

## TABLE OF CONTENTS

Administrative Staff	2
Welcome: Principal's Message	3
Mission Statement	4
Our Vision	4
Parent/Guardian Guide for Grades 9-12	5
Planning Your Program	6
Massachusetts Comprehensive Assessment System (MCAS)	7
Ninth & Tenth Grade Experience (NGE/10GE), and Newcomer Education Success Team (NEST)	7
Requirements: Graduation, Program & Promotion	8
GPA Policy	10
School Counseling Department	12
Course Level Descriptors	13
<b><u>COURSE DESCRIPTORS</u></b>	
Art	15
Business Education	18
Center for Career and Technical Education	21
English	29
English Learner Education	32
Health Education/Family & Consumer Sciences	38
Library Media Services	40
Mathematics	42
Music	47
Physical Education	53
Science	55
Social Studies	62
Special Education	67
World Languages	72
Special Programs	76
Add/Drop Protocol	79
List of Modified Courses offerings in SY21 .....	80
Daily Schedule	81
Somerville High School Scholarship Foundation Engraved Brick Campaign	81



Somerville High School is accredited by the New England Association of Schools and Colleges, Inc., a non-governmental, nationally recognized organization whose affiliated institutions include elementary schools through collegiate institutions offering postgraduate instruction.

The courses described herein will be offered each year provided a sufficient number of students select the course, a qualified teacher can be assigned, and suitable facilities are available.

**SOMERVILLE HIGH SCHOOL**  
81 Highland Avenue  
Somerville, Massachusetts 02143  
(617) 629-5250

**SCHOOL DEPARTMENT ADMINISTRATION**

		<u>Phone</u>
Superintendent of Schools	Mary Skipper	617-629-5200
Assistant Superintendent for Curriculum & Instruction	Chad Mazza	617-629-5214
Director of Finance	Francis Gorski	617-629-5216
District Administrator for Student Services	Liz Doncaster	617-629-6233
Human Resources and Diversity Administrator	Mariana MacDonald	617-629-5229
Director of Special Education	Christine Trevisone	617-629-5646

**HIGH SCHOOL ADMINISTRATION**

<b>Principal</b>	Sebastian LaGambina	617-629-5264
<b>Assistant Principal</b>	Sean Callanan	617-629-5258Re

**Assistant Principals**

Beacon House (A-Doq)	Nicole Viele	617-629-5260
Elm House (Dor-Le)	Marie Foreman	617-629-5270
Highland House (Lf-Pi)	Harry Marchetti	617-629-5280
Broadway House (Pj-Z)	Paul Cooley	617-629-5290

**Department Heads/Supervisors**

Art	Dr. Luci Prawdzik	617-629-5256
Athletics/Intramurals	Stanley Vieira	617-629-5243
Center for Career and Technical Ed./Business	Sean Callanan	617-629-5258
College and Career Readiness (x 6259)	Melanie Kessler	617-625-6600
English	Jodi Remington	617-629-5247
English Learner Education	Emily Blitz	617-629-5478
Information Technology	John Breslin	617-629-5263
Library	Charles LaFauci	617-629-5449
Math	Trish Murphy-Sheehy	617-629-5246
Music	Richard Saunders	617-629-5248
Physical Education/Health/Family & Consumer Sciences	Sheila Freitas-Haley	617-629-5249
School Counseling	Traci Small	617-629-5244
Science	Marianna Hosking	617-629-5255
Social Studies	Alicia Kersten	617-629-5253
Special Education (x 6188)	Rachel Ziulkowski	617-629-5250
World Languages	Dr. Lisa Machnik	617-629-5254



***"A Student has the Right to be Treated  
with Dignity and Respect."***

***Encouraging and Maintaining Positive Attitudes  
is an Important Part of the Development  
of the Whole Learner."***



Dear Students, Parents and Guardians of Somerville High School,

Somerville High School is committed to providing a quality education for all students and ensuring that all students are college and career ready upon graduation. We offer a wide range of rich courses to meet the many interests of our students. Our course offerings provide opportunities for students to explore their interests while discovering and refining many skills needed to be successful beyond high school. We hope you use this Program of Studies to assist you in mapping out your path to success at Somerville High School.

