calculator is emphasized throughout instruction. Applications include problems relating to the students' technical areas and everyday life.</p>			

306 ***AP Psychology*** (Grades 11 & 12) Credits: 2 Level: 1

Prerequisite: 90 Average or above for science courses in grades 9 and 10.

This course is designed for the highly motivated student who is a proficient, prolific reader and possess strong writing abilities. Independent reading is expected in this class.

This course is ideal for students who wish to complete studies in secondary school equivalent to an introductory college course in psychology. AP Psychology focuses on the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the subfields within psychology. Students will also learn about the ethics and methods psychologists use in their science and practice. AP coursework requires substantial daily reading in both the college-level text and outside readings.

Students taking this course must take the AP exam in May in order to receive AP credit on their transcript. A qualifying score of three (3) or better on the exam may earn a student college credit.

406 ***Current Events*** (Grade 11) Credits: 1 Level: 5

This course, offered to grade 11 students, investigates events of recent history and what is happening in the world today. With an increased awareness of current events comes a better understanding of world affairs as well as national and state government issues. The fundamental focus of this course is to prompt and encourage the habit of following current events with particular attention to the value of the internet, newspapers, news magazines and broadcast media. Students will have an opportunity to discuss and present their views on global topics. Students should expect to become more responsible and knowledgeable consumers of news information and opinion.

570 ***Culture and Civilizations of the Spanish-Speaking World*** (Grade 12) Credits: 1 Level: 5

This course, offered to grade 12 students, examines the history and culture of Spanish-speaking countries, specifically Spain, Central & South America and the Caribbean. Students will delve into the geography, history, food, music, dance, literature and modern culture of countries in these regions. Students should expect to keep an open mind as they learn about a world much different from their own. Students will read works written by Latin American and Spanish authors, listen to music, try different foods, work on culture projects and possibly communicate with students from these countries. Please note that this course is not credited as a language course and does not fulfill the language requirement of most colleges and universities.

915 ***Literary Lab*** (Grade 9) Credits: 1 Level: 5

Enrollment in this course requires the recommendation of School Counseling

Literary Lab is offered to freshmen as a supplemental course where the focus is on process. Emphasis is placed on strengthening comprehension and fluency. This course employs a variety of reading materials both fiction and nonfiction and classroom experiences along with individualized instruction. Additional emphasis is placed on review of writing fundamentals to improve written language skills.

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| 916 | <i>Literary Strategies</i> (Grade 10) | Credits: 1 | Level: 5 |
| <i>Enrollment in this course requires the recommendation of School Counseling</i> | | | |
| <p><i>Literary Strategies</i> is offered to sophomores as a supplemental course where the focus is on process. This course assesses and reinforces comprehension required to analyze literary and informational texts in preparation for MCAS. Additional emphasis is placed on organizing information via the writing process.</p> | | | |
| | | | |
| 917 | <i>Literary Workshop</i> (Grade 11) | Credits: 1 | Level: 5 |
| <i>Enrollment in this course requires the recommendation of School Counseling</i> | | | |
| <p><i>Literary Workshop</i> is offered to juniors as a supplemental course where the focus is on process. This course builds upon the skills required to analyze literary and informational texts. Additional emphasis is placed on organizing information through research projects in order to build background knowledge which will strengthen overall comprehension.</p> | | | |
| | | | |
| 918 | <i>Literary Roundtable</i> (Grade 12) | Credits: 1 | Level: 5 |
| <i>Enrollment in this course requires the recommendation of School Counseling</i> | | | |
| <p><i>Literary Roundtable</i> is offered to seniors as a supplemental course where the focus is on process. Literary and informational texts are discussed and analyzed using comprehension strategies developed and reinforced over the duration of this supplemental program. Additional emphasis is placed on organizing information via the writing process.</p> | | | |
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| 951 | <i>Wilson Reading</i> (Grades 9-12) | Credits: 1 | Level: 5 |
| <i>Enrollment in this course requires IEP team recommendation</i> | | | |
| <p>The Wilson Reading Program directly and systematically teaches students to fluently and accurately decode. The instruction is very interactive and multi-sensory. It also thoroughly teaches, “total word construction,” not just phonics. Students learn to encode (spell) as they learn to decode. The Wilson Reading System teaches word construction according to six types of syllables. These syllable types are gradually taught to the student. Comprehension is strengthened using a variety of reading materials along with individualized instruction in the computer reading lab. Depending on the needs of the student, this program is delivered in several models: one-on-one, small group, JUSTWORDS.</p> | | | |

960 Study Strategies

Credits: 1 Level: 5

Enrollment in this course requires IEP team recommendation

This course focuses on developing strategies to meet individual goals in learning and lifelong success. Lessons include fostering an understanding of personal strengths and weaknesses and reflective practices for individual accountability. Students are presented with a variety of strategies including organization, planning, self-advocacy, time management, and assessment preparation. A portion of each class period is designated to course work for students to apply taught skills and strategies.

910 Transitions (Grade 12)

Credits: 1 Level: 5

Enrollment in this course requires IEP team recommendation

This course is designed to prepare seniors with an IEP for the transition into their post-secondary experience. Topics covered include self-advocacy, goal setting, personal accountability, understanding ADA, disability awareness, asking for accommodations in the workplace or educational environment, transportation needs, and life management. Individualized and group activities in the areas of college exploration, job applications, money management, and transportation are some of the skills explored in this class.

English Language Education

The English Language Education (ELE) program at Blackstone Valley Tech (BVT) is designed to assist students whose first language is not English to acquire proficiency in the English language. Students receive developmentally appropriate instruction in the areas of listening, speaking, reading and writing. Working in collaboration with Social Studies, Science, Language Arts, Mathematics, and Vocational Instructors this program focuses on continued academic language development.

Students are assigned to ELE classes according to grade level and English proficiency. Need for ELE services is determined based on WIDA SCREENER, MODEL, and/or ACCESS test scores, other standardized test scores, prior ESL inclusion, and teacher recommendation.

The ELE curriculum is aligned with the Massachusetts and WIDA standards.

981 *ELE I - Entering* Credits: 1 Level: 5

Students are placed in this course based on the ELE Coordinator's recommendation

At this given level of English language proficiency, English language learners will process, understand, produce or use:

- pictorial or graphic representation of the language of the content areas
- words, phrases or chunks of language when presented with one-step commands, directions, WH- (**Why? What? Who? When? etc...**), choice or yes/no questions, or statements with sensory, graphic or interactive support
- oral language with phonological, syntactic, or semantic errors that often impede meaning when presented with basic oral commands, direct questions, or simple statements with sensory, graphic or interactive support

982 *ELE II - Beginning* Credits: 1 Level: 5

Students are placed in this course based on the ELE Coordinator's recommendation

At this given level of English language proficiency, English language learners will process, understand, produce or use:

- general language related to the content areas
- phrases or short sentences
- oral or written language with phonological, syntactic, or semantic errors that often impede the meaning of the communication when presented with one- to multiple-step commands, directions, questions, or a series of statements with sensory, graphic or interactive support

983 *ELE III - Developing* Credits: 1 Level: 5

Students are placed in this course based on the ELE Coordinator's recommendation

At this given level of English language proficiency, English language learners will process, understand, produce or use:

- general and some specific language of the content areas
- expanded sentences in oral interaction or written paragraphs
- oral or written language with phonological, syntactic or semantic errors that may impede the communication, but retain much of its meaning, when presented with oral or written, narrative or expository descriptions with sensory, graphic or interactive support

Students are placed in this course based on the ELE Coordinator's recommendation

At this given level of English language proficiency, English language learners will process, understand, produce or use:

- specific and some technical language of the content areas
- a variety of sentence lengths of varying linguistic complexity in oral discourse or multiple, related sentences or paragraphs
- oral or written language with minimal phonological, syntactic or semantic errors that do not impede the overall meaning of the communication when presented with oral or written connected discourse with sensory, graphic or interactive support

Students are placed in this course based on the ELE Coordinator's recommendation

At this given level of English language proficiency, English language learners will process, understand, produce or use:

- specialized or technical language of the content areas
- a variety of sentence lengths of varying linguistic complexity in extended oral or written discourse, including stories, essays or reports
- oral or written language approaching comparability to that of English-proficient peers when presented with grade level material

Vocational-Technical Programs

Advanced Manufacturing and Fabrication		Auto Collision Repair and Refinishing	
0360	Advanced Manufacturing and Fabrication Exploratory	0310	Auto Collision Repair and Refinishing Exploratory
0361	Advanced Manufacturing and Fabrication 9 Shop	0311	Auto Collision Repair and Refinishing 9 Shop
3601	Advanced Manufacturing and Fabrication 9 Related	3101	Auto Collision Repair and Refinishing 9 Related
0362	Advanced Manufacturing and Fabrication 10 Shop	0312	Auto Collision Repair and Refinishing 10 Shop
3602	Advanced Manufacturing and Fabrication 10 Related	3102	Auto Collision Repair and Refinishing 10 Related
0363	Advanced Manufacturing and Fabrication 11 Shop	0313	Auto Collision Repair and Refinishing 11 Shop
3603	Advanced Manufacturing and Fabrication 11 Related	3103	Auto Collision Repair and Refinishing 11 Related
0364	Advanced Manufacturing and Fabrication 12 Shop	0314	Auto Collision Repair and Refinishing 12 Shop
3604	Advanced Manufacturing and Fabrication 12 Related	3104	Auto Collision Repair and Refinishing 12 Related

Automotive Technology		Biotechnology	
0320	Auto Technology Exploratory	0750	Biotechnology Exploratory
0321	Auto Technology 9 Shop	0751	Biotechnology 9 Shop
3201	Auto Technology 9 Related	7501	Biotechnology 9 Related
0322	Auto Technology 10 Shop	0752	Biotechnology 10 Shop
3202	Auto Technology 10 Related	7502	Biotechnology 10 Related
0323	Auto Technology 11 Shop	0753	Biotechnology 11 Shop
3203	Auto Technology 11 Related	7503	Biotechnology 11 Related
0324	Auto Technology 12 Shop	0754	Biotechnology 12 Shop
3204	Auto Technology 12 Related	7504	Biotechnology 12 Related

Construction Technology		Cosmetology	
3300	Construction Technology Exploratory	0210	Cosmetology Exploratory
0331	Construction Technology 9 Shop	0211	Cosmetology 9 Shop
3301	Construction Technology 9 Related	2101	Cosmetology 9 Related
0332	Construction Technology 10 Shop	0212	Cosmetology 10 Shop
3302	Construction Technology 10 Related	2102	Cosmetology 10 Related
0333	Construction Technology 11 Shop	0213	Cosmetology 11 Shop
3303	Construction Technology 11 Related	2103	Cosmetology 11 Related
0334	Construction Technology 12 Shop	0214	Cosmetology 12 Shop
3304	Construction Technology 12 Related	2104	Cosmetology 12 Related

Culinary Arts		Dental Assisting	
0450	Culinary Arts Exploratory	0220	Dental Assisting Exploratory
0451	Culinary Arts 9 Shop	0221	Dental Assisting 9 Shop
4501	Culinary Arts 9 Related	2201	Dental Assisting 9 Related
0452	Culinary Arts 10 Shop	0222	Dental Assisting 10 Shop
4502	Culinary Arts 10 Related	2202	Dental Assisting 10 Related
0453	Culinary Arts 11 Shop	0223	Dental Assisting 11 Shop
4503	Culinary Arts 11 Related	2203	Dental Assisting 11 Related
0454	Culinary Arts 12 Shop	0224	Dental Assisting 12 Shop
4504	Culinary Arts 12 Related	2204	Dental Assisting 12 Related

Drafting and Design Technology		Electrical	
		0410	Electrical Exploratory
		0411	Electrical 9 Shop
		4101	Electrical 9 Related
		0412	Electrical 10 Shop
		4102	Electrical 10 Related
0343	Drafting and Design Technology 11 Shop	0413	Electrical 11 Shop
3403	Drafting and Design Technology 11 Related	4103	Electrical 11 Related
0344	Drafting and Design Technology 12 Shop	0414	Electrical 12 Shop
3404	Drafting and Design Technology 12 Related	4104	Electrical 12 Related

Electronics and Engineering Technology		Engineering and Robotics Technology	
0350	Electronics and Engineering Technology Exploratory	0380	Engineering and Robotics Exploratory
0351	Electronics and Engineering Technology 9 Shop	0381	Engineering and Robotics 9 Shop
3501	Electronics and Engineering Technology 9 Related	3801	Engineering and Robotics 9 Related
0352	Electronics and Engineering Technology 10 Shop	0382	Engineering and Robotics 10 Shop
3502	Electronics and Engineering Technology 10 Related	3802	Engineering and Robotics 10 Related
0353	Electronics and Engineering Technology 11 Shop	0383	Engineering and Robotics 11 Shop
3503	Electronics and Engineering Technology 11 Related	3803	Engineering and Robotics 11 Related
0354	Electronics and Engineering Technology 12 Shop	0384	Engineering and Robotics 12 Shop
3504	Electronics and Engineering Technology 12 Related	3804	Engineering and Robotics 12 Related

Health Services		HVAC&R	
0490	Health Services Exploratory	0440	HVAC&R Exploratory
0491	Health Services 9 Shop	0441	HVAC&R 9 Shop
4901	Health Services 9 Related	4401	HVAC&R 9 Related
0492	Health Services 10 Shop	0442	HVAC&R 10 Shop
4902	Health Services 10 Related	4402	HVAC&R 10 Related
0493	Health Services 11 Shop	0443	HVAC&R 11 Shop
4903	Health Services 11 Related	4403	HVAC&R 11 Related
0494	Health Services 12 Shop	0444	HVAC&R 12 Shop
4904	Health Services 12 Related	4404	HVAC&R 12 Related

Information Technology		Multimedia Communications	
0230	Information Technology Exploratory	0620	Multimedia Communications Exploratory
0231	Information Technology 9 Shop	0621	Multimedia Communications 9 Shop
2301	Information Technology 9 Related	6201	Multimedia Communications 9 Related
0232	Information Technology 10 Shop	0622	Multimedia Communications 10 Shop
2302	Information Technology 10 Related	6202	Multimedia Communications 10 Related
0233	Information Technology 11 Shop	0623	Multimedia Communications 11 Shop
2303	Information Technology 11 Related	6203	Multimedia Communications 11 Related
0234	Information Technology 12 Shop	0624	Multimedia Communications 12 Shop
2304	Information Technology 12 Related	6204	Multimedia Communications 12 Related

Painting & Design Technology		Plumbing	
0460	Painting & Design Technology Exploratory	0430	Plumbing Exploratory
0461	Painting & Design Technology 9 Shop	0431	Plumbing 9 Shop
4601	Painting & Design Technology 9 Related	4301	Plumbing 9 Related
0462	Painting & Design Technology 10 Shop	0432	Plumbing 10 Shop
4602	Painting & Design Technology 10 Related	4302	Plumbing 10 Related
0463	Painting & Design Technology 11 Shop	0433	Plumbing 11 Shop
4603	Painting & Design Technology 11 Related	4303	Plumbing 11 Related
0464	Painting & Design Technology 12 Shop	0434	Plumbing 12 Shop
4604	Painting & Design Technology 12 Related	4304	Plumbing 12 Related

The curriculum for Blackstone Valley Tech approved Chapter 74 Career Vocational Technical Education (CVTE) programs, is developed, aligned and revised based on the current Massachusetts CVTE Frameworks. Vocational instruction is designed utilizing the Massachusetts Framework strands, competencies and tasks, as well as local, state, and national licensing and certification requirements. Valuable industry input is derived from the Program Advisory Committees, the General Advisory Committee and subject matter experts in each area of instruction.

Advanced Manufacturing & Fabrication

0360 *Advanced Manufacturing & Fabrication Exploratory*

This one-week course provides students with the basic knowledge and skill level used in manufacturing technologies today. Students receive instruction in personal and shop safety, tool usage, measuring, cutting metal, introduction to Computer Numerical Control (CNC) lathe, mill, and plasma, as well as gas metal arc (GMAW) welding while making special projects. Students receive instruction through a combination of presentations, demonstrations, and hands-on performance.

0361 *Advanced Manufacturing & Fabrication 9th Grade Shop*

Credits: 8

This two-trimester course provides students with the basic knowledge and skill training necessary for continued success in the Advanced Manufacturing and Fabrication program. Students receive instruction in career opportunities, shop operational procedures, personal and shop safety, tool usage, basic operation of Computer Numerical Control (CNC) machinery, oxy-acetylene welding processes, shielded metal arc welding (SMAW), simple fabrication operations, and use of hand and power tools. Students receive instruction through a combination of presentations, demonstrations and hands on performance.

3601 *Advanced Manufacturing & Fabrication 9th Grade Related*

Credits: 1

This two-trimester course provides students with the basic knowledge and skill training necessary for continued success in the Advanced Manufacturing and Fabrication program. Students receive instruction in career opportunities, shop operational procedures, personal and shop safety, tool usage, basic math and measuring skills, related theory in machining tools, and both shielded metal arc (SMAW) and oxy-acetylene processes. Students receive instruction through a combination of presentations, demonstrations, video equipment and hands-on activities.

0362 *Advanced Manufacturing & Fabrication 10th Grade Shop*

Credits: 8

This course provides students with the basic knowledge and skill training necessary for continued success in Advanced Manufacturing and Fabrication program. Students are instructed in milling, hand tools, measuring tools, Computer Numerical Control (CNC) lathe and mill, power saws, Shielded Metal Arc Welding (SMAW), Gas Metal Arc Welding (GMAW), oxy-acetylene processes, resistance spot welding, press brake, 20-ton punch and the related theory that will cover these metal working processes. Students receive instruction through a combination of presentations, demonstrations and hands-on performance.

- 3602 *Advanced Manufacturing & Fabrication 10th Grade Related*** Credits: 1
-
- Students are instructed in basic mathematics, linear measurement, tolerances, basic blue print reading, geometry and applied mathematics. Related theory also covers milling, hand tools, measuring tools, Computer Numerical Control (CNC) lathe and mill, power saws, welding symbols, Shielded Metal Arc Welding (SMAW), Gas Metal Arc Welding (GMAW), oxy-acetylene processes, resistance spot welding, press brake, and the 20-ton punch. Students receive instruction through a combination of presentations, demonstrations, hands-on performance, field trips, and guest speakers. Reading, writing and math assignments related to the Advanced Manufacturing and Fabrication professions are integrated with academic frameworks during this class.
- 0363 *Advanced Manufacturing & Fabrication 11th Grade Shop*** Credits: 8
-
- This course provides students with advanced knowledge and skill training necessary for continued success in the Advanced Manufacturing and Fabrication program. Students receive advanced training in CNC milling and lathe, CAD/CAM, Computer Numerical Control (CNC) Programming, Gas Metal Arc Welding (GMAW), introductory Gas Tungsten Arc Welding (GTAW), welding symbols, intermediate fabrication, and related theory. Students receive instruction through a combination of presentations, demonstrations, and hands-on performance.
- 3603 *Advanced Manufacturing & Fabrication 11th Grade Related*** Credits: 1
-
- This full year course provides instruction in trigonometry, Computer Numerical Control Programming (CNC), metal working formulas, metallurgy, heat treatment of metals and employment skills. Related theory also covers advanced CNC milling and lathe, CAD/CAM, Gas Metal Arc Welding (GMAW), gas tungsten arc welding and intermediate fabrication. Students receive instruction through a combination of presentations, demonstrations, hands-on performance, field trips, and guest speakers. Reading, writing and math assignments related to the Advanced Manufacturing and Fabrication professions is integrated with academic frameworks during this class.
- 0364 *Advanced Manufacturing & Fabrication 12th Grade Shop*** Credits: 8
-
- This course provides students with instructions and skill training necessary for continued success in the Advanced Manufacturing and Fabrication program. Students receive instruction in the areas of CAD/CAM (AutoCAD & Mastercam 2018), Computer Numerical Control (CNC) lathe, mill, and plasma cutting, advanced machining skills, and participate in outside live work utilizing skills acquired. Advanced welding techniques with the following welding processes (strong emphasis on out of position welding) with, GTAW, GMAW, and SMAW. Senior students will be given the opportunity to work on AWS D1.1 structural welding code (limited 3/8" plate) and ASME code section IX (open root 3/8" plate). They will also fabricate aluminum and steel structures. Job placement and opportunities in the cooperative education program are available for those whose skill level and academic achievement meet all school requirements for the cooperative education program. Students receive instruction through a combination of presentations, demonstrations, and hands on performance testing.
- 3604 *Advanced Manufacturing & Fabrication 12th Grade Related*** Credits: 1
-
- This course provides twelfth grade students with instructions in geometry and trigonometry utilizing machining formulas, blue print reading, advanced welding techniques, CAD/CAM (AutoCAD & Mastercam 2018) and Computer Numerical Control (CNC) lathe, mill, and plasma cutting. Advanced theory pertaining to welding codes and techniques will be provided. Instruction utilizing presentations, demonstrations, hands-on performance, field trips and guest speakers. Research, which includes reading, writing and math assignments related to the Advanced Manufacturing and Fabrication professions, will be integrated with academic frameworks during this class.

Auto Collision Repair and Refinishing

0310 *Auto Collision Repair and Refinishing Exploratory*

The program is an intensive one-week introduction in basic auto body panel straightening and repair using industry standard repair and refinish procedures. Students will be introduced to refinishing techniques using a Virtual Painting system in addition to repair techniques using a state-of-the-art water-based, base-coat/clear-coat refinish process. Students will also receive instruction in air brushing techniques and graphics application to complete a student designed take-home refinishing project. Related theory focuses on the general topics of shop safety and career potential in the collision repair industry.

0311 *Auto Collision Repair and Refinishing 9th Grade Shop*

Credits: 8

Students are introduced to basic vehicle construction, basic hand tools used for repair, paint and surface preparation, vehicle detailing, and the use of industry specific materials such as plastic fillers, masking supplies, abrasives, and solvents. Safety is an important issue and is stressed throughout the 4-year program. Students are also instructed in basic automotive mechanical system diagnostic repair and replacement procedures in the areas of; suspension and steering, electrical, brakes, heating and air conditioning, cooling systems and drive train.

3101 *Auto Collision Repair and Refinishing 9th Grade Related*

Credits: 1

This two-trimester course examines auto detailing (washing and cleaning of vehicles), surface preparation, masking, hand sanding techniques, respirator safety, general hand tools, electric and pneumatic power tools used in the collision repair industry, introduction to spray guns, undercoats (primers), small dent repair (plastic fillers), basic body construction, precision measuring and mechanical and electrical component familiarization. Reading, writing, science and math assignments are integrated with Auto Collision Repair and Refinishing theory.

0312 *Auto Collision Repair and Refinishing 10th Grade Shop*

Credits: 8

Collision repair basics are expanded to include use of pneumatic and electric tools, compressed air supplied equipment, sheet metal work, paint and primer mixing ratios and applications, trim removal and installation, using a torque wrench and torqueing procedures, small dent repair, panel replacement and adjustment, and safe jacking and hoisting procedures. Safety, industry standards and quality workmanship are stressed. Students are also instructed in additional automotive system diagnostic repair and replacement procedures in the areas of; Suspension and Steering, Electrical, Brakes, Heating, and Air Conditioning, Cooling Systems and Drive Train.

3102 *Auto Collision Repair and Refinishing 10th Grade Related*

Credits: 1

This course reviews the freshmen third trimester, refinishing equipment, refinishing procedures and materials, basic sheet metal repair, polishing and compounding, welding basics (gas), basic MIG welding, cosmetic panel replacement, wheels and tires, fasteners, exterior moldings and trim, and jacking and hoisting procedures, mechanical and electrical component familiarization. Reading, writing, and math assignments related to the collision repair profession are integrated with academic frameworks during this class.

- 0313** ***Auto Collision Repair and Refinishing 11th Grade Shop*** Credits: 8
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- Juniors fine-tune previously acquired skills. Instruction includes welding and cutting equipment and procedures, overall paint application including color and clear topcoats, body and frame straightening procedures, and automotive plastics. Juniors learn to diagnose each vehicle's unique collision damage and perform appropriate repair procedures. Students are also instructed in more advanced basic automotive system diagnostic repair and replacement procedures in the areas of; Suspension and Steering, Electrical, Brakes, Heating and Air Conditioning, and Drive Train.
- 3103** ***Auto Collision Repair and Refinishing 11th Grade Related*** Credits: 1
-
- Students study interior repair, glass replacement, fiberglass panel repair, plastic repair and refinishing procedures, structural panel replacement, wheels and tires, fasteners, exterior moldings and trim, and mechanical and electrical component familiarization. Reading, writing, science and math assignments related to the collision repair profession are integrated with academic frameworks in this class. Specific juniors may be assigned to help mentor grade 9 students.
- 0314** ***Auto Collision Repair and Refinishing 12th Grade Shop*** Credits: 8
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- In addition to using previously acquired skills, seniors specialize in analyzing and repairing frame damage. Damage repair and refinishing skills are mastered. Mentoring of underclassmen, business and managerial concepts, such as damage estimating, part and material ordering, and customer interaction are introduced. Seniors who have met program requirements may participate in the Cooperative Education program. Students are also instructed in advanced aspects of automotive system diagnostic repair and replacement procedures in the areas of; Suspension and Steering, Electrical, Brakes, Heating and Air Conditioning, Drive Train and Vehicle Restraint Systems.
- 3104** ***Auto Collision Repair and Refinishing 12th Grade Related*** Credits: 1
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- This course examines vehicle structural repair, analyzing and gauging frame damage, and advanced refinishing procedures, suspension systems, and mechanical and electrical component familiarization. Research as well as reading, writing, and math assignments related to the collision repair profession are integrated with academic frameworks during this class. Students who are participating in the Cooperative Education program will receive assignments that must be completed to remain in the program.

0320 *Auto Technology Exploratory*

This one-week program provides the 9th grade student with instruction in basic maintenance of vehicles. Students will be paired with a Mentor from the Junior class, and guided through the repair process performing oil and filter changes, tire rotations, brake system service, and tire mounting & balancing. Students will also work with a partner disassembling, inspecting and reassembling a small engine. Each student completes a reflective assignment for the tasks performed that day. Students receive instruction in shop operational procedures, personal and shop safety, and tool usage. Instructional delivery includes multimedia presentations, demonstrations and an emphasis on hands-on performance.

0321 *Auto Technology 9th Grade Shop*

Credits: 8

This two-trimester course provides students with the basic knowledge and skill training necessary for continued success in the Automotive Technology program. Students receive instruction in career opportunities, online repair manuals, hand & power tools, measuring tools and preventative maintenance. Students will also learn basic braking system fundamentals and repair. Instructional methods include multimedia presentations with interactive software, instructor demonstrations and hands-on performance testing, on shop vehicles, in the areas listed above.

3201 *Auto Technology 9th Grade Related*

Credits: 1

This two-trimester course provides students with the technical knowledge necessary for success in the Automotive Technology program. Students receive instruction in tools, measuring systems, engine and chassis lubrication, cooling systems, and braking fundamentals & repair braking system fundamentals including Pascal's law, and how it relates to force/pressure, braking valves and electronic brake controls. Instructional delivery includes the use of instructor led presentations, reading and writing assignments, classroom demonstrations, and multimedia presentations included in our online curriculum.

0322 *Auto Technology 10th Grade Shop*

Credits: 8

This course provides students with the knowledge and skill training necessary for continued success in the Automotive Technology program. Students receive instruction and hands-on training in steering/suspension fundamentals and service, tire service and repair, wheel alignment fundamentals and service, engine rebuilding, and basic electrical/electronic theory and operation (level 1), and online repair manuals. Instructional delivery includes interactive multimedia presentations, demonstrations, computer based instruction and hands-on performance testing.

3202 *Auto Technology 10th Grade Related*

Credits: 1

This course provides students with the technical knowledge necessary for continued success in the Automotive Technology program. Students receive instruction in steering and suspension geometry, performance of pre-alignment checks and 4-wheel alignment, Tire construction & service, fundamentals of electrical principles, use of DMM's, Ohm's Law, basic circuit design, testing and repair of batteries, starters, alternators and their related circuits, and introduction to Hybrid technology Students will also learn Internal combustion engine fundamentals and repair. Instructional delivery includes interactive multimedia presentations, reading and writing assignments, computer based instruction, and classroom demonstrations.

0323 *Auto Technology 11th Grade Shop* Credits: 8

This course provides students with the knowledge and skill training necessary for continued success in the Automotive Technology program. Students participate in an underclassman Mentoring program throughout the freshman exploratory process. Students will Service heating and air conditioning systems, Service and repair differential and manual driveline components. Junior year will conclude with Fuel and Ignition system diagnosis and repair, reinforced with lab scenarios. Students are also introduced to service writing/advising, billing and customer service. Instructional delivery includes multimedia presentations, demonstrations, and hands-on performance testing.

3203 *Auto Technology 11th Grade Related* Credits: 1

This course provides students with the technical knowledge and skill training necessary for continued success in the Automotive Technology programs. Students receive instructional theory in HVAC, differential and driveline and engine performance, including scan tool diagnosis, ignition systems and fuel systems, and customer service techniques.

0304 *Auto Technology 12th Grade Shop* Credits: 8

This course provides students with the technical knowledge and skill training necessary to begin post-secondary education or attain an entry-level position in the workplace. Students receive instruction and hands-on training in the service and repair of automatic transmission/transaxle, Hybrid safety, Diesel and service writing/advising procedures. Students also receive instruction and hands-on training diagnosing these systems using scan tools and other test equipment to resolve drivability concerns. Instructional delivery includes multimedia presentations, demonstrations, and hands-on performance testing.

3204 *Auto Technology 12th Grade Related* Credits: 1

This course provides students with the technical knowledge and skill training necessary to begin post-secondary education or attain an entry-level position in the workplace. Students receive instruction and hands-on training in the principles and operation of automatic transmission operation and controls, hybrid operation and controls and diesel operation and controls. Students receive instruction and hands-on training with diagnostic flow-charts, scan tools and other test equipment. Instructional delivery includes multimedia presentations, writing assignments, repair scenario discussion, and classroom demonstrations.

0750 *Biotechnology Exploratory*

The Biotechnology Exploratory course introduces students to fundamental techniques and equipment used in the laboratory such as micropipettes and centrifuges, basic laboratory safety, and insights into several career paths in biotechnology. Through active participation in discussions and hands-on lab activities, students gain practical experience in creating bioplastics, genetically modifying bacteria to make them glow, separating colorful compounds by gel electrophoresis, and studying live organisms through microscopy. Assessments of students' potential success in the Biotechnology field include a combination of hands-on performance evaluations, written assignments and safety.

0751 *Biotechnology 9th Grade Shop*

Credits: 8

The freshman year builds a solid foundation to the Biotechnology curriculum. Initially, students focus on lab safety and management, obtaining certifications in personal protective equipment and chemical safety. Early techniques in biotechnology are investigated through hands-on experiences such as harnessing fermentation to make cheese. Students will develop key observational and analytical skills as they explore forensic science and evaluate crime scene evidence, including hair, fibers and fingerprints, and engage in blood typing and DNA detection. DNA purification and quantitation becomes a focal point of study. Competency assessments include experiment execution and results, data analyses, lab notebook entries and safety.

7501 *Biotechnology 9th Grade Related*

Credits: 1

The theoretical instruction in Biotechnology is designed to enhance the practical aspects covered in laboratory projects and vocational training throughout the freshman year. This course offers supplementary guidance encompassing the historical evolution of biotechnology, DNA structure and replication, gene cloning and genetic disorders, as well as bioethics. Students actively engage in graphing data using Excel, drawing conclusions and properly recording information in a laboratory notebook. Competency assessments include reading and writing assignments, projects, presentations and evaluative testing.

0752 *Biotechnology 10th Grade Shop*

Credits: 8

Sophomores will acquire molecular biology skills and techniques used in gene cloning, such as restriction enzymes and agarose gel electrophoresis. Students will use the polymerase chain reaction (PCR) to identify genetically modified foods and explore personal genomics by testing their own DNA for genetic markers linked to heightened sensitivity to bitter tastes in foods and sleep tendencies. Mastering the spectrophotometer and the BCA assay will enable students to accurately measure analyte concentrations. Students will also gain microbiology skills to inoculate, grow and differentiate bacteria by Gram staining. A major project includes plant cloning. Competency assessments include experiment execution and results, data analyses, lab notebook entries and safety.

- 7502 *Biotechnology 10th Grade Related*** Credits: 1

Sophomores will broaden their understanding of Biotechnology concepts related to gene expression, polymerase chain reaction (PCR), mutations, genetic diseases and cancer. Major projects include creating a scientific poster and writing a comprehensive research paper on a chosen genetic disorder. Students will engage in debates on gene editing as well as the regulations governing the use of laboratory animals in medical research. Learning the principles behind spectrophotometry such as the Beer-Lambert law supports students' laboratory work. Competency assessments include reading and writing assignments, projects, presentations and evaluative testing.
- 0753 *Biotechnology 11th Grade Shop*** Credits: 8

Juniors will acquire advanced skills and techniques in Biotechnology as they perform Western blots and ELISA assays to characterize and quantify specific proteins using antibodies. A major focus is biological safety and aseptic technique as students learn to culture and genetically modify mammalian cell lines using laminar flow hoods and specialized incubators. Additionally, students will become proficient in preserving cell stocks through cryopreservation, staining mammalian cells and analyzing chromosomes by karyotyping. Competency assessments will gauge students' ability to execute experiments, interpret results, maintain digital lab notebooks, adhere to safety protocols, and attain credentials.
- 7503 *Biotechnology 11th Grade Related*** Credits: 1

Juniors will expand their understanding of Biotechnology concepts related to basic immunology, cell biology, and the application of gene therapy in treating genetic diseases. Students learn about the challenging process of drug discovery and development, then team up to design a strategy to treat an illness of their choice, screen participants for clinical trials, seek FDA approval, and create a promotional video for their product. To reinforce and apply skills previously learned, students will conduct a scientific literature review using the PubMed database to compose a research question and design an independent research project. Competency levels will be determined by reading and writing assignments, projects, presentations and evaluative testing.
- 0754 *Biotechnology 12th Grade Shop*** Credits: 8

Seniors will focus on the area of Biotechnology known as biomanufacturing – the large-scale production of biological products. Through hands-on and simulated activities, students will perform upstream processing (cell culture and fermentation), downstream processing (separation and purification) and product formulation. Chromatographic techniques, such as size exclusion, affinity, hydrophobic interaction, and ion exchange, will be employed to purify biomolecules. Additionally, students will practice regulatory compliance (GLP, GMP and SOPs), engage in mock regulatory inspections, and undertake a long-term independent research project. Competency assessments include experiment execution and results, data analyses, lab notebook entries, safety and acquisition of credentials.

Seniors will learn foundational principles in Biotechnology related to the biomanufacturing process. Topics covered include bioreactor design, optimizing the conditions for robust cell growth such as temperature, pH, dissolved oxygen and nutrient concentrations, as well as biosafety during the biomanufacturing workflow. Emphasis is placed on the biochemical principles underlying the chromatographic techniques utilized for the purification of biomolecules. Additionally, students will read scientific articles to fine-tune their protocols for a long-term independent research project. Competency levels will be determined through reading and writing assignments, projects, presentations and evaluative testing.

3300 *Construction Technology Exploratory*

This one-week course provides students with the basic knowledge and relevance of safety, estimating, and career paths in the field of construction technology. Students receive instruction in hand tools and their applications and general shop safety. Students will put in to practice what they have learned by building an assigned project. Critical thinking skills are emphasized throughout the course.

0331 *Construction Technology 9th Grade Shop***Credits: 8**

This is a two-trimester course, providing construction technology students with basic knowledge and relevance of shop safety. Students are introduced to blueprint reading and working from measured drawings. Students receive instruction in hand tools, hand applications, and are introduced to power tools. Critical thinking skills are emphasized throughout the course. A side table and Adirondack chair project is used to review the students' progress in the general knowledge of blueprint reading and the use of hand tools and stationary power equipment.

3301 *Construction Technology 9th Grade Related***Credits: 1**

This two-term course, meeting one period per day during the shop cycle, provides students with the basic knowledge of estimating and relevance of safety in the shop setting. Students receive instruction in both hand and power tool safety and application. Students are introduced to interpreting blueprints and measured drawings. Critical thinking skills are emphasized throughout the course. Reading, writing and math assignments related to construction technology theory are an integral part of this class. Throughout every phase of instruction, deliberate effort is made to acquaint students with working conditions they can expect to find on an actual job. Safety is stressed at all times.

0332 *Construction Technology 10th Grade Shop***Credits: 8**

This course builds on the skills students have acquired as freshmen. Students begin to interpret blueprints, learn components of platform framing and hone their hands on skills as they embark on construction of a scale model of a house. Tool and worksite safety is an integral part of the shop curriculum. Students learn estimating and are introduced to state and local building codes. Students are evaluated by their performance on individual and group projects.