As a comprehensive high school, we have the advantage of offering many more courses than traditional schools. We are deeply committed to providing state-of-the-art, cutting-edge career and technical education (CTE) courses, as well as challenging academics such as advanced placement programs and courses to enrich the learning experience in world languages, arts, and music. Our curriculum is aligned with state and federal standards and we have adopted the Mass Core standards which have increased the rigor for all students.

Somerville High School is a place where we value educating the whole student. Our outstanding and dedicated faculty is most interested in being a part of your success. We have various opportunities for you to get connected to the school through clubs, activities, athletics, arts, music, and drama, through our support services, and the house system made up of Beacon, Elm, Highland, and Broadway House. Becoming a part of the Somerville High School community through involvement in extracurricular activities and athletics will make your high school experience more rewarding, enriching, and satisfying. It's imperative that you take advantage of what Somerville High School has to offer so that upon graduation, you leave with many excellent options that meet your individual goals and interests. This may include goals such as being accepted into the four-year college of your choice, receiving a job offer from a local union you desire to work for, or participating in a community college or certificate program that leads to gainful employment. Make the most of your Somerville High School experience and you will be on your way to achieving your goals.

On behalf of the faculty and staff at Somerville High School, we look forward to working with you during this important course selection period.

Sincerely,

Sebastian LaGambina  
Principal

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The Somerville Schools will not discriminate against any student on account of race, color, sex, sexual orientation, gender identity, religion, disability or national origin. This means that all courses and school programs are open to all students and that students will not be denied any opportunity because of race, color, sex, sexual orientation, gender identity, religion, disability or national origin.

## MISSION STATEMENT

*"Dedicated to the preparation of youth for the responsibilities of life."*

Our mission, as educators, is to foster the development of well-educated, responsible and productive citizens through a standards-based program of studies that encourages students to realize their intellectual, creative and civic potentials. In partnership with students, parents/guardians and members of the Somerville community, we strive to provide a healthy, safe, academically challenging, and supportive learning environment in which all students are valued and respected.

### Student Expectations for Learning

- I. Expectations for Academic Performance
  - A. All students will be effective readers.
  - B. All students will be effective writers.
  - C. All students will be effective users of technology.
  - D. All students will be effective critical and creative thinkers.
- II. Expectations for Civic Performance
  - A. Students will volunteer and participate in school clubs and individual and group community service projects and performances.
  - B. Students will follow the rules and laws of school and society, while fostering civic responsibility.
  - C. Students will learn to consistently handle disagreement in a constructive and responsible way by showing respect and tolerance.
  - D. Students will learn how to make safe and healthy decisions as part of the life-long learning process.
- III. Expectations for Social Performance
  - A. Students will exhibit ethical behavior in school and in the community.
  - B. Students will help other students in the daily activities of school and social interaction.

## OUR VISION

Ours is a multicultural school community dedicated to the realization of the full intellectual, physical, social, and emotional potential of all students. We believe our students are capable of high achievement, and we are committed to meeting the individual needs of each student. In this pursuit, we shall maintain a safe environment that nurtures the curiosity, dignity and self-worth of each individual. This vision of our schools impels us to advocate the following:

- Discuss your son/daughter's course selection and future planning.
- We will motivate our students to strive for excellence.
- We will support instruction in a broad realm of academic, aesthetic, health and vocational studies to provide for a well-educated and diverse student body.
- We will supplement formal education with a variety of extracurricular programs and activities to enrich the lives of students and enhance their interests in education.