3302 *Construction Technology 10th Grade Related***Credits: 1**

This full year course meets one period per day during the shop cycle. Students receive instruction in blueprint reading and interpreting "to scale" drawings. Tool and jobsite safety includes the use of portable power tools, and an introduction to state and local building codes. Every student will participate in a 10 hour OSHA safety class and will earn their OSHA 10 card. Reading, writing, and math assignments related to the construction technology profession are integrated with academic frameworks during this class. Students also learn the basics of forming and pouring concrete for residential and commercial construction.

- 0333 *Construction Technology 11th Grade Shop*** Credits: 8

This course provides the construction technology student with advanced knowledge in the areas of shop and worksite safety, estimating, and state and local building codes. Students will have the opportunity to work in two different training settings. Students rotate from working on projects within the shop to working on off-campus sites in which they will be engaged in community service construction projects within the district's 13 sending towns. The emphasis of instruction and projects is on residential house framing and finishing procedures.
- 3303 *Construction Technology 11th Grade Related*** Credits: 1

This three term course, meeting one period per day during the shop cycle, provides the construction technology student with advanced knowledge in the area of safety, estimating, and state and local building codes. The main concentration for instruction includes residential house framing. There will be a strong emphasis on interpreting blueprints as well as state and local building codes. Reading, writing, and math assignments related to the construction technology professions are integrated with academic frameworks during this class.
- 0334 *Construction Technology 12th Grade Shop*** Credits: 8

This course provides the construction technology student with advanced knowledge in the areas of safety, estimating, and state and local building codes. The goal of this course is to provide each student with the technical knowledge and experiences essential to secure employment as a carpenter and or transition to a post-secondary institution. Students rotate from working on projects within the shop to working on off-campus sites within the district's 13 sending towns, engaged in community service construction projects. Students also have the option to participate in the co-op and work-study programs.
- 3304 *Construction Technology 12th Grade Related*** Credits: 1

This three term course, meeting one period per day during the shop cycle, provides construction technology students with advanced knowledge of relevance of safety and estimating, blueprint reading, as well as state and local building codes. Instruction in house planning is emphasized. Research, which includes reading, writing and math assignments related to construction technology professions, is integrated with academic frameworks during this class.

Cosmetology

0210 *Cosmetology Exploratory*

This one week course provides the 9th grade student with an introduction to the cosmetology program. The student is introduced to fundamentals of health and safety, infection control, customer service and communication skills, anatomy, color theory, principles of hair design as well as career opportunities within the industry. Practical instruction includes wet hairstyling, blow dry styling, thermal hair styling, braiding, fantasy up-styles and make up, nail care with nail art, special effects make-up, hair extensions and mock highlighting. Students are able to experience the live clinic floor salon as clients and receive services from the Juniors. Hands on performance assessments, safety and written assessments are used to determine the student's potential success in the cosmetology industry.

0211 *Cosmetology 9th Grade Shop*

Credits: 8

When students enter permanent placement, this course provides the student with basic knowledge and skill training necessary for success in the cosmetology industry. Students receive instruction on equipment safety, infection control and sanitation/disinfection. Practical work includes scalp care, shampooing and treatments, natural hair care and braiding, nail care, artificial nail enhancements, perm wrapping, up-styling, historic styling, introduction to fantasy makeup, wet and thermal hairstyling, blow dry styling as well as comprehensive portfolio projects.

2101 *Cosmetology 9th Grade Related*

Credits: 1

Related instruction for the 9th grade student incorporates basic technical instruction and studies that include the history of cosmetology, career opportunities, life skills and professional image. Emphasis is placed on infection control, shampooing and treatments, hairstyling, manicuring, pedicuring, nail structure and diseases/disorders and artificial nail enhancements. Instruction includes demonstrations, hands on activities, writing assignments, weekly vocabulary, projects and portfolio writing and website design.

0212 *Cosmetology Shop 10th Grade Shop*

Credits: 8

This course is designed to further develop the basic skills and knowledge needed for success in the cosmetology field. Students continue to receive practical instruction on equipment safety, infection control and sanitation, along with customer service and communication skills. Practical work includes scalp care, shampooing and treatments, facials, day/evening and fantasy make-up application, hair removal, advanced hairstyling, up-styling, advanced perm wrapping, artificial nails review, as well as comprehensive portfolio projects.

2102 *Cosmetology 10th Grade Related*

Credits: 1

This course is designed to further develop the comprehension of basic cosmetology theories and technical instruction. Students receive instruction on properties of the hair and scalp, principles of hair design, anatomy and physiology, skin structure and disorders, hair removal, skin care, make-up, chemistry and electricity, and haircutting. Instruction includes demonstrations, hands on activities, writing assignments, weekly vocabulary, projects and portfolio writing and website design.

0213	<i>Cosmetology Shop 11th Grade Shop</i>	Credits: 8
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This course is designed to give students the opportunity to achieve proficiency in their knowledge and technical skills in the cosmetology program. Students receive advanced levels of instruction in skin care, make-up application, nail care techniques, haircutting, advanced hairstyling, permanent waving, chemical relaxing and keratin smoothing treatments, Ethnic hair care, hair removal, hair coloring, safe chemical use, as well as sanitation/disinfection practices, as well as comprehensive portfolio projects. Students will meet state board hourly requirements and have the opportunity to provide human services “working” at the <u>“Salon at BVT”</u> (our clinic floor) which is open to the public.		
2103	<i>Cosmetology 11th Grade Related</i>	Credits: 1
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This course is designed to give students the opportunity to advance their knowledge and technical skills in the cosmetology program. Students receive instruction in customer service and communication skills, marketing products and services, life skills, professionalism, and receptionist skills. Technical skills include permanent waving, chemical relaxing, hair coloring, State Board of Cosmetology prep, as well as reviews in freshman sciences and nail theory. Instruction includes demonstrations, hands on activities, writing assignments, weekly vocabulary and projects. Students will also create a professional website.		
0214	<i>Cosmetology Shop 12th Grade Shop</i>	Credits: 8
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This course is designed to provide students with the opportunity to master their technical skills and comprehension level in the cosmetology program. Students receive instruction in all aspects of running a full service salon/spa and work at mastering prior tasks as well as learning new advanced/trending techniques. Students meeting State Board of Cosmetology hourly requirements will continue to provide human services in <u>“Salon at BVT”</u> that is open to the public. Qualified seniors who are in good standing vocationally and academically, and successfully passed the State Board exam, can participate in our cooperative education program. Students may be offered the opportunity to apprentice in a paid off-campus position. Qualified seniors will gain industry experience and an opportunity to master their knowledge and skills in a professional workplace. Students will continue to work on a professional portfolio.		
2104	<i>Cosmetology 12th Grade Related</i>	Credits: 1
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This course is designed to prepare the student for state licensure, the professional workplace and entrepreneurship opportunities. Students receive instruction on the salon business, employability, on-the-job training, finance, management and entrepreneurship; familiarizing the students with all aspects of the industry. A major portfolio project includes a Business Plan Project that encompasses all aspects of opening an actual salon. New technical training includes wigs and hair enhancements. State Board of Cosmetology review, prep, and mock testing prepare students for licensure exams. After completing the Massachusetts State Board hourly requirement of 1000 hours, and successfully passing the State Board written and practical exam, the student will be a licensed cosmetologist. For those graduates who wish to continue their education at the college level, recommended courses of study are small business management, marketing, or other business related courses. Other educational opportunities would include advanced post-secondary training in nail techniques, barbering, wigs and extensions and aesthetics.		

0450 *Culinary Arts Exploratory*

This one-week course provides the 9th grade student with an introduction to the food and beverage industry from four vantage points: kitchen, restaurant, cafeteria and bakeshop, and an in depth exploration of a world cuisine. The student spends time in each area learning hands-on applications. The student is introduced to safety, sanitation, personal hygiene, table settings, order taking, baking and the science behind ingredients, and basic knife skills. Instruction utilizing demonstrations, hands-on performance assessment, and written tests and quizzes are used to help determine the student's potential success in the food and beverage industry.

0451 *Culinary Arts 9th Grade Shop***Credits: 8**

This half-year course will provide the 9th grade students with an introduction to and development of their basic knowledge and skills in the Culinary Arts program. Students will receive introductory instruction in cooking methods, frying, salads, sandwiches, vegetable preparation, cookies, brownies, pies and cake making, institutional preparation and cooking, weights and measurements, order taking, POS system, restaurant service, and sanitation management. Throughout all positions, the major focus is on food and personal safety and sanitation.

4501 *Culinary Arts 9th Grade Related***Credits: 1**

This half-year course will provide the 9th grade students development of their basic knowledge and theory in the Culinary Arts program. After an initial focus on safety and sanitation, students will receive instruction in knife cuts, kitchen stations, culinary math, weights and measurements, introduction to cooking ingredients and their uses, foundations of foodservice and introduction to dining room operations, tableside cooking and introduction to baking.

0452 *Culinary Arts 10th Grade Shop***Credits: 8**

This yearlong course will provide the 10th grade students with a further development of their basic knowledge in the Culinary Arts program. Students will receive instruction in advanced cooking methods, salads, sandwiches, vegetable preparation, breads, pies, cakes, cookies and brownies, institutional preparation and cooking, weights and measurements, introduction to meat identification, sequence of service, POS systems and sanitation management.

4502 *Culinary Arts 10th Grade Related***Credits: 1**

This yearlong course will provide the 10th grade students with a further development of their basic knowledge and theory in the Culinary Arts program. Students will receive instruction in cooking methods, egg cookery, salads and dressings, basic culinary math, weights and measurements, introduction to meat identification, basic sauces and their families, dining room operations and types of service and mixing methods. Students will also earn their OSHA 10 hour general industry card.

- 0453 Culinary Arts 11th Grade Shop** Credits: 8
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- This yearlong course will provide the 11th grade students opportunities to acquire new knowledge and skills in the Culinary Arts program working in upperclassmen positions and as a role model for freshmen. Students will receive instruction in food and beverage management, running and working hot stations on the kitchen line, maitre d', pastry chef, handling money, problem solving, basic menu design, garde manager, bistro cooking and service.
- 4503 Culinary Arts 11th Grade Related** Credits: 1
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- This year-long course will provide the 11th grade students opportunities to advance their knowledge and skills in the Culinary Arts program as a manager. Students will continue to refine their skills as related to all areas of the shop while transitioning into management roles. A major portion of the coursework will include the National Restaurant Associations' ServSafe Food Handler Manager program. Students will receive an introduction to cost controls, menu design and descriptions, sustainability, nutrition, creating theme dinners, presentation, management theories, and restaurant marketing. A major portion of this class will be the junior year Culinary Arts portfolio.
- 0454 Culinary Arts 12th Grade Shop** Credits: 8
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- This yearlong course will provide the 12th grade students an opportunity to master their knowledge and skills in the Culinary Arts program working as role models for sophomores. Students will receive advanced instruction in food and beverage management, operating the kitchen line, maitre d', pastry chef, handling money, problem solving, menu design, barista, garde manager, tableside cooking, bistro cooking and service. Students will also learn about and use POS system technology in both the restaurant and kitchen.
- Senior students will have the opportunity to select a concentration area of study within the program, if basic competencies have been met in all areas. A major part of this focus is in planning and executing the annual Superintendent's dinner.
- 4504 Culinary Arts 12th Grade Related** Credits: 1
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- This year-long course will provide the 12th grade students the opportunity to advance their knowledge and skills in the Culinary Arts program as a manager. Students will receive instruction in cost controls, nutrition, menu development and design, creating theme dinners, presentation, management theories, restaurant marketing, introduction to wines and wine pairings, event planning and execution tableside cooking, advanced cake decoration and food art and science. A portion of the coursework will include ServSafe Alcohol Certification program. A further focus is in assisting students to take the knowledge they have gained over the previous years and, using critical thinking skills, apply it to real life situations in the classroom and shop. Successful completion of the senior Culinary Arts portfolio is a graduation requirement and will be introduced in class.

0220 *Dental Assisting Exploratory*

This week long course introduces students to the dental assisting profession. Students are exposed to various principals of clinical, laboratory, and clerical dental assisting. This program allows students to determine whether their abilities and interests are compatible with this technical area. During this course, students explore the many career opportunities in the dental field. Shop safety and program orientation is provided.

0221 *Dental Assisting 9th Grade Shop***Credits: 8**

When students enter permanent placement in the Dental Assisting program, the course of study provides an orientation to the dental facility. Safety is of the utmost concern and is stressed and practiced during every year of the dental assisting program. Students are introduced to infection control, dental morphology, tooth numbering systems and identification. In addition, basic chairside and laboratory procedures are taught, with an emphasis on preventative dentistry, oral hygiene instruction, nutrition counseling, and interpersonal communication. Students travel to elementary schools and daycare facilities to teach dental health education.

2201 *Dental Assisting 9th Grade Related***Credits: 1**

The Dental Assisting related theory instruction is intended to complement the vocational instruction and laboratory projects taught during the freshman year. The course of study provides additional instruction in the areas of dental history, the dental team, industry based professional organizations, dental specialties, communication, instruments, equipment and procedures are introduced.

0222 *Dental Assisting 10th Grade Shop***Credits: 8**

Students review and expand upon materials previously studied. Areas of study include an introduction to dental charting, preparation for patient care, patient education, and dental office management. Students also receive instruction in maintaining patient records, dental instrumentation, chairside techniques, and responding to client needs. Students travel to middle schools to teach dental health education. Students learn and utilize aseptic, disinfection, and sterilization techniques. Qualified students receive Infection Control Certification from the Dental Assisting National Board. Certification in adult, child and infant CPR/First Aid is attained.

2202 *Dental Assisting 10th Grade Related***Credits: 1**

The Dental Assisting related theory instruction is intended to complement the vocational instruction and laboratory projects taught during the sophomore year in the Dental Assisting program. Topics taught during freshman year will be built upon. In order to prepare for The Dental Assisting National Board Infection Control Certification, infection control and health and safety practices will be a large part of this year's related instruction. Students receive instruction in the areas of microbiology, anatomy and physiology, medical terminology and management of hazardous materials. Reading, writing, and scientific research assignments related to infectious diseases are integrated into this course. Students receive certification from CareerSafe, an online 10 hour OSHA safety course. The goal of the CareerSafe program is to teach younger workers how to stay safe in the workplace.

0223 *Dental Assisting 11th Grade Shop* Credits: 8

During this year considerable instruction in the production of traditional as well as digital dental radiographs is given. Components of the dental x-ray unit, digital sensors, Panoramic x-ray techniques, safety precautions, film identification, film placement using both bisecting and paralleling techniques, and film processing and mounting are all studied. Qualified students receive radiology certification from the Dental Assisting National Board. Students review and expand upon materials previously studied. Topics of study include dental materials, chairside procedures, and clinical records, advanced dental laboratory procedures, dental anesthesia, four-handed dentistry techniques, and digital impression scanning skills. Students receive instruction in the areas of application of dental materials, restorative procedures, prosthodontic procedures, laboratory procedures, preventative measures, oral surgery, and healthcare office management procedures. Students are taught the skills necessary for externship and employment.

2203 *Dental Assisting 11th Grade Related* Credits: 1

Students review and expand upon materials previously studied. Program topics include radiation health and safety, dental specialties and oral pathology. To prepare for the Dental Assisting National Board Radiation Health and Safety Certification, all aspects of dental radiography are a large part of the junior year related instruction. The Dental Assisting related theory instruction is intended to complement the vocational instruction and laboratory projects taught during the junior year in the Dental Assisting program. Head and neck anatomy, pharmacology, management of pain and anxiety, ethics and jurisprudence and employability are taught.

0224 *Dental Assisting 12th Grade Shop* Credits: 8

Students review and expand upon materials previously studied. Qualified seniors participating in the cooperative education program gain industry experience in paid positions off-campus. To participate in the cooperative program, students must meet all co-op requirements and be in good academic and vocational standing. Students may participate in a clinical affiliation with both specialty and general practice dental offices. Students receive continued instruction in the areas of dental science and business office procedures. Students travel to geriatric facilities to teach dental health education. Certification in adult, child and infant CPR/First Aid is attained.

2204 *Dental Assisting 12th Grade Related* Credits: 1

The Dental Assisting related theory instruction is intended to complement the vocational instruction and laboratory projects taught during the senior year in the Dental Assisting program. Students review and expand upon materials previously studied. Program topics include radiation health and safety, dental specialties, oral pathology, advanced radiography techniques, and advanced digital impression techniques.

Drafting and Design Technology (2 Year Program)

0343 *Drafting and Design Technology 11th Grade Shop*

Credits: 8

This course is comprised of two half-year segments. The first half of the year will provide students with an understanding of the basics of mechanical design involving reverse engineering and a breakdown of the design process. The instructor will introduce AutoCAD and Inventor software that will be utilized to apply ASME/ANSI standards for dimensions with multi-views, isometric views, auxiliary views, orthographic projections, sectioning, tolerances, and threads/fasteners. Students will develop CAD skills that allow them to design, model, and detail parts according to standard industry guidelines and expectations, as well as utilizing 3D printing technology to gain hands-on experience in modeling. The remainder of the school year will be dedicated to introducing residential architecture and design. Students will gain an understanding of the requirements in design of the service, living, and sleeping areas in residential homes. Interactive assignments on Revit software allow students in the program to utilize creative design as well as fulfilling industry expectations. Students will finish this year with the ability to generate plot plans, floor plans, foundation plans, exterior elevation plans, roof plans and necessary sectioning and detailing.

3403 *Drafting and Design Technology 11th Grade Related*

Credits: 1

This course is comprised of two half-year segments. The first half focuses on developing students' skills in mechanical drawing and design. Students are introduced to theory related to identifying the manufacturing processes and the key elements that impact design. The second half of the school year provides students with an introduction to theory relating to residential architectural drawing and design. Students become familiar with the elements required in floorplan design with an emphasis on presentation to clientele and following industry regulations. Classroom instruction includes reading, writing and mathematics assignments related to the Drafting and Design Technology profession. For both mechanical and architectural design segments, students learn how to fill out effective and clear time cards and reflections as expected in the workforce. In 11th grade related, students will also complete the OSHA 10-hour General Industry Certification.

0344 *Drafting and Design Technology 12th Grade Shop*

Credits: 8

This course is comprised of two half-year segments; the first half provides students with advanced studies in mechanical drawing and design, and the second half provides students with advanced studies in residential architectural drawing and design. During the mechanical design segment, further develop their skills in dimensioning with geometric dimensioning and tolerancing instruction, and learn how to effectively produce sheet metal parts, advanced cast and machined parts, and welded elements. Students also have 3D printers available to print complex parts and projects completed inside or outside of shop. The manufacturing segment will provide students with an understanding of how all aspects of Drafting and Design Technology come together from the design to the manufacturing of a product. Final projects will require students to create full assemblies with detail drawings, parts lists, and general notes while applying advanced dimensioning techniques.

The architectural segment is comprised of an in depth look into residential house design and construction. Students develop foundation plans, framing plans, full house sections, roof plans, and elevation detail drawings. Final projects will require students to design a residential house with a complete set of documented house plans.

3404 *Drafting and Design Technology 12th Grade Related*

Credits: 1

This course is comprised of two half-year segments. The first half provides students with advanced theory related to mechanical drawing and design, and the second half provides students with advanced theory related to residential architectural drawing and design. The architectural segment identifies the components and considerations of construction drawings in residential design and career readiness in the field of architecture. The mechanical segment provides students with theory relating to mechanical design and career readiness in the field of mechanical engineering. Students will complete official AutoCAD, Revit, and Inventor Certifications in shop and can utilize them in their professional careers after high school. Career opportunities and pathways in Drafting and Design Technology are presented in related and students are encouraged to pursue higher education or workforce placement after graduation. Seniors will develop unique and detailed portfolios demonstrating their skills in Drafting and Design that can be presented to universities or employers.

<i>Electrical</i>

0410 *Electrical Exploratory*

Students will be introduced to basic electrical theory, hands on projects, and electrical and tool safety. Using basic electrical hand tools, students demonstrate the skills required for: Romex wiring, splicing wires, junction box installation, device wiring consisting of single pole and three way switches, duplex receptacle, and lighting sockets. Students also will finish the week wiring a multiple wiring method project and connecting it to 120 volt electricity. Students will be shown multiple pathways they can succeed in the Electrical trade.

0411 *Electrical 9th Grade Shop***Credits: 8**

This course provides students with the fundamentals in wiring methods. Using basic hand tools, supplied by the shop, students demonstrate the skills required for basic 120/240 volt circuitry. Students will wire projects using wiring methods including Romex and MC Cable, both surface mount and stud wall. Students will learn to install single pole, 3-way and 4-way switches, light sockets and duplex receptacles. While working on projects, students learn how to draw a rough wiring schematic and follow their schematic to wire the project. They will also learn the importance of following the project layout for proper heights and distances. Emphasis on neat and workmanlike manner is stressed on projects. Electrical and hand tool safety is an integral part of the course.

4101 *Electrical 9th Grade Related***Credits: 1**

Students are introduced to basic electrical theory and will learn the relationship between voltage, amperes, resistance, and power (Ohm's Law and Watt's Law). The lessons learned in related are used on an everyday basis for wiring projects. The National Electrical Code (NEC), with Massachusetts amendments, is introduced, and students will learn how to navigate the NEC. Utilizing the NEC, students are introduced to Article 100 - Definitions, Article 110 - Requirements for Electrical Installations, and Article 300 - Wiring Methods. Safety is emphasized in this course and the students learn to comply with all safety practices. Reading, writing, and math assignments related to electrical theory are an integral part of this class.

0412 *Electrical 10th Grade Shop***Credits: 8**

Students will expand their knowledge of new and complex wiring methods including: Surface Metal Raceway, Flexible Metal Conduit, Liquidtight Flexible Conduit, and Electrical Metallic Tubing. Students will be introduced to residential wiring and by the end of the school year, they will complete a 100amp overhead service project with multiple branch circuits typical in a house. The complexity of projects increases as students gain knowledge of advanced wiring methods. Electric and battery powered drills are introduced and used during the year. Proper and safe use of drills, hand tools, ladders, and electrical testing equipment is emphasized.

4102 *Electrical 10th Grade Related*

Credits: 1

Students will utilize the National Electrical Code (NEC) to reinforce their knowledge of new wiring methods introduced in shop. Residential wiring is emphasized and students will learn about overhead services on a house and will also be instructed on the branch circuit requirements for the different rooms of a house. Students will be introduced to ARC Fault and GFCI protection requirements for the branch circuits of a home. Students are taught to calculate the electrical demand load for a home, how to take out an electrical permit, and how to submit a service request form to a utility company. Students will have an interesting and challenging final related project that consists of laying out a residential dwelling unit, listing the electrical requirements per room, a complete a materials list and cost for the job. Students will study for and receive a 10 hour OSHA certificate/card which is integral for Co-Op placement Junior/Senior year. Reading, writing, and math assignments related to the electrical professions are integrated with academic frameworks during this class.

0413 *Electrical 11th Grade Shop*

Credits: 8

This course builds upon the 10th grade training and expands to include underground services, mock wood room projects to resemble rooms in a house (bedroom, bathroom and kitchen). Student projects will get more difficult as to enhance their training and knowledge. Additional wiring methods will be taught including; PVC, Rigid Conduit, and ENT. Students will also be introduced basic motor control projects consisting of relay logic, start/stop stations, magnetic starters, and 3-phase motors wiring. Proper use of various multi-meters used to trouble shoot relay logic projects is taught along with all safety practices. Eligible students have the ability to go out on Co-Op during the third term.

4103 *Electrical 11th Grade Related*

Credits: 1

Review of previous wiring methods and shop safety will be discussed and tested. Students will be instructed on the necessary code rules pertaining to underground services and a review of branch circuits will be provided. This course provides students with the theory of relay logic control circuits for motors and relays. The National Electrical Code training is more enhanced to cover multiple wiring methods, overcurrent, and motors. Magnetic motor control circuits are taught with different types of manufactory equipment and various wiring schematics. Reading, writing, and math assignments related to the electrical professions are integrated with academic frameworks during this class.

0414 *Electrical 12th Grade Shop*

Credits: 8

This course is a continuation of 11th grade training with advanced projects in multiple wiring methods and advanced motor control training. This includes designing control schematics for various motors using National Electrical Code standards. Students will be introduced to commercial wiring and will wire a mock commercial office consisting of receptacles, lighting and data/communication wiring. Students can also be introduce to live outside projects. The live work projects are featured requiring safe work practices. The Co-Op experience is also available to electrical students meeting the requirements of this program.

4104 *Electrical 12th Grade Related*

Credits: 1

Review of previous wiring methods, motor control/relay logic, and shop safety will be discussed and tested. National Electrical Code, OSHA safety rules and practices are taught for the importance during outside projects for installation of electrical work. Students study advanced motor control; forward and reverse, timing; two-speed, and reduced voltage circuits are taught. Research, including reading, writing and math assignments related to the electrical professions, is integrated with academic frameworks during this class.

Electronics and Engineering Technology

0350 *Electronics and Engineering Technology Exploratory*

This program introduces the practical aspects of the science and industry of electronics to the inexperienced student. Students receive practical instruction encompassing soldering, basic circuits, components, equipment, materials and safety. Students construct three projects including an LED Flasher, Tingler and an Alien Game. Students do live work to accentuate learning. During the related portion of this course, students are instructed in the theoretical aspects of the science and industry of electronics. Students observe demonstrations, view videotapes, and listen to guest speakers. Students are introduced to fundamental concepts such as current, voltage, resistance, power, semiconductors, and integrated circuits. Students also learn how to solve problems using the VEX IQ robotics.

0351 *Electronics and Engineering Technology 9th Grade Shop*

Credits: 8

The freshmen year introduces the practical aspects of the science and industry of DC electronics as well as engineering. Students will build upon the skills acquired during the exploratory cycle. Students will be introduced to DC theory, electronic components, circuit analysis, various engineering and electronic equipment, engineering design process, mechanical design, and reverse engineering. This program will teach the student Multi-sim (labview) a simulation package that delivers quick, efficient, and effective tools for learning complex circuit design and analysis. They will also design projects using the Autodesk software for the 3D printer mechanical design and Ulti-board to create circuit boards. Major components are the construction of a multi-meter and other electronics engineering projects utilizing the engineering design process. The program is optimal for three career paths, Electrical Engineering, Electronics Technician, and Electronics Assembler.

3501 *Electronics and Engineering Technology 9th Grade Related*

Credits: 1

This course introduces the theoretical aspects of the science and industry of DC electronics and builds upon the skills acquired during the exploratory cycle. Students learn about DC circuits, components, equipment, materials, and safety. All related work is closely integrated with shop work and is immediately applied in the laboratory. Students are trained to design, prototype, assemble, test, and troubleshoot DC circuits such as resistive series, parallel, series-parallel, and parallel-series configurations utilizing CAD and the engineering design process. Reading, writing, and math assignments related to electronics theory is an integral part of this class.

0352 *Electronics and Engineering Technology 10th Grade Shop*

Credits: 8

This program introduces students to concepts in AC Theory and the analysis of AC circuits. Electronic concepts learned in the sophomore year include waves, magnetism, capacitance, AC circuits, etc. It will also begin to expand on engineering concepts learned in the freshman year. Students will explore statics and other mechanical concepts using the engineering design process. Other engineering material covered this year will include materials, kinematics, process control, and various energy uses and sources. They will also design projects using the Autodesk software for the 3D printer mechanical design and Ulti-board to create circuit boards. The program is optimal for three career paths, Electrical Engineering, Electronics Technician, and Electronics Assembler.

- 3502 *Electronics and Engineering Technology 10th Grade Related*** Credits: 1
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- This program introduces the theoretical aspects of the engineering and science of AC electronics and mechanical applications building upon the skills acquired during the freshman program. Students receive related instruction on AC circuits, components, equipment, materials, with Impedance, AC/DC Waveforms, Phase Angle, Inductance/Inductive Reactance, Transformer, Capacitance and Capacitive Reactance, RC Time Constants, RC/RL Wave Shapes, Magnetic Poles, Magnetic Lines of Force, Electromagnets and Solenoids, Control Circuits, Latch Circuits, Buzzers and safety. All related work is closely integrated with shop work and is immediately applied in the laboratory. Students are trained to design, prototype, assemble, test, and troubleshoot AC circuits and mechanical systems. Reading, writing, and math assignments related to the engineering and electronics professions are integrated with academic frameworks during this class.
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- 0353 *Electronics and Engineering Technology 11th Grade Shop*** Credits: 8
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- This program introduces Semiconductors to the students and continues to build on engineering concepts and electronic knowledge. Students will learn about diodes, wave rectification, transistors operational amplifiers and other electronic components and equipment. Pneumatics will be focus areas that students will learn much about and continue applying design principles to for projects. Students will also be introduced to digital electronics in the latter part of the year. They will learn about and apply basic digital electronic concepts, components, and equipment. They will also design projects using the Autodesk software for the 3D printer mechanical design and Ulti-board to create circuit boards. The program is optimal for three career paths, Electrical Engineering, Electronics Technician, and Electronics Assembler.
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- 3503 *Electronics and Engineering Technology 11th Grade Related*** Credits: 1
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- This program introduces the theoretical aspects of the science and engineering of analog electronics and mechanical applications. Students receive related instruction on semiconductor circuits, components, equipment, materials, diodes and Half-Wave Rectification, Full-Wave Rectification with Power Supply, Filters, Zener Diode Regulator, Diode Waveshaping, Voltage Doubler, Transistor Junctions, PNP DC Bias, Transistor Load Lines and operational amplifiers. The course provides comprehensive, classroom instruction in electronics and engineering terminology, semiconductor applications, pneumatics, renewable energy, and safety. All related work is closely integrated with shop work and is immediately applied in the laboratory. Students are trained to design, prototype, assemble, test, and troubleshoot analog circuits such as power supplies, amplifiers, and oscillators as well as complex mechanical systems. Reading, writing, and math assignments related to the engineering and electronics professions are integrated with academic frameworks during this class.
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- 0354 *Electronics and Engineering Technology 12th Grade Shop*** Credits: 8
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- This program will continue from the students' junior year within the realm of Digital Electronics. Students will learn more complicated concepts and components and apply these to challenging projects that utilize both the engineering design process and knowledge of electronics. Some topics will include basic logic gates, flip-flops, counters, registers, and adders. Students will be asked to complete a major capstone project that utilizes the design process from start to finish along with all other skills and knowledge learned in the previous years. This will be a college level project that students will work in teams in order to complete. They will also design projects using the Autodesk software for the 3D printer mechanical design and Ulti-board to create circuit boards. The program is optimal for three career paths, Electrical Engineering, Electronics Technician, and Electronics Assembler.

This program introduces the theoretical aspects of the science and industry of electronics and builds upon the skills acquired during the junior year. Students receive related instruction on digital circuits, components, equipment, materials, AND/NAND, OR/NOR, XOR/XNOR, SET/RESET Flip-Flop, D-Type Flip-Flop, JK Flip-Flop Tri-State Output, TTL/CMOS Comparison BCD Decimal Decoder, BCD Priority Encoder, ADC, DAC, Multiplexer, Demultiplexer, 7-Segment Driver and Display, Parity Generator and Checker, Asynchronous Ripple Counters, Synchronous Counters, 4-Bit Shift Registers, 4-Bit Adders, and 4-Bit Comparators, and safety. All related work is closely integrated with shop work and is immediately applied in the laboratory. Students participate in cooperative education to accentuate learning. Students are trained to design, prototype, assemble, test and troubleshoot digital circuits such as counters, registers, coders, drivers, multiplexers, controllers, and processors. Research, which includes reading, writing and math assignments, related to the electronics professions, is integrated with academic frameworks during this class.

0380 *Engineering and Robotics Exploratory*

This one-week course provides the 9th grade student with an introduction to the many fields of engineering and the different careers that exist within industry. Through a combination of classroom instruction and hands-on projects, the student will be introduced to the engineering design process, engineering principals, product design and manufacturing, robotics, process automation, and reverse engineering. Students will learn a variety of engineering principles and then demonstrate what they've learned by producing several different projects and a final presentation. This exploratory week will give students a good understanding of what to expect over the next few years in the Engineering and Robotics program.

0381 *Engineering and Robotics (PLTW-IED) 9th Grade Shop***Credits: 8**

The Engineering and Robotics program utilizes Project Lead the Way (PLTW) as a base for its curriculum. The first year of the program introduces students to a variety of topics through the PLTW “Introduction to Engineering Design” course. Students will learn about engineering design & problem solving, project management, computer aided design (Autodesk Inventor and AutoCAD), and reverse engineering. Through a variety of hands-on projects, students will design solutions to proposed problems, document their work using an engineer’s notebook, and communicate solutions to peers and faculty. Students will utilize their math skills extensively in all aspects of the Engineering and Robotics Program each year.

3801 *Engineering and Robotics (PLTW-IED) 9th Grade Related***Credits: 1**

Students will learn about engineering careers as well as engineering practices and theories. This course provides the 9th grade student with the basic technical knowledge and studies in the Engineering and Robotics area. Students will explore engineering case studies, research the history of engineering, and learn about the multiple career opportunities that await them in the engineering field. Instruction utilizes presentations, demonstrations, engineering notebook inspections, hands-on performance tests, writing assignments, quizzes, and traditional tests in the above areas to determine achievement of competencies. Reading, writing, and math assignments related to engineering theory are an integral part of this class. The students will have the opportunity to earn college credits based upon their performance in the course.

0382 *Engineering and Robotics (PLTW- CIM & DE) 10th Grade Shop***Credits: 8**

The Engineering and Robotics program utilizes Project Lead the Way as a base for its curriculum. The second year of the program introduces students to additional engineering topics via PLTW’s “Computer Integrated Manufacturing” and “Digital Electronics” course. Both courses are taught throughout the year and students will engage in project-based instruction on topics including energy, motion, material properties, robotics, CAD/CAM and CNC-machining. VEX is used as the platform for classroom instruction and students will have the opportunity to compete in local robotics events. In the Digital Electronics class, students will learn how to create circuits with digital logic design & control, soldering and breadboarding utilizing engineering standards and technical documentation. Students will also have the opportunity to get involved with SkillsUSA.

3802 *Engineering and Robotics (PLTW- CIM & DE) 10th Grade Related***Credits: 1**

This course provides the foundation and theory behind many engineering concepts that will be used later on in future PLTW classes. Students will continue to develop problem solving skills and will apply their knowledge to design and create solutions to various challenges on a host of engineering topics. Students will become well versed in the history of computer modeling, manufacturing equipment, process and robotics automation. Students will learn about digital logic and the function

of each of the various components utilized in their designs. The students will have the opportunity to earn college credits based upon their performance in each of the courses.

0383 *Engineering and Robotics (PLTW-CEA) 11th Grade Shop* Credits: 8

The Engineering and Robotics program utilizes Project Lead the Way as a base for its curriculum. The third year of the program introduces students to additional engineering topics via PLTW's "Civil Engineering and Architecture" course. This course is taught throughout the year and student will engage in project-based instruction on topics including architectural design, civil engineering and the creation and utilization of technical drawings using industry-standard software throughout.

3803 *Engineering and Robotics (PLTW-CEA) 11th Grade Related* Credits: 1

This course provides the foundation and theory in the Civil Engineering & Architecture course. It will utilize various software programs that will aid students in developing skills necessary to design and develop 3D model structures for residential and industrial applications. The students will have the opportunity to earn college credits based upon their performance in the course.

0384 *Engineering and Robotics (PLTW-AE) 12th Grade Shop* Credits: 8

The final year of the program introduces students to additional engineering topics via PLTW's "Aerospace Engineering" course. Students will engage in project-based instruction on topics including robotics, circuit board design, the fundamentals of atmospheric flight and space flight using the industry-standard software throughout. The students will also pursue their industry certifications in SolidWorks.

3804 *Engineering and Robotics (PLTW-AE) 12th Grade Related* Credits: 1

Students will have the opportunity to continue to develop their 21st century learning skills while working alongside their peers in the AE class. In the AE class, students will explore the evolution of flight, navigation & control, flight fundamentals, space travel, and orbital mechanics. A combination of hands-on projects, individual & group work, and testing procedures will serve as a basis for student learning in this exciting and interactive course.

0490 *Health Services Exploratory*

The Health Services Exploratory acquaints students with many content areas taught throughout the program including an introduction to the medical field, nursing, anatomy and physiology, vital signs, and aging, and Hands Only CPR. After learning about and discussing aging issues, students have an opportunity to go out into the community and work with clients in local Adult Day Health Centers. During exploratory week, students will learn about the various career options within the health services field.

0491 *Health Services 9th Grade Shop***Credits: 8**

The freshman year incorporates a basic introduction to the Health Services curriculum. Students focus on anatomy and physiology, medical terminology, aging, and nutrition. In addition, they are introduced to the role of the Certified Nursing Assistant, their role as part of the healthcare team, the different types of healthcare facilities, and are introduced to basic nursing skills. Volunteering in the community is also a very important component of the Health Services curriculum. Freshmen volunteer at local Adult Day Health Centers where they put theory into practice while gaining valuable communication skills.

4901 *Health Services 9th Grade Related***Credits: 1**

Nutrition Assistant certification is offered for the related component. Students may receive certification upon completion of an exam and become eligible to be a nutrition assistant after they turn 16 years of age.

0492 *Health Services 10th Grade Shop***Credits: 8**

The sophomore year continues to focus and expand upon nursing skills, anatomy and physiology, human growth and development, medical terminology, aging, nutrition, and developmental disabilities. Students practice clinical nursing skills in the Health Services nursing lab. There is an early childhood practicum where the students apply the theory they have learned in class. Students work with community agencies that serve individuals with developmental disabilities.

4902 *Health Services 10th Grade Related***Credits: 1**

Students attain certifications in OSHA, CPR, and First Aid. Students receive a certificate of completion in Alzheimer's care.

0493	<i>Health Services 11th Grade Shop</i>	Credits: 8
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The junior year of Health Services focuses on completing the remaining required hands-on skills and knowledge base needed to prepare the students for the Massachusetts State Nursing Assistant Certification exam administered by the Red Cross. The shop portion of junior year involves review and practice of nurse assistant care skills regulated by the Massachusetts Department of Public Health. These skills are applied in real clinical settings under the direction and supervision of a nurse instructor. Clinical sites include a rotation through various long-term care facilities. Upon completion of the CNA curriculum, students receive an additional 15 hours of instruction to receive Home Health Aide Certification through the Home Care Aide Council.		
4903	<i>Health Services 11th Grade Related</i>	Credits: 1
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Students will learn the theory behind the nurse assistant care skills. These topics range from professional work behavior in the health care field, safety, infection control, care of the elderly resident, nutrition and hydration in long term care, mobility, comfort measures and elimination. In addition, the students will relate all of the body systems to the care they are performing in the lab and on clinical.		
0494	<i>Health Services 12th Grade Shop</i>	Credits: 8
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The senior year of Health Services focuses on three aspects of health care: the pharmacy technician, advanced nursing skills, and medical billing and coding EKG skills. Students who qualify for Cooperative Education will be able to pursue work as a C.N.A. in one of the numerous long-term health care facilities in the Blackstone Valley. Students who do not go on co-op will be afforded the opportunity to be active in the healthcare setting through affiliations and externships.		
4904	<i>Health Services 12th Grade Related</i>	Credits: 1
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Students will gain a knowledge base for pharmacy technician. They will also learn and practice advanced nursing skills, EKG, and medical billing and coding.		

HVAC&R

0440 *HVAC&R Exploratory*

The HVAC&R Exploratory Program is designed as a one week overview of several disciplines within this trade. Students gain specific knowledge and skills to explore the many career opportunities in the Heating, Ventilation, and Air Conditioning, and Refrigeration fields.

0441 *HVAC&R 9th Grade Shop*

Credits: 8

This course encompasses all basic refrigeration practices including piping, proper use of refrigeration tools, and refrigerant handling according to EPA guidelines. Also included in this course: compressor testing and dismantling, basic electrical projects, and the use of basic controls. The shop program utilizes all standard safety procedures practiced in the HVAC&R industry. This course provides fundamental knowledge necessary for continued success in this field. Shop instruction is project based and hands on in nature.

4401 *HVAC&R 9th Grade Related*

Credits: 1

Students are instructed in all basic refrigeration theories, specific requirements for piping, types and uses of HVAC&R tools, and federal laws regarding refrigerant handling. Electrical theory as applied to the HVAC&R industry is studied, as well as wiring diagrams and descriptions of various mechanical-electrical controls. Reading, writing, and math assignments related to HVAC&R theory are an integrated part of this class. This class supports all lab/shop projects performed during freshmen year in the HVAC&R program. Safety instruction is addressed in all units presented.

0442 *HVAC&R 10th Grade Shop*

Credits: 8

Students are instructed in heat energy theories, basic and advanced refrigeration components, advanced refrigerants, and refrigerant handling. Students design and install an advanced refrigeration system with accessories as well as a complete central air conditioning system. Students study electrical theories and applications used in the HVAC&R industry including pressure controls, starting relays, and circuit identification. Refrigeration system troubleshooting is a major component throughout the sophomore year. The shop program utilizes all standard safety procedures practiced in the HVAC&R industry. This course provides the fundamental knowledge necessary for continued success in this field. Shop instruction is project based and hands on in nature.

4402 *HVAC&R 10th Grade Related*

Credits: 1

This course examines heat energy theories and operational functions for advanced refrigeration systems and components. Instruction is provided on the complete installation and startup of a central air conditioning system. Various applications of refrigeration systems are researched as well as special refrigeration components. This course also reviews electric motor types and usage as well as motor relay and control operation. Troubleshooting skills are applied to problems encountered in the HVAC&R field. Reading, writing, and math assignments related to the HVAC&R professions are integrated with academic frameworks during this class. Shop instruction is project based and hands on in nature.

0443 HVAC&R 11th Grade Shop

Credits: 8

Students test and install various types of heating systems including oil, gas, electric, heat pumps and alternative heat sources. Heat transfer systems using hydronic principles and forced air delivery systems are also assembled and tested. Several projects and tasks are focused on troubleshooting heating controls and equipment. The shop program utilizes all standard safety procedures practiced in the HVAC&R industry. This course provides fundamental knowledge necessary for continued success in this field. Shop instruction is project based and hands on in nature.

4403 HVAC&R 11th Grade Related

Credits: 1

Energy requirements and estimation for winter climate control, and operation of all types of heating systems are major component of this course. Students examine theories of fluid dynamics & heat transfer such as hydronics and air systems. Students also perform heat loss calculations and design a modern residential heating system. They are introduced to, and compare heat pumps, alternative energy, gas, and oil fired systems. Reading, writing, and math assignments related to the HVAC&R professions is integrated with academic frameworks during this class. This class supports all lab/shop projects performed during junior year in the HVAC&R program. The material is presented utilizing various methods including lectures, hands-on, term projects and select audio visual resources. Safety instruction is addressed in all units presented.

0444 HVAC&R 12th Grade Shop

Credits: 8

During the senior year, students are instructed in advanced troubleshooting techniques of heating/cooling systems. Students received instruction in preventative maintenance, indoor air quality as well as psychometrics. This course also includes introduction to pneumatic and digital controls, blueprint reading, and senior project presentations. Seniors on co-op will have an adjusted shop grade based on their co-op experience. The shop program utilizes all standard safety procedures practiced in the HVAC&R industry. This course provides fundamental knowledge necessary for continued success in this field. Shop instruction is project based and hands on in nature.

4404 HVAC&R 12th Grade Related

Credits: 1

This course examines advanced heating/cooling system design, computerized heat load/gain estimation, blueprint reading, and job estimating. Students examine air flow, air system design, and psychometrics as applied to air conditioning systems. Specific instruction will be offered to students seeking training in a specialized HVAC&R field. Students are required to complete one or more HVAC&R term projects. The subject of these projects will concur with lab or Co-Op related projects. Research, which includes reading, writing, and math assignments related to the HVAC&R professions, is integrated with academic frameworks during this class. Seniors on co-op will have an adjusted related grade based on their co-op experience. This class supports all lab/shop projects performed during senior year in HVAC&R program. Safety instructions are addressed in all units presented.

Information Technology

0230 *Information Technology Exploratory*

The focus of this exploratory program is to introduce students to the basic knowledge and skills necessary to pursue study in the Informational Technology program. Basic instruction in shop safety and IT program orientation is provided. Students learn the necessary skills that open the way to the various career options for the IT professional. They develop an understanding of the scope of the program and the technology systems involved. Projects include but are not limited to PC repair, operating system installation, Network Configuration cable assembly, WIFI setup, printer installation, web development, concepts, and computer programming, and Cybersecurity Concepts.

0231 *Information Technology 9th Grade Shop*

Credits: 8

The focus of the freshman year is to dive into Information Technology and show students all it has to offer. Students will experience the major topics, big ideas, and computational thinking practices used by computing professionals to solve problems and create value for others. This course will empower students to develop computational thinking skills while building confidence to build a mindset to advance in the Information Technology field.

start the CompTIA 220-1001 A+ and PC Pro Certification training. The 220-1001 Training includes: health and safety, underlying principles of technology, hardware, problem solving and troubleshooting basics, word processing, spreadsheets, databases, using internet resources and e-mail, digital images and graphics, incorporating digital video and audio, employability and management and entrepreneurship. TestOut PC Pro is a supplemental training used with the “A+ Guide to IT Technical Support Book by Jean Andrews” to prepare for the A+ and PC Pro Certification Exams taken sophomore year. Both training course are taught together as they work hand in hand to prepare the students for the two exams. All students will have the opportunity to earn the PC Pro and CompTIA A+ certifications having successfully completed the course and the additional content of TestOut in their sophomore year.

This course also provides an introduction to programming including coding fundamentals through an approachable block-based programming language where they will have early success in creating useable Apps.

2301 *Information Technology 9th Grade Related*

Credits: 1

The Information Technology related theory instruction is intended to complement the Vocational Instruction, and laboratory projects. Students have the opportunity to learn the principles and theories related to their hands-on activities and projects conducted in the laboratory during the freshman school year. After the exploratory classes are completed, we will be covering the theory behind computational thinking big ideas. the first half of the CompTIA A+ training focusing on the internal and external hardware of PC's and go in-depth on each individual PC component.

Students will engage in computational thinking practices and collaboration strategies that reinforce coding fundamentals in shop

0232 Information Technology 10th Grade Shop

Credits: 8

The focus of the sophomore year is to continue with the second half of the CompTIA A+ and PC Pro Certification training. This year we will focus on the 220-1002 which includes: health and safety, operating systems, software troubleshooting, network terminology and design, server management, software deployment, virtual machines and customer service. TestOut PC Pro is a supplemental training used with the “A+ Guide to IT Technical Support Book by Jean Andrews” to prepare for the A+ and PC Pro Certification Exams taken this year. Both training course are taught together as they work hand in hand to prepare the students for the two exams. All students will have the opportunity to earn the PC Pro and CompTIA A+ certifications having successfully completed the course and the additional content of TestOut in their sophomore year.

Once students have completed the coursework for PC Pro they will transition into the first part of the CISCO Curriculum; Introduction to Networking. Here they will learn the basic concepts to networking I order to prepare them for CCNET.

This course also includes Introduction to Computer Programming curriculum and teaches the foundations of computer science and basic programming, with an emphasis on helping students develop logical thinking and problem solving skills through solving complex algorithms, interpreting data and working with number systems. This course will be part of the sophomore year related theory class. Once students complete the Introduction to Computer Programming course, they will have learned material equivalent to a semester college introductory course in Computer Science and be able to program in JavaScript.

This course is designed to prepare students to pass the TestOut PC Pro and CompTIA A+ Certifications. Both of these Certifications are industry recognized by Dell, Intel, and HP and are a great entry level certification to earn. This certification measures not just what you know, but what you can do. They measure your ability to install, manage, repair, and troubleshoot PC hardware and Windows, Linux, and Mac operating systems. In addition to covering everything you need to know to become certified, this course is designed to help you gain real-world skills that you will use every day as a PC technician.

2302 Information Technology 10th Grade Related

Credits: 1

The Information Technology related theory instruction is intended to complement the Vocational Instruction, and laboratory projects. Students have the opportunity to learn the principles and theories related to their hands-on activities and projects conducted in the laboratory during the sophomore school year. We will be covering the theory behind second half of the CompTIA A+ training focusing on the industry terms and tools needed to be prepared for the CompTIA 220-1001 and 1002 Exams. software side of PC's, virtualization, basic networking and server management. Along with this students will be introduced to introductory programming & networking concepts provided in the shop curriculum.

0233 Information Technology 11th Grade Shop

Credits: 8

The focus of the junior year is to continue the Cisco training with the next two college level courses “Routing and Switching Essentials” and “Scaling Networks”. This course describes the architecture, components, and operations of routers and switches in a small network. Students learn how to configure a router and a switch for basic functionality. By the end of this course, students will be able to configure and troubleshoot routers and switches and resolve common issues with RIPv1, RIPv2, single- area and multi-area OSPF, virtual LANs, and inter-VLAN routing in both IPv4 and IPv6 networks. This course describes the architecture, components, and operations of routers and switches in a small network. Students learn how to configure a router and a switch for basic functionality. By the end of this course, students will be able to configure the opportunity to earn the CompTIA A+ and Net+/ CCENT certification having successfully completed the Routing and Switching Essentials.

This course also expands upon the applied programming concepts learned sophomore year. Students will dive into a hands-on course in designing and developing World Wide Web pages using HTML (HyperText Markup Language) and CSS (Cascading Style Sheets). The course will cover HTML tags for text, images, links, lists, simple layouts, complex layouts, tables, frames, style, internal style sheets, and external style sheets. Basic issues in using graphics on the Web will also be covered.

During Junior Year, students will dive into CompTIA’s Network+ certification training. This course prepared students for a vendor neutral certification making IT professionals gain expertise in configuring, managing, installing, troubleshooting and maintaining basic computer networks. Thought by top experts, students gather essential knowledge of network configuration, technologies and installations as well as topologies and media security and management. The Network+ certification by CompTIA is an internationally recognized and coveted credential providing proof of a student’s knowledge, skills and ability to manage, maintain, troubleshoot, install, operate and configure a basic network infrastructure. This course will prepare students to take the CompTIA Network+ Certification Exam N10-006.

2303 Information Technology 11th Grade Related

Credits: 1

The Information Technology related theory instruction is intended to complement the vocational Instruction, and laboratory projects. Students have the opportunity to learn the principles and theories related to their hands-on activities and projects conducted in the laboratory during the junior year. This will also include the following assignments every week: homework, lab reports, chapter presentation and quizzes, this will be posted on their Netacad.com web site. HTML and Computer Science concepts are reinforced through interactive instruction of coding concepts. Students will also be exposed to hosting options and the back end of web development.

0234 Information Technology 12th Grade Shop

Credits: 8

Seniors who do not participate in the cooperative program will receive instruction to further their knowledge in the growing field of Cybersecurity. Whether seeking a career in the growing field of cybersecurity or learning to defend their own personal data or a company's data, students in Cybersecurity establish an ethical code of conduct while learning to defend data in today's complex cyberworld. Information Technology through a specific pathway selection. These pathways include IT fundamentals, Linux Professional, Cyber Security, Computer Science and Cisco coursework. Each pathway offered to students allows them to focus on a specific area of Information Technology that they may be interested in pursue after high school. Upon graduation all students will have the opportunity to earn the CompTIA A+, Network+ and Security+ certification and/or up to the full Cisco Certified Network Associate experience in paid positions off-campus. Participation in the cooperative program requires students to meet all coop requirements and be in good academic and vocational standing. Seniors also have the opportunity to work with the school's technology staff on the configuration and service of equipment on the school's network and on community related projects.

This course also offers continued learning in programming languages as well as future advanced programming courses. Students learn high and low level programming commands, sequences and languages during shop and related theory classes and continue to build their knowledge of coding, especially code efficiency and security.

2304 Information Technology 12th Grade Related

Credits: 1

The Information Technology related theory instruction is intended to complement the vocational Instruction, and laboratory projects. Students have the opportunity to learn the principles and theories related to their hands-on CISCO Cybersecurity activities and projects conducted in the laboratory during the senior year. This will also include the following assignments every week: cybersecurity, computer Ethics, and project management concepts will also be covered in this course.

360 AP Computer Science A

Credits: 2

This is an optional course for seniors in the Information Technology shop only. This course is delivered in shop during shop week. Students who elect to take this course will receive two (2) credits for this course and six (6) credits for shop. Students who take this course agree to take the AP Exam in the spring of their senior year. A qualifying score of three (3) or better on the AP exam may earn a student college credit.

The AP Computer Science A course is an introductory course in computer science. Because the design and implementation of computer programs to solve problems involve skills that are fundamental to the study of computer science, a large part of the course is built around the development of computer programs that correctly solve a given problem. These programs should be understandable, adaptable, and, when appropriate, reusable. At the same time, the design and implementation of computer programs is used as a context for introducing other important aspects of computer science, including the development and analysis of algorithms, the development and use of fundamental data structures, the study of standard algorithms and typical applications, and the use of logic and formal methods.

Using Python® as a primary tool, students explore and become inspired by career paths that utilize computing, discover tools that foster creativity and collaboration, and use what they've learned to tackle challenges like app development and simulation. This course is endorsed by the College Board, giving students the opportunity to take the AP Computer Science Principles exam for college credit. Course consists of 20+ hours of hands on laboratory experience solving real problems in a socially responsible way.

Multimedia Communications

The Multimedia Communications Department emphasizes media design from a problem solving and strategic point of view utilizing the latest technologies and techniques. Students learn strategies for critical thinking and problem solving with a foundation in visual design, marketing, client communication, and entrepreneurship. User experience is an integral part of all projects. Regardless of medium, students will employ techniques related to targeted marketing and branding of products and services based on industry standard audience research techniques. Students undertake a design-centered approach to conceive innovative solutions, while creating visions and building consensus among stakeholders. Collaboration and teamwork are essential skills that are exercised on a consistent basis. Stanford University's Design Thinking for Educators is used as a framework for rapid creation and refinement of visual design solutions for any product or service utilizing a 5-phase approach – Empathy, Definition, Ideation, Prototyping, and Testing – to align technical and non-technical audiences. Please visit www.bvtmultimedia.com to learn more about us.

Students will gain experience with tools related to graphic design (Adobe Creative Cloud), photography, Web and interactive design, and video production. In an effort to mirror expectations of the communications industry, students are expected to meet tight production deadlines while managing multiple projects concurrently. All students work on live projects in our in-house Design and Print Center gaining valuable experience in print production and finishing techniques. Throughout the Multimedia program, each student will turn their projects into a complete multimedia experience, gathering all of their concepts, designs, animations, video, sounds, and graphics into an interactive portfolio. Each student will also have an opportunity to become Adobe certified (ACA) by taking various exams offered in Visual Communications, Production, Rich Media, and Web Design.

0620 *Multimedia Communications Exploratory*

This one-week course provides the 9th grade exploratory student with an opportunity to explore the world of digital media. Students experience instruction in the digital media labs using Adobe design software and Apple computer technology. Students are introduced to a wide variety of techniques for graphic design, animation, photography, web design, branding identity, and marketing.

0621 *Multimedia Communications 9th Grade Shop*

Credits: 8

The foundations of design drive strategic concepts in multiple venues including; Web, photography, animation, videography, user experience and digital print production. Students learn how to develop design concepts in print and Digital formats. The Stanford Design Thinking model is introduced, as well as, conceptual thinking, concept mapping, brainstorming, storyboarding, design theory, color theory, typography, web design, photography, user experience design, and presentation skills. Outsourcing techniques are included in the prototyping phase of all projects. Emphasis and evaluations are placed on skill development, creativity, project management, and time management.

6201 *Multimedia Communications 9th Grade Related*

Credits: 1

Introduction to Adobe InDesign and Adobe Photoshop; Intro to HTML/CSS; graphic design, photography, drawing techniques; and storyboarding are essential components of the 9th grade curriculum. Students are evaluated based on their performance on projects that provide opportunities for students to make connections between tools, techniques, and related theory. Student evaluation incorporates test and quiz grades, and completion of all homework/written assignments.

0622 Multimedia Communications 10th Grade Shop

Credits: 8

In this course students will develop intermediate skills using Adobe Photoshop, Adobe InDesign and Adobe Premiere Adobe Creative Cloud Applications. Projects include intermediate portrait retouching designing for a target audience, application of persuasion techniques in advertising, and optimization for print and web digital workflows. Students will also develop skills in design thinking and problem solving through the use of type, space, and image. Emphasis and evaluations are placed on skill development, creativity, project management, and time management.

6202 Multimedia Communications 10th Grade Related

Credits: 1

Students build upon the introductory skills and knowledge acquired freshmen year and continue to develop skills related to strategic and design thinking, user experience, and concept development. Topics include; branding and marketing through graphic design, Stanford University's Design Thinking model, advertising, marketing, TV Advertisements, 3D modeling / printing, television commercials, storyboarding, story writing, video treatments, stop motion animation, digital photography, video, editorial design, audio, presentation skills, and portfolio development. Student evaluation incorporates instructional workshops, test and quiz grades, and completion of all homework/written assignments.

0623 Multimedia Communications 11th Grade Shop

Credits: 8

Junior year students will focus on applying their skills while beginning to work on live work projects for clients within the school and the district. Students will develop projects from start to finish utilizing Stanford University's design thinking model – Empathy, Definition, Ideation, Prototyping, and Testing. Projects will become client focused with strong marketing objectives. Students will develop integrated branding and production of professional products across many media, including print, web, motion graphics, photography and videography. Portfolio development for college entrance and/or career entry positions will be required for promotion to senior year. All juniors will also have the opportunity to work within the BVT Design and Print Center, producing printed products for clients from all over the district. Students will gain experience in scanning, layout and design, copyediting, digital pre-press, digital print production and customer service. Emphasis is placed on the development of quality standards and safe operating procedures. Additionally, students may apply for a cooperative education internship within the BVT Design and Print Center. Students will also have the opportunity to earn Adobe Certified Associate credentials.

6203 Multimedia Communications 11th Grade Related

Credits: 1

Students in this course will further enhance their employability skills through participation in various instructional workshops related to customer relationship management and formal presentation of concepts. Information architecture development, planning and documentation is explored and demonstrated. Activities include role-playing and formal communication with a variety of audiences for both interpersonal communication and formal proposal presentation. Integrated academic assignments related to digital design and communication theories are an integral part of this class. Student evaluation incorporates instructional workshops, test and quiz grades, and completion of all homework/written assignments.

Through demonstration of mastery of concepts, seniors prepare to enter the work force or continue their education. Students will further develop skills in advanced publication design techniques for both print and web applications; advanced photography and retouching techniques; advanced client management and advanced public speaking/presentation activities. Students must complete a senior capstone project working one-on-one with a client in the community to develop design concepts and marketing materials to establish or enhance brand identity. Products will include a variety of media based on a plan developed collaboratively with their client. Strict adherence to the Creative Process and documentation of all phases will be required. Finally, students will present their completed project and documentation to a panel consisting of advisory members and school administrators. Students will also have the opportunity to earn Adobe Certified Associate credentials. Eligible students will have the opportunity to participate in the Cooperative Education Program.

Students focus on portfolio development and growth. Presentation skills, creative writing, copy writing, design, marketing, branding, and advanced printing process skills are further enhanced through instructional workshops. Students are required to produce portfolio materials optimized for a variety of media including: web, interactive, and print. A final portfolio will be submitted to meet graduation requirements.

Student evaluation incorporates instructional assignments, test and quiz grades, and completion of all homework/written assignments. Students receive instruction, in a cooperative learning environment, through a combination of demonstrations, guest speakers, self-study, small group projects, live work, and individual hands-on experiences. Integrated academic assignments related to digital design and communication theories are an integral part of this class.

Painting & Design Technology

0460 *Painting & Design Technology Exploratory*

This one-week program provides students with an overview of several disciplines within this occupational area. Students gain specific knowledge and skills that enable them to explore various opportunities available in the painting and design technology field. Students are exposed to a variety of hands-on training including surface preparation, painting, Interior Design (using Chief Architect), sign making and large format digital printing (using Adobe Illustrator), and spray-painting.

0461 *Painting & Design Technology 9th Grade Shop*

Credits: 8

This two-trimester course provides students with the introductory knowledge and skill training necessary for the modern day trade of painting and design technology. Students attain basic skills in surface coatings, wall applications and furniture refinishing. OSHA safety regulations and practices are introduced as well as Material Safety Data Sheets safety procedures. Students will practice mixing techniques and develop understanding of color schemes using the color wheel as well as hand drawing with perspective and shading. Critical thinking skills are emphasized throughout the course.

4601 *Painting & Design Technology 9th Grade Related*

Credits: 1

This related course introduces print reading, fundamentals of evaluating floor plans, introduction to paints, coatings and sealants, and graphic applications and sign art. Students' school and professional portfolios are developed. Reading, writing and math assignments related to Painting Design Technology are an integral part of this class.

0462 *Painting & Design Technology 10th Grade Shop*

Credits: 8

This course provides fundamental knowledge necessary for continued success in the Painting & Design technology field. Shop instructions are project-based and hands-on in nature. Instruction includes wall covering and textiles, spray painting, drywall repair, and decorative finishes. Computer aided design is introduced using Adobe Illustrator and various sign industry software's to create signage and full color, large format, digitally printed artwork. Learning to cut, print, and apply digital graphics to various substrates will enhance the technical side of the Painting & Design trade. The students will also learn how to design, fabricate, paint, install, and estimate various sign, architectural design, and painting jobs. We are a "live" shop and work on many projects requested from the school and local communities throughout the school year.

4602 *Painting & Design Technology 10th Grade Related*

Credits: 1

This class supports all shop projects performed in the Painting Design Technology Program. Students receive instruction through a combination of presentations, hands-on activities and term projects, and select audiovisual materials. Safety instructions are addressed in all units. Students receive instruction in job planning, supervision, and presentation. Reading, writing and math assignments related to the Painting Design Technology are an integral part of this class. Students acquire their OSHA 10 hour card.

0463	<i>Painting & Design Technology 11th Grade Shop</i>	Credits: 8
<hr/>		
In addition to reinforcing previous skills, instruction expands to assist students in gaining mastery level competency in painting, sign making, interior design, estimating, planning, scheduling, and communicating. As part of the interior design component, students will enhance their knowledge in designing commercial and residential plans. The students use a professional 3D architectural software (Chief Architect) to design and remodel offices, kitchens, bedrooms, bathrooms, and other living areas according to the needs and wants of the client. The students will make presentations that will include presentation of boards and computer generated renderings. The students also use the program to estimate projects with an understanding of schedules, tool lists, materials lists, process flow, and labor requirements. Students further develop their skills in the trade by working on school facility and community based projects.		
4603	<i>Painting & Design Technology 11th Grade Related</i>	Credits: 1
<hr/>		
Students receive instruction through a combination of lectures, hands-on, term projects, and select audio-visual materials. Small business management skills are developed and foreperson's duties/leadership roles are fostered. Reading, writing, and math assignments related to the Paint Design Technology are an integral part of this class.		
0464	<i>Painting & Design Technology 12th Grade Shop</i>	Credits: 8
<hr/>		
Students focus on an in depth review of previous instruction. The goal is to strengthen student knowledge in preparation for involvement in the cooperative vocational educational program. The students further develop their skills in computer based sign design for digital printing on various substrates as well as cut vinyl. Students will use Chief Architect (our professional 3D architectural software) and the principals and elements of design to produce presentations that will highlight their work. Their presentations include technical drawings, both computer generated and hand drawn renderings as well as samples and concept details describing a finished project. They further their design abilities by identifying the distinguishing features of period furniture and becoming knowledgeable in materials and functional requirements of fabrics, window treatments and home textiles.		
4604	<i>Painting & Design Technology 12th Grade Related</i>	Credits: 1
<hr/>		
Students strengthen skills in career planning, relationships with employers, employees, and customers. Competencies learned in grade 11 are reviewed and reinforced, specifically safety and shop procedures, applied math, working drawings and vocabulary. Reading, writing and math assignments related to Painting Design Technology are an integral part of this class. Workplace competencies include job-hunting, resume writing, and interview techniques.		

Plumbing

All instruction is in accordance with the Commonwealth of Massachusetts Fuel, Gas, and Plumbing Code including Section II (Educational Tier Curriculum) and current Massachusetts Career Vocational Technical Education (CVTE) Frameworks guidelines. For Additional guidelines and curriculum requirements, refer to “248 CMR 11.00 Education and Experience Standards and Requirements for Licensure” on the mass.gov website.

0430 *Plumbing Exploratory*

This one-week exploratory related program is designed to enhance student awareness of the plumbing field. Synchronized use of video, instructor presentation, and relevant literature is provided to the student. Multiple basic shop tasks are being performed on an individual basis along with team work projects.

0431 *Plumbing 9th Grade Shop*

Credits: 8

Students in this two-semester program are given basic orientation in career opportunities, shop-marking procedures, tool crib procedures, and hand tool safety. Students receive instruction in understanding a ruler/tape measure. Procedures on how to measure, cut and preparation of steel, copper, and cast iron piping with various fittings and joining methods.

4301 *Plumbing 9th Grade Related*

Credits: 1

This course provides related theory instruction closely aligned with the students’ shop tasks. This allows for the enhancement of the academic discipline related to a particular task. The understanding of basic mathematical requirements pertaining to linear measurements determining diameters, sizes, types, connections and uses within the industry of steel, copper and cast iron pipe and fittings.

0432 *Plumbing 10th Grade Shop*

Credits: 8

Students receive a full school year of instruction in the areas of power tool safety, water heaters, hot and cold water distribution systems, drainage waste, and venting system, installation of rough and finish plumbing for residential plumbing fixtures, valve repair, power threading, equipment and safety. Process piping on both steel and copper using multiple styles of hangers and supports.

4302 *Plumbing 10th Grade Related*

Credits: 1

Students are instructed in theory continuing within the Tier I curriculum on related shop tasks including water heaters, hot and cold water distribution systems, basic drainage waste and vent systems, residential blueprint reading, and valve characteristics. Reading, writing, and math, assignments related to the plumbing professions are integrated with academic frameworks during this class.

0433 *Plumbing Shop 11th Grade Shop*

Credits: 8

Students are instructed in the areas of sizing and installing gas piping, introduction to drain-cleaning, introduction to the installation of commercial plumbing fixtures, and an introduction to residential gas hydronic heating systems. In addition to shop tasks, students perform plumbing facility maintenance work under direct instructor supervision.

4303 *Plumbing 11th Grade Related*

Credits: 1

Students continue plumbing related theory in accordance with their shop tasks. This includes sizing gas piping, cleanouts and cleanout locations, laws pertaining to commercial plumbing fixtures, and residential heating system design. Reading, writing, and math assignments related to the plumbing professions are integrated with academic frameworks during this class.

0434 *Plumbing 12th Grade Shop*

Credits: 8

Students focus on an in-depth review of previous instruction. The goal is to strengthen student knowledge in preparation for involvement in the cooperative vocational educational program. In addition, students may be involved in school facility maintenance work.

4304 *Plumbing 12th Grade Related*

Credits: 1

The related program is designed to fine-tune the students plumbing studies to date. An in-depth study of heating system design, gas piping design, hydraulic data, and plumbing code license preparation is the focus of instruction. Research, which includes reading, writing, and math assignments related to the plumbing professions, is integrated with academic frameworks during this class.

ADMISSION POLICY

[Approved by the Massachusetts DOE: June 21, 2004]

[Revisions Approved by Mass DESE: August 2013]

[Revisions Approved by Mass DESE: October 14, 2015]

[Revisions Approved by MASS DESE: October 26, 2018]

[Revisions Approved by BVT School Committee: November 18, 2021, Amended December 16, 2021]

PREAMBLE

Reviewers of the admissions plan which follows are first encouraged to recognize that the Blackstone Valley Vocational Regional School District (BVT) does not limit its services to its campus-based enrollees. Over the past three decades our system has assisted sister LEAs in establishing Chapter 74 programs, DESE authorized Pathway options, and multiple career education opportunities. Districtwide students have participated in and benefitted from multiple integration initiatives from robotics, medical assisting, historical re-enactments, and science lessons provided by their regional vocational technical partner. As a viable educational partner, the District fosters multiple shared endeavors among its eleven feeder LEAs. Collaborative ventures include but are not limited to hosting events which showcase educational models and excellence of all educational systems, professional development training, shared grant pursuits, extending consulting support to colleagues, operating vaccination clinics, and providing construction assistance for career labs. New forms of collaboration are regularly advanced via monthly meetings among area Superintendents, their staff, and BVT personnel.

This plan is anchored in the District's most recent state-approved admissions plan, which was approved by DESE in FY2019, and builds upon that plan to incorporate changes mandated by the adoption of amendments to the Vocational Technical Education Regulations, 603 CMR 4.03(6)(a), by the Board of Education on June 22, 2021.

At Blackstone Valley Tech, we recognize the importance of inclusivity and are mindful of the need to ensure our admissions policy and procedures are sensitive to equity and access issues of targeted populations within our catchment area. Enrollment data confirms that policy and procedure changes over the past three years has the District trending favorably in increasing enrollment of students of color and students with disabilities. Our goal is to continue this positive movement towards equity in CVTE enrollments at BVT by strengthening our recruitment efforts and support systems to be more inclusive of first language not English (FLNE), English Learner (EL), and economically disadvantaged students. An important part of this plan relies upon the CVTE Equitable Access Grant received during the summer of 2021, which will facilitate funding for a recruitment specialist responsible for recruiting and advocating for EL, FLNE, and economically disadvantaged applicants; a data specialist to analyze enrollment and other data to support enrollment policy and procedure changes; Spanish and Portuguese interpreters for recruitment events; bus transportation costs for bilingual tours; and supplies and materials to ensure equitable access to information on CVTE and BVT's online application.

Additional support measures include continuing to provide orientation for sending school counselors, tours and open houses for prospective students and their families, and admissions information on our website provided in both Spanish and Portuguese. To strengthen the ability of targeted populations to be successful applicants, our website offers several virtual information sessions and provides sample questions to be used in preparing for admissions interviews. The District has also created additional opportunity for enrollment via the DESE approval on July 13, 2021 of a revised two-year Drafting program that will enable us to accept Grade 11 applicants. To field test the DESE suggested lottery process, the District will review candidates for its revised two-year Drafting Program under a proposed lottery process.

Within this Admissions Policy, the parameters of selection criteria have been detailed to ensure compliance with BOE approved amendments. For example, all excused absences are forgiven within the Attendance score and an opportunity is provided for candidates to appeal the score to shed light on extenuating circumstances which may have impacted attendance. Similarly, minor infractions are no longer considered within the School Discipline/Conduct score, and more in-depth review of discipline issues allows admissions personnel to reach an individualized assessment of each candidate's conduct.

The District is committed to monitoring and self-analyzing the impact of admissions outcomes to ensure positive trending to mirror protected populations within the catchment. This, along with the redefined candidate review process detailed within the following, should enable the District to gauge the impact of its reconfigured admissions. The District reaffirms its commitment to provide quality career technical education to its thirteen member communities equally.

INTRODUCTION

Blackstone Valley Vocational Regional District School Committee has established an admissions process due to the space limitation of Blackstone Valley Tech. Vocational technical laboratories (shops) are designed and equipped to serve a specific maximum number of students safely. Consequently, a complex of such laboratories lacks both the space and flexibility to accommodate the possible needs and/or interests of all applicants. Therefore, a process is utilized to determine which applicants have demonstrated a commitment to their education and a readiness for rigorous career technical studies. All applicants to grades nine through twelve at Blackstone Valley Regional Vocational Technical High School will be evaluated using the criteria contained in this Admissions Policy.

The Blackstone Valley Vocational Regional School Committee will annually review and approve the District's Admission Policy no later than October 1st unless requesting an extension from the Department of Elementary and Secondary Education (DESE). The Superintendent will submit an annual attestation by October 1st to the DESE indicating the Admission Policy has been approval of the District's School Committee.

The Blackstone Valley Vocational Regional District School Committee approved the current policy on November 18, 2021.

A copy of the approved Admission Policy will be made available in the following locations:

- On file with the Massachusetts Department of Elementary and Secondary Education (DESE)
- On file with the BVT Human Resources Department in the District's Policy Manual
- Admission page of the BVT website
- Included in the annual publication of the BVT Program of Studies
- Linked to the admission application
- Linked to a copy of admission decline letters

EQUAL EDUCATIONAL OPPORTUNITY

Blackstone Valley Regional Vocational Technical High School admits students and makes available to them its programs and courses of study without regard to race, color, sex, religion, national origin, gender identity, sexual orientation, homelessness or disability.

If there is a student with limited English proficiency, a qualified representative from Blackstone Valley Regional Vocational School District will assist the applicant in completing the necessary forms and assist in interpreting during the entire application and admissions process upon the request of the applicant. All admission materials, tours, open houses and applications are made available in multiple languages, via our website, language interpreters, or by contacting the Admission Office.

Students with disabilities may voluntarily self-identify for the purpose of requesting reasonable accommodations during the entire application and admissions process.

Blackstone Valley Tech is committed to providing educational opportunities to students experiencing homelessness. Please contact Blackstone Valley Tech's liaison (Mr. Matthew Urquhart, Assistant Principal) at 508-529-7758 x3024 or murquhar@valleytech.k12.ma.us with any questions on how BVT can assist in the application process.

Consistent with Massachusetts regulations, Blackstone Valley Tech has created a plan with "deliberate, specific strategies to promote equal educational opportunities and attract, enroll, and retain a student population that, when compared to students in similar grades in sending districts, has a comparable academic and demographic profile."

Blackstone Valley Tech:

- Employs a full time licensed teacher of English Learners. This teacher serves as a liaison for students and parent(s)/guardian(s) of English Learners and supports students in both their academic and shop courses.
- Maintains a Diversity, Equity and Inclusion team of staff members.
- All staff is provided with yearly training and professional development in the support of students with diverse backgrounds.
- All professionally licensed teaching staff are SEI indorsed or enrolled in SEI coursework.
- Curricular materials with in the vocational, academic and school counseling areas are regularly reviewed for bias and generalizations.
- Utilizes multilingual and/or multicultural students as ambassadors in the admissions process to travel to sending middle schools for presentations about BVT.
- Employs many internal interpreters while also contracting externally to ensure availability and accessibility for students, parent(s)/guardians(s) and families to all school activities.
- Has many student clubs, organizations and activities that promote causes and celebrations related to diversity, equity, and inclusion of all students.

Information on limited English proficiency, disability or homeless status submitted voluntarily by the applicant, for the purpose of receiving assistance and accommodations during the entire application and admission process, will not affect their admission to the school.

ELIGIBILITY

Any eighth, ninth, tenth or eleventh grade student who is a resident of the Blackstone Valley Vocational Regional School District (Bellingham, Blackstone, Douglas, Grafton, Hopedale, Millville, Milford, Mendon, Millbury, Northbridge, Sutton, Upton, Uxbridge) who expects to be promoted to the grade they seek to enter by their local district is eligible to apply for fall admission or admission during the school year subject to the availability of openings to Blackstone Valley Regional Vocational Technical High School. Resident students will be evaluated using the criteria contained in this Admissions Policy. Priority for admission is given to Blackstone Valley Vocational Regional School District residents according to the District Agreement. Resident students who meet the requirements for admission shall be admitted prior to acceptance of any non-resident students seeking the same program.

Homeschool applicants may apply to attend Blackstone Valley Tech full-time and will be subject to the same admissions standards as other applicants.

Students who are not residents of the Blackstone Valley Vocational Regional School District are eligible to apply for fall admission or admission during the school year subject to the availability of openings to Blackstone Valley provided they expect to be promoted to the grade they seek to enter by their local district. Nonresident students will be evaluated using the criteria contained in this Admissions Policy.

Transfer students from other Chapter 74 State Approved Programs are eligible to apply for fall admission or admission during the school year to grades 9-12 at Blackstone Valley provided they expect to be promoted to the grade they seek to enter by their current school. Transfer students will be evaluated using the criteria contained in this Admissions Policy and the availability of seats in the same program at BVT.

ORGANIZATIONAL STRUCTURE

Blackstone Valley Tech is a public regional vocational technical school located in Upton, Massachusetts. Blackstone Valley Tech is a member of the Blackstone Valley Vocational Regional School District and is accredited by the New England Association of Schools and Colleges. Blackstone Valley Tech is committed to providing quality vocational technical programs.

It is the responsibility of the Blackstone Valley Tech's Superintendent-Director to supervise the administration of the policies and procedures used to admit and enroll applicants, consistent with all applicable laws, regulations and guidance in conformity with this Admissions Policy.

Blackstone Valley Tech has an Admissions Committee appointed by the Superintendent-Director. The committee is chaired by the Vocational Director and consists of members of the Administration, School Counselors, Student Services, Vocational Technical and Academic Departments. Responsibilities of the Admissions Committee include:

- A. determination of standards for admission
- B. development and implementation of admission procedures
- C. processing of applications
- D. acceptance of students according to the procedure and criteria in the admissions policy
- E. establishment and maintenance of a list of candidates to be considered for admission when/if seats become available.

The Blackstone Valley Tech Vocational Director is responsible for disseminating information about Blackstone Valley Tech through local school assemblies, information sessions, school tours, open houses, direct mailings, and press releases. Additionally, they are responsible for collecting applications from the local schools.

Blackstone Valley Regional Vocational Technical School District Agreement:

Blackstone Valley Regional Vocational Technical School District is governed by a School Committee composed of one elected member with residency consideration for each town and district wide election across all 13 communities. Annually, the Admissions Committee makes a recommendation to the School Committee regarding the number of positions available for new students for the coming school year.

In accordance with the Educational Reform Act, the Blackstone Valley Vocational Regional School District Committee votes annually on whether to adopt school choice. Currently, by such vote, Blackstone Valley Tech is not a choice school. The overwhelming application interest from member towns contributed significantly to this decision.

RECRUITMENT PROCESS

1. Blackstone Valley Tech disseminates information about the school through a variety of methods.
 - a. Representatives from Blackstone Valley Tech will make themselves available to visit each sending school in the fall (October/November) to meet all eighth graders and conduct an informational program about the vocational-technical-academic offerings available at Valley Tech. This program consists of viewing a video about the school, a question and answer period and a review of dates relative to tours of the school, Admission Open House, and due date for completed applications.
 - b. The Admissions Office will offer a series of evening virtual information sessions for interested parents/students. These events will be advertised on the school's website and via a direct mailing to all district 8th grade students. This program consists of viewing a video about the school, a question and answer period and a review of dates relative to tours of the school, admission open house, and due date for completed applications.
 - c. An Admission Open House is scheduled in late November/early December. Prospective students and their parent(s)/guardian(s) have an opportunity to visit all vocational-technical programs and speak with teachers as well as view a presentation about all offerings. Language interpreters are onsite at the school during the Admission Open House and are available throughout the evening to assist with tours and to answer admission questions.
 - d. Parent(s)/guardian(s) may schedule individual and/or group visits at a mutually convenient time.
 - e. Brochures, which describe vocational technical programs including academic courses, sports, student activities, cooperative education, and special education resources are distributed during the 8th grade visitations, attached to our school's website and available during the admission open house. BVT makes available all admission materials including these documents, resources, and the application in multiple languages.
 - f. Blackstone Valley Tech does not require potential students or their parents/guardians to attend any school tours, open houses, or information sessions as a condition of the application and/or enrollment.

APPLICATION PROCESS

Application Deadlines:

9th Grade Applications for Fall Admissions First Friday in February
10th, 11th & 12th Grade Applications for Fall Admissions First Friday in April

APPLICATION PROCESS - FOR FALL ADMISSIONS*

TO THE NINTH, TENTH, ELEVENTH AND TWELFTH GRADE

1. Students interested in applying to Blackstone Valley Tech for fall admission to the ninth, tenth, eleventh or twelfth grade must:
 - a. Obtain an application from their local school Guidance Counselor or complete the online application. The paper application and online application portal will be available each year on October 1st.
 - b. For the paper version of the application, return the completed application form to their local school Guidance Counselor by the deadline set by the Guidance Counselor. Students who complete the online application, a request will be made of their Guidance Counselor by the BVT Admissions Office to complete the sending school information.

* applying for admission during the winter and spring to begin classes the following fall

- c. Attend an interview at their local school, at Blackstone Valley Tech or via a virtual platform, conducted by Blackstone Valley Tech Staff or come to Blackstone Valley Tech for an interview. The Admission Office will work with students and parents/guardians to establish a schedule that works best for all parties.
2. It is the responsibility of the local school Guidance Counselor to:
 - a. Complete their portion of the application form or complete the data request form provided by the BVT Admission Office.
 - b. Forward the completed application or data spreadsheet to the Admissions Office at Blackstone Valley Tech by the first Friday in February. Complete applications include:
 - (i) Completed application form (including required signatures).
 - (ii) For applications to grade 9 (fall admission), the grade 7 and terms 1 & 2 grade 8 courses taken and marks obtained in English language arts or its equivalent, social studies, math and science from the local school report card/transcript are required. For applications to grades 10, 11 & 12 (fall admission) courses taken and grades obtained from the previous school year and terms 1 & 2 of the current school year in English language arts or its equivalent, social studies, math and science from the local school report card/transcript are required.

For applications to grade 9 (fall admission), grade 7 and terms 1 & 2 grade 8 unexcused absences from the local school report card/transcript are required.

For applications to grades 10, 11 & 12 (fall admission) the sum of the previous school year and terms 1 & 2 current school year unexcused absences from the local school report card/transcript is required.

For applications to grade 9 (fall admission), the grade 7 and terms 1 & 2 grade 8 behavior records from the local school report card or from the local school Guidance Counselor's recommendation are required. For applications to grades 10, 11 & 12 (fall admission) the previous school year and terms 1 & 2 of the current school year behavior records from the local school report card/transcript or from the local school Guidance Counselor's recommendation are required.

For applications to grade 9, 10, 11 and 12 (fall admission), the local school Guidance Counselor's recommendation for each candidate is required.
3. If incomplete applications are received, the following procedures will be followed:
 - a. The Admissions Office at Blackstone Valley Tech will notify the local school Guidance Counselor and parent/guardian that the application that the application is incomplete and will request completion.
 - b. The applicant's parent(s)/guardian(s) will be notified by the Blackstone Valley Tech Admission Office in the event that the problem is not resolved by the local school Guidance Counselor.
 - c. For applications that are not completed (missing data/information) prior to the first Friday in February deadline, our admissions office will continue to work with the sending school and parent(s)/guardian(s) to complete the application for the second and subsequent rounds of admission.

LATE APPLICATIONS

Applications received before the first Friday in February will be considered for the first round of admissions. Applications received after the first Friday in February will be eligible for the second and subsequent rounds of the rolling admission process. They will be evaluated using the same criteria as other applications and their composite score will be computed. They will be placed on the established applicant list.

TRANSFER STUDENTS

Applications from students who are enrolled in a state-approved (Chapter 74) vocational technical high school program in another school (transfer students) will be considered for admission (including admission during the school year) if they relocate away from their current school and wish to pursue the same program of study at Blackstone Valley Tech. All transfer applicants must attend an informational meeting at Blackstone Valley Tech. If the applicant or parent/guardian cannot provide transportation, an official from Blackstone Valley Tech will go to the local school to meet with the applicant. Their applications will be evaluated according to the provisions of this Admissions Policy and the availability of seats in the same program at BVT

WITHDRAWN STUDENTS

Students who withdraw from Blackstone Valley Tech and who are attending or not attending another high school may reapply to Blackstone Valley Tech following the procedures contained in this admission policy and will be evaluated using the criteria contained in this Admission Policy.

YEARLY ADMISSION PROCESS

Blackstone Valley Tech utilizes a yearly method for their application and admission process. Applications do not carry over from year to year. An applicant must reapply each year if not offered admission in a given year.

ADMISSION LOTTERY FOR THE TWO-YEAR DRAFTING PROGRAM

A rising junior student (10th grade student at the time of the application) who is a resident of the Blackstone Valley Vocational Regional School District (Bellingham, Blackstone, Douglas, Grafton, Hopedale, Millville, Milford, Mendon, Millbury, Northbridge, Sutton, Upton, Uxbridge) and is interested in pursuing a training in the drafting trade is eligible to apply for the two-year Chapter 74 approved Drafting program.

Application Deadline:

10th Grade Application for Fall Admissions First Friday in April

Students interested in applying to Blackstone Valley Tech for fall admission to the two-year Chapter 74 approved Drafting program must complete the following to be eligible for the selection lottery:

- a. Obtain an application from their local school Guidance Counselor or complete the online application. The application and online application portal will be available each year on October 1st. The application must be completed and submitted prior to the deadline.
- b. Applications received after the deadline will not be eligible for the selection lottery.
- c. Applicants will not be eligible for admission if suspended or expelled pursuant to M.G.L. c.71 §37H or §37H1/2.
- d. Successful of completion of 10th grade. The applicants must have passed courses in English language arts or its equivalent and mathematics for the school year immediately preceding their enrollment at Blackstone Valley Tech.

The selection lottery will take place annually prior to May 15th. Student applicants and parents/guardians will be notified two weeks prior of the selection lottery date and time. The lottery will be live via a virtual or in-person session. All students will be issued a selection number. The first 16 selected via lottery will be offered the 16 available seats. All other students remaining will be issued a lottery number 17 through the last applicant and will be placed in this order on a waitlist for the two-year drafting program.

The student(s) and parent(s)/guardian(s) will be notified of their selection. They will have 7 days to accept or decline the offer. If there is a decline, the next person on the lottery driven waitlist will be notified and given the same amount of time to accept or decline. This process will continue until all seats are filled. The process will conclude when all seats are filled or until the first week in September.

Students applying for the two-year drafting program are not eligible for in-school program transfers.

SELECTION CRITERIA

The Admissions Committee, using admissions criteria, process completed applications. Each applicant will be assigned a score derived from the sum of the sub scores of the following criteria.

After points are given in each area, the points are totaled for each applicant. A maximum total of one hundred (100) points can be earned.

A. Scholastic Achievement: Maximum 25 points

Grade Averages	Points
80 - 100	25
70 - 79	20
65 - 69	15
60 - 64	10
0 - 59	0

For applications to grade 9 (fall admission), the average of grade 7 and terms 1 & 2 grade 8 marks in English language arts, social studies, mathematics, and science from the local school report card/transcript are used. For applications to grades 10, 11 and 12 (fall admission) the average of the previous school year and terms 1 & 2 of the current school year marks in English language arts, social studies, mathematics and science from the local school report card/transcript are used. For applications to grades 9, 10, 11 and 12 (admission during the school year) the current school year to the date of the application marks in English language arts, social studies, mathematics and science from the local school report card/transcript are used.

B. Attendance: Maximum 15 points

Absences for all excused reasons by the sending district will not be counted.

The absences from Grade 7 are added to the absences from the first 2 terms of Grade 8 and then divided by six (6) to establish a final average of absences per term. Points are awarded as follows:

Average Days Absent Per Term	Points
0	15 points
1	12 points
2	10 points
3	8 points
4	5 points
5+	0

For applicants receiving a score of 8 points or less in the category of Attendance have the opportunity to submit a letter of evidence indicating the extenuating circumstances surrounding the unexcused absences. This letter will be reviewed by the Admissions Committee to determine if the absences or a portion of the absences will be excused for the purposes of the application.

C. School Discipline/Conduct: Maximum 15 points

Applications will consider student discipline in a binary method. If a student has been suspended for any infractions under M.G.L. c.71, § 37H or M.G.L. c.71, § 37H-½ or been suspended or expelled for more than 10 days cumulative under M.G.L. c.71, § 37H-¾ they will receive 0 points in this category. Otherwise full points will be awarded to the applicant.

D. Local Guidance Counselor's Recommendation: Maximum 15 points

A member of the Guidance Department in each member town will complete a recommendation based on a rubric on the application form.

Rating	Points
Excellent	15
Above Average	10
Average	5
Below Average	0

E. Interview: Maximum 30 points

Licensed teaching staff and administration from Blackstone Valley Tech will conduct personal interviews with all students who apply. The interviewer will award a maximum of 30 points for the applicant's answer to 5 questions. Questions range in point value from 1 to 10 points. The same five interview questions are asked of each applicant and are scored using a rubric.

Rating	Points
Excellent	30
Above Average	23
Average	18
Below Average	10
Poor	0

Blackstone Valley Tech provides a document of helpful interview techniques and a bank of sample interview questions to all applicants. This resource is provided in multiple languages. For students whose first language is not English or is more comfortable answering in another language, interviews will be conducted in the applicant's native language.

For students with learning disabilities (including IEPs, 504s or DCAP plans), a multitude of resources are available to support the applicant during the interview process. The resources include, but not limited to, extended answering time, word banks, repeated questions, additional prompts, etc. To access these accommodations, paren(s)/guardian(s) of students with learning disabilities are encouraged to contact the Student Services at BVT at 508-529-7758 x3013. Sending school guidance counselors can also assist in this process with authorization from the applicant's parent/guardian.

SELECTION PROCESS

In March, members of Blackstone Valley Tech's Admissions Committee will assemble to review all fully completed applications received by the first Friday in February. They will check each application for accuracy before awarding rating points in each category. After awarding rating points, each category will be totaled. The applicants from each town will be ranked from high to low. Students listed above the cut-off score will be selected for admission. Those below the cut-off point will be placed on a hold list. In the event of a tie-breaker situation, acceptances will be prioritized to mitigate the greatest fluctuations in enrollment of a given town versus its enrollment from the prior year. The cut-off score is determined annually by ranking all applicants from top to bottom and selecting the number of applicants necessary to fill the Freshmen Class (i.e. 400 applicants, 225 top ranked are accepted). All students and their local guidance counselors are advised of their admissions status (accepted, hold list) by the 2nd week in April.

After the completion of the first round of admissions, Blackstone Valley Tech will continue to draw from the hold list to fill all available seats until the last Friday in September. Seats may become available due to declines, withdrawals, out-of-district moves, and other methods resulting in opportunities to offer admission to additional students.

Non-resident applicants are evaluated using the criteria in this Admissions Policy and will be placed on the applicant list after the resident applicants. Non-resident applicants on the list will only be accepted if all resident applicants have been accepted.

Applications received after the first Friday in February will be evaluated using the same criteria as other applications and their composite score will be integrated in rank order on the established applicant list.

Late applicants whose applications were not received by Blackstone Valley Tech by the first Friday in February will receive a letter informing them of their status.

ENROLLMENT

In order to enroll at Blackstone Valley Tech for the fall, applicants must have been promoted to the grade they wish to enter by their local school district. In addition, they must have passed courses in English language arts or its equivalent and mathematics for the school year immediately preceding their enrollment at Blackstone Valley Tech.

VOCATIONAL TECHNICAL PROGRAM PLACEMENT

Because Blackstone Valley Tech offers 5 or more Chapter 74 state-approved programs, BVT provides a half year exploratory program for 9th grade students, which is based on the applicable Vocational Technical Education and Massachusetts Curriculum Frameworks.

All ninth grade students enrolled at Blackstone Valley Regional Technical High School participate in a vocational technical exploratory program (August through December) designed to introduce each student to several career pathways while helping them discover their talents and interests through a brief (typically 4-5 days) immersion in seven different vocational-technical areas. Students choose three programs to explore, and Blackstone Valley Tech provides the remaining four, including one gender based, non-traditional shop in compliance with Carl D. Perkins Career and Technical Education Act of 2006 (Perkins IV) . (Example: Automotive for a female student or Cosmetology for a male). Throughout the exploratory experience, vocational teachers evaluate each student based upon a common rubric/scoring guide in the following areas:

- Competency in technical area
- Following Instructions
- Quality of Work
- Safety
- Behavior/Professionalism

Students may receive a maximum of 20 points in each criterion for a total of 100 points. Exploratory scores are then entered into the student information system, tabulated, organized and reported to each individual student and their parent/guardian the week following each experience.

At the conclusion of the exploratory period, each student selects their program of choice; as well as second through seventh choices from the explored shops. The administrative team meets to review scores and student requests which are sorted to rank order the students according to their score in the shop the student requested as their first choice.

To assist in the selection process, Blackstone Valley Tech offers a Freshmen Vocational Career Night which provides the opportunity for parents/guardians to visit the student's top four program choices. Vocational staff present information pertaining to the program's curriculum and State frameworks, post-secondary placement and career paths, co-op and employment opportunities. Language interpreters are present onsite at the school during the Freshmen Vocational Career Night and are available throughout the evening to assist with presentation in the program areas and answer questions regarding the vocational selection process.

Students are admitted into the shop of their choice based on the point total they received in their first choice shop. For example, a student with a point total of 90 would be admitted before a student with a point total of 80.

When a technical program exceeds its capacity for enrollment, the following steps are taken for placement:

1. Students are placed in their 2nd through 7th choices according to their choice of program (shop).
2. Their rank order (using exploratory scores) is then compared to other students requesting that shop.
3. Tie breaker procedure for all placements:
 - First tie breaker - based on the shop average of the selected shop.
 - Second tie breaker – based on the cumulative average of all seven shops.
4. Students will not be placed in a particular shop if they did not pass that shop during exploratory.
5. Program wait lists are created when students are placed in a program other than their first choice, yet would like to be in a different shop that is at full capacity. Students on a wait list are rank-ordered by their exploratory scores. Waitlisted students are notified if an opening occurs in their desired shop and given the option to change shops or remain in their current placement.

If a student did not receive any of their seven choices and wishes to explore additional shops they may do so for two additional cycles provided there is space to safely do so.

After placement, students continue in the shop in which they were placed for the remainder of their school tenure unless they request a transfer. Students who wish to transfer from one shop to another may apply for transfer through their school counselor by completing a Request for Shop Transfer form and obtaining the appropriate signatures after the second 9th grade trimester is completed.

- Transfer requests will be considered subject to availability of openings in the requested program(s). Each transfer applicant will receive career counseling prior to final transfer approval.
- Transfer requests in shop placement will not be allowed after the completion of the first trimester of sophomore year. Exceptions to this may only be authorized and approved at the discretion of the Assistant Superintendent-Director (Principal).

Students who enroll in Blackstone Valley Tech High School after grade 9 will be accepted into a specific technical program upon admission. If, after enrollment, the student desires a shop change, the students may apply for transfer through their school counselor by completing a Request for Shop Transfer form and obtaining the appropriate signatures. Transfer requests will be considered subject to availability of openings in the requested shops. Each transfer applicant will receive career counseling prior to final transfer approval. Transfer requests in shop placement will not be allowed after the completion of the first trimester after enrollment at BVT.

REVIEW and APPEALS

The applicant's parent(s)/guardian(s), upon receipt of a letter from Blackstone Valley Tech indicating that the applicant was not accepted, may request a review of the decision by sending a letter requesting a review to the Vocational Director within thirty days of the receipt of the letter. The Vocational Director will respond in writing to the letter with the findings of the review within thirty days.

If after the review, the parent/guardian wishes to appeal the findings of the review they may do so by sending a letter requesting a meeting with the Superintendent-Director to appeal the Vocational Director's findings. The Superintendent-Director will respond in writing to the parent/guardian with a scheduled date for the appeal within thirty days of the receipt of the letter. The Superintendent-Director will respond in writing to the letter with their decision on the appeal within thirty days of the meeting with the Superintendent-Director when the appeal was presented.

The applicant's parent/guardian, upon receipt of a letter from Blackstone Valley Tech indicating that the applicant was not accepted or placed on a waiting list for a particular program (shop)(major), may request a review of the decision by sending a letter requesting a review to the Vocational Director within thirty days of the receipt of the letter. The Vocational Director will respond in writing to the letter with the findings of the review within thirty days.

MAINTENANCE OF RECORDS

Blackstone Valley Regional Vocational Technical High School maintains records of all students who apply, enroll, or are waitlisted, as well as their score on admission criteria (if used), to facilitate analysis of its admissions system and compliance with applicable laws and regulations. Blackstone Valley Tech will provide this information to the Department upon request.

ADMISSION INITIATIVES 2021-2022

The Blackstone Valley Vocational Regional School District has continuously evaluated and revised its Admission Policy to reflect the need to provide equitable access to our school and its programs. Using tools provided by the DESE to evaluate data, stakeholder input, and program trends, revisions to the Admission Policy are proposed and along with a plan of initiatives to support the admission process. The following initiatives are planned for the 2021-2022 admission season to support the approved Admission Policy:

2. Obtained CVTE Equitable Access Grant resulting in the establishment of two positions to the support the admission process:
 - a. Recruitment Specialist – This is a grant-funded position through the CTVE Equitable Access grant that will help improve equitable access to the admission process for Blackstone Valley Tech. The role of this person will include the recruiting and advocating for but not limited to English learners, FLNE and economically disadvantaged student applications from the 13 sending towns. In addition, this position will act as a liaison creating and maintaining partnerships with sending districts, community organizations, and families to provide access to the admission process. The Admission Recruitment Specialist will develop, coordinate, and deliver outreach programs to educate prospective students and their families on the benefits of a vocational technical education.
 - b. Equitable Access Data Specialist - This is a grant-funded position through the CTVE Equitable Access grant that will help improve equitable access to the admission process for Blackstone Valley Tech. The role of this person will be to collect and present data that focuses on the admission process at BVT to support policy and procedure changes.

- c. Application assistance – The purchase of a lap top with internet access via a hot spot allowing the Recruitment Specialists to access admission information and the online application a variety of locations including community locations,
3. Increased and expanded use of multiple language resources in all areas of our admission process, including but not limited to:
 - Online materials
 - Application
 - Printed materials
 - In-person tours
 - Interviews
 - Open house
 - Career & curriculum nights
4. Conduct meetings with District stakeholders for the purposes of soliciting input pertaining to the admission policy and process.
 - Sending school guidance counselors
 - Program advisory board members
 - Current BVT student and parents
 - Prospective BVT students and parents
 - Community members at large

Appendices of Admission Policy Resources for 2021-2022

Appendix A:	CTVE Equitable Access Data Specialist Job Description	Page 17-18	
Appendix B:	CTVE Admission Recruitment Specialist Job Description	Page 19-20	
Appendix C:	BVT Admission Webpage	Page 21-25	
	English	https://www.valleytech.k12.ma.us/Page/38	
	Spanish	https://www.valleytech.k12.ma.us/Page/1672	
	Portuguese	https://www.valleytech.k12.ma.us/Page/1673	
Appendix D:	Interview Anxiety & Sample Interview Questions	Page 26-34	English,
	Spanish, Portuguese Translation		
Appendix E:	Interview Accommodation	Page 35	
Appendix F:	Graphic Organizer for Interviews	Page 36-39	

English:

Is BVT right for you?

Making the decision to attend a vocational-technical high school might just be one of the most important decisions of your life thus far. But how do you know whether BVT is right for you?

It's simple, really. Start by answering these questions:

- Do you love a good challenge?
- Do you learn best when your hands, mind, and heart work together?
- Are you open to new ideas, working collaboratively, and listening intently?
- Are you ready to expand your outlook and make meaningful connections within a unique community?
- Do you believe it's never too soon to begin planning your future?

If your answer to any of these questions is an enthusiastic "YES!" we'd love to hear from you. Take some time to browse through our View Book and read about our 18 exciting career vocational-technical programs and rigorous academic offerings. See how many extracurricular activities are available to help you develop your interests, fuel your passion, make new friends, and have fun!

Spanish:

¿Es BVT adecuado para usted?

Tomar la decisión de asistir a una escuela secundaria vocacional-técnica podría ser una de las decisiones más importantes de su vida hasta ahora. Pero, ¿cómo saber si BVT es adecuado para usted?

Es simple, de verdad. Comienza por responder a estas preguntas:

- ¿Te encanta un buen desafío?
- ¿Aprendes mejor cuando tus manos, mente y corazón trabajan juntos?
- ¿Estás abierto a nuevas ideas, trabajando en colaboración y escuchando atentamente?
- ¿Estás listo para expandir tu perspectiva y hacer conexiones significativas dentro de una comunidad única?
- ¿Crees que nunca es demasiado pronto para comenzar a planificar tu futuro?

Si su respuesta a cualquiera de estas preguntas es un entusiasta "¡SÍ!" nos encantaría saber de usted. Tómese un tiempo para navegar a través de nuestro View Book y leer sobre nuestros 18 emocionantes programas vocacionales-técnicos de carrera y rigurosas ofertas académicas. Vea cuántas actividades extracurriculares están disponibles para ayudarlo a desarrollar sus intereses, alimentar su pasión, hacer nuevos amigos y divertirse!

Portuguese:

BVT é certo para você?

Tomar a decisão de cursar um ensino fundamental profissional-técnico pode ser uma das decisões mais importantes de sua vida até agora. Mas como você sabe se bvt é certo para você?

É simples, na verdade. Comece respondendo a essas perguntas:

- Você ama um bom desafio?
- Você aprende melhor quando suas mãos, mente e coração trabalham juntos?
- Você está aberto a novas ideias, trabalhando de forma colaborativa e ouvindo atentamente?
- Você está pronto para expandir sua perspectiva e fazer conexões significativas dentro de um comunidade única?
- Você acredita que nunca é cedo demais para começar a planejar seu futuro?

Se sua resposta a qualquer uma dessas perguntas é um entusiasmado "SIM!" adorariamos ouvir de você. Tire um tempo para navegar pelo nosso View Book e ler sobre nossos 18 programas profissional-técnicos de carreira emocionantes e ofertas acadêmicas rigorosas. Veja quantas atividades extracurriculares estão disponíveis para ajudá-lo a desenvolver seus interesses, alimentar sua paixão, fazer novos amigos e se divertir!

English:

How to Apply

Students with a passion for learning who reside in the 13-town of Blackstone Valley Vocational Regional School District and who will have completed Grade 8 prior to enrolling, may apply. This year we will be offering an online Freshman application. The [freshman online application](#) (opened October 1st) is the primary and preferred method for applying. However, if you need a paper copy, you may obtain one from your school guidance counselor or call our Admissions Office at 508-529-7758 x3020. **The deadline to apply for grade 9 is the first Friday in February.**

Upperclassmen Application: Admissions for grades 10-12 are subject to the availability of openings. Upperclassmen, like 8th-grade students interested in applying for the 9th grade, please use the [upperclassman online application](#) or obtain an application from their local school Guidance Counselor, and proceed through the admissions process in the same way. **The deadline to apply for upperclassman is the first Friday in April.**

Admission Timeline

The following timeline should be kept in mind (*subject to change due to COVID-19*):

- **November:** Tentatively, campus tours are not available at this time. Opportunities to tour may arise over the winter months. The Open House is scheduled to be in-person. Decision will be made as the date approaches.
- **First Friday in February:** Application Deadline.
- **February:** Interviews are conducted virtually.
- **March (late):** Notification/acceptance letters mailed.
- **First Friday in April:** Upperclassman application deadline.
- **April 9, 2022:** [Placement testing](#) for accepted incoming freshman students.
- **April (late):** Deadline to accept for those who received an acceptance letter.
- **June/July:** Subject to availability of openings, applications for upperclassmen are reviewed. For complete details on what it takes to become a BVT Beaver, check out our [BVT Admissions Policy](#).

Appendix A: Admissions Standards for the Massachusetts State Colleges and Universities

Minimum Admissions Requirements for Massachusetts State Universities and Undergraduate UMASS Campuses

The minimum undergraduate admissions standards for the state universities and UMass campuses were established for several primary reasons: first, to emphasize the importance of successfully completing a rigorous academic course of study in high school (example MassCore, a recommended program of studies that includes specific numbers and types of courses across academic subjects); second, to ensure that students are well prepared to begin college courses and their path to degree; and third, to increase consistency of undergraduate admissions across the state universities and UMass campuses.

Again, these standards are minimum requirements. Eligibility for undergraduate admission is not an entitlement of admission for any applicant; as such, meeting the minimum standards does not guarantee admission, since admissions officers consider a wide range of factors in when reviewing students' applications, and the state universities and UMass campuses can establish additional requirements. For information about any additional requirements, please contact the admissions office at the institution(s) to which the student is interested in applying.

Note: These standards do not apply to the community colleges, which implement open admissions and enrollment policies. For additional information about admissions policies at the community colleges, please contact the admissions office at the institution(s) to which you are interested in applying.

Freshman Applicants

The admissions standards for freshmen applicants at Massachusetts' public four year institutions have three primary components:

1. Successful completion of required academic courses in specific subjects; and
2. A minimum average and weighted grade point average (GPA) earned in high school level academic courses;
3. The submission of SAT or ACT scores.

Academic Course Requirements for Entering College Freshmen

All freshman applicants are required to successfully complete the following courses in each academic subject over their four years of high school. Applicants are required to have completed 17 courses. This reflects the required completion of four courses of mathematics in high school including mathematics in the senior year, effective fall 2016. In fall 2017 an additional lab science will be required.

The table below provides detailed information about the course requirements for each academic subject.

Subject	Requirements for Entering College Freshmen		
	Fall 2015	Fall 2016	Fall 2017 and beyond
English	4 Courses		
Mathematics	3 courses (Algebra I & II and Geometry or Trigonometry or comparable coursework)	4 courses (Algebra I & II and Geometry or Trigonometry or comparable coursework) including mathematics during the final year of high school	
Sciences	3 courses (from Natural Science and/or Physical Science and/or Technology/ Engineering; including 2 courses with laboratory work). Technology Engineering courses must be designated as science courses (taken for science credit) by the high school		3 courses (from Natural Science and /or Physical Science and/or Technology/Engineering), including 3 courses with laboratory work
Social Sciences	2 courses (including 1 course in U.S. History)		
Foreign Languages	2 courses (in a single language) Note: American Sign Language (ASL) is a foreign language.		
Electives	2 courses (from the above subjects or from the Arts & Humanities or Computer Sciences)		

Note: comparable courses are defined as coursework that is equal to or beyond the content defined in the Massachusetts Curriculum Frameworks.

If a high school designates a course as a comparable mathematics course or designates a science course as a science laboratory course, college admissions officers must accept that the course meets the above requirements. High school transcripts should clearly indicate that the course(s) are mathematics or science courses.

MINIMUM GPA REQUIREMENT

The minimum average GPA for freshman applicants, weighted for accelerated (Honors and Advanced Placement) courses, is 3.0 for both the state universities and the UMass undergraduate campuses. Detailed information about calculating the weighted GPA is presented in the Appendix.

This GPA is based on all courses completed and grades received for courses in which the student is currently enrolled (for example, mathematics courses in which the student is enrolled during the senior year of high school).

SAT/ACT SCORE REQUIREMENTS FOR APPLICANTS WHO DO NOT MEET THE GPA REQUIREMENT

All freshman applicants who meet the minimum average GPA requirement of 3.0 and are within three years of their high school graduation must submit their SAT scores (for Critical Reading and Mathematics) or ACT scores.

For freshman applicants who do not meet the minimum GPA requirement, they must earn the following SAT or ACT scores in order to be eligible for admission.

NOTE: NO APPLICANT WITH A HIGH SCHOOL GPA BELOW 2.0 MAY BE ADMITTED TO A STATE UNIVERSITY OR UMASS UNDERGRADUATE CAMPUS.

**Table 2A: NEW SAT – SAT test administration after March 2016
Required NEW SAT or ACT Scores for Freshman Applicants to UMass**

Weighted Average GPA	Combined NEW SAT Score (Evidenced Based Reading & Writing and Mathematics)	ACT Score
2.51 - 2.99	1030	20
2.41 - 2.50	1070	21
2.31 - 2.40	1110	22
2.21 - 2.30	1140	23
2.11 - 2.20	1180	24
2.00 - 2.10	1220	25

**Table 3A: NEW SAT – SAT test administration after March 2016
Required NEW SAT or ACT Scores for Freshman Applicants to State Universities**

Weighted Average GPA	Combined SAT Score (Critical Reading and Mathematics)	ACT Score
2.51 - 2.99	990	19
2.41 - 2.50	1030	20
2.31 - 2.40	1070	21
2.21 - 2.30	1110	22
2.11 - 2.20	1040	23
2.00 - 2.10	1180	24

EXCEPTIONS AND ALLOWANCES FOR SPECIFIC GROUPS OF STUDENTS

APPLICANTS WHO ARE ENGLISH LANGUAGE LEARNERS

An English language learner or limited English proficient student is defined as a student who does not speak English (or whose native language is not English) and is not currently able to perform ordinary classroom work in English, or a student who was identified as an English language learner or limited English proficient student at any point during his or her high school career. Students who were English language learners during high school must complete all required high school level academic courses with two exceptions:

1. They may substitute up to two electives for the two required foreign language courses; and
2. They may substitute up to two years of college preparatory English as a Second Language courses for college preparatory English courses.

APPLICANTS WITH LEARNING OR OTHER DISABILITIES

Applicants with professionally diagnosed and documented learning disabilities (documentation must include diagnostic test results) are exempt from taking standardized tests for admission to any public institution of higher education in the Commonwealth. However, these applicants must complete all required academic courses and earn a minimum average GPA of 3.0 or present other evidence of the potential for academic success.

Note: an applicant with learning or other disabilities may substitute two electives for the two required foreign language courses if s/he has submitted to the high school the results of an evaluation, completed within the past three years, that indicates a specific diagnosis of a learning disability that affects the ability to learn a foreign language.

APPLICANTS ENROLLED IN CAREER/VOCATIONAL TECHNICAL HIGH SCHOOL PROGRAMS

Applicants enrolled in career/vocational technical high school programs must complete the required number of college preparatory courses, distributed in the same manner and with the same minimum grade point averages required of other high school graduates, with the following exceptions:

- Two vocational and technical courses may be used to fulfill the two required electives.
- Applicants who do not complete the two required foreign language courses must complete an additional elective course, for a total of three such courses, and also satisfy one of the following options:
 1. Complete at least one full academic year of study of foreign language or
 2. Complete a fourth full academic year of study of science technology/engineering, which need not be a laboratory course; or
 3. Complete one full academic year of study of computer science.

For more information on State College and University Admissions, go to <http://www.mass.edu/forstufam/admissions/admissionsstandards>.