- We will employ a variety of instructional materials and techniques that accommodate the broad spectrum of developmental levels, individual needs and learning styles.
- We will base instruction on the strengths of our students, transcending recall of information and mastery of basic skills to a full engagement in the critical and creative levels of cognition.
- We will celebrate the multicultural nature of our student population in our curriculum and schools.
- We will maintain educational practices that enhance the aspirations and self-concepts of all students.
- We will maintain appropriate support services for instructional programs.
- Our school will be places of innovation marked by the active involvement of all members of the Somerville community.
- We will maintain an environment that encourages individuals to explore issues and adopt innovative techniques.
- We will encourage collegial relationships within our school community.
- We will reflect the diversity of our population in all school programs and levels.
- We will encourage classroom and school-based decision making within the parameters established by the larger school community.
- We will nurture professional growth and engagement with educational literature as a basis for sound educational decision-making.
- We will involve families and other members of the Somerville community in our school.
- Our students will be prepared for adult life and provided with the vision and determination to contribute to an ever-changing world.
- We will provide students with the skills and attitudes necessary to be responsible adults.
- We will prepare students for entrance into college or into the world of work.
- We will establish in students respect for our democratic ideals and a sense of service to the community.
- We will provide students with needed skills and an appreciation for lifelong learning.
- We will foster in students an appreciation of the environment and their membership in the global community.

## **OUR PARENT/GUARDIAN GUIDE FOR GRADES 9-12**

Parents and Guardians are encouraged to become members of the Somerville High School Parent Teacher Student Association (PTSA) and to become involved in the School Improvement Council. The SHS School Improvement Council is made up of the Principal, one administrator, seven teachers, seven parents/guardians, seven students, each elected by their own constituencies, and an undetermined number of community representatives, nominated and elected by the members of the School Improvement Council. Meetings are open to the public and are scheduled at 6:30 p.m. on the second Wednesday of every month. A period of fifteen minutes is made available at each meeting for public input and/or questions.

Parents and guardians are encouraged to consider the following to help accomplish the standards and curriculum objectives of the Somerville Public Schools.

- Respect your son/daughter's opinions and encourage discussion of his/her concerns.
- Respect the individuality of your son/daughter and encourage independent thinking and decision-making.
- Encourage participation in school activities and talk about the school day.
- Provide a quiet study area for regular use.
- Encourage regular reading habits including reading the daily newspaper (print or electronic).
- Encourage your son/daughter to use technology, such as computers and mobile devices, in the learning process.

- Encourage your son/daughter to participate in school activities.
- Expect good attendance at school with timely arrival each day.
- Develop communication with the school and with your son/daughter's teachers.
- Discuss life choices with your son/daughter that include: identifying one's values, hygiene, health care, relationships, sexuality, and use of drugs, alcohol, and tobacco.
- Set reasonable limits of behavior after discussion with your son/ daughter.
- Expect your son/daughter to assume responsibility for his/her actions and to follow the law.
- Assign tasks to be done at home and around the home and neighborhood.
- Expect your son/daughter to engage in part-time work responsibilities that do not interfere with the responsibilities of school.
- Talk with your son/daughter about local, state, national and international events and issues.
- Enrich your son/daughter's mind through participation in scientific, educational, cultural, and recreational activities.
- Develop with your son/daughter awareness and understanding of the power of advertising on television and elsewhere.
- Encourage respect for the environment and responsible use of resources.
- Expect good money management and spending habits.

Students are encouraged to become involved in the rich variety of activities, clubs, and athletic programs offered throughout the school year. Information about any of the above is available by contacting the principal or your child's counselor.

## PLANNING YOUR PROGRAM

Somerville High School is a comprehensive high school offering a wide array of courses and educational programs to meet the needs of its diverse students.

In light of recommendations by the Massachusetts High School Program of Studies (MassCore) and requirements of the National Collegiate Athletic Association (NCAA), students who are preparing to enter four-year colleges are urged to include in their high school program:



- 4 years of English
- 4 years of mathematics
- 4 years of science (including three laboratory classes)
- 4 years of social studies
- 3 years of a world language (including two years of the same language)
- 1 year of Fine Arts and/or Performing Arts (Music, Visual Arts, Drama)

Following this program, along with all other Somerville High School graduation requirements, ensures that students will meet or exceed MassCore recommendations and eligibility requirements established by the NCAA.

Students are advised to take time and thought when requesting their courses in Aspen since it is very difficult to make course changes once the school year has begun. Course selection should reflect career post secondary goals, interests and abilities. Students are urged to consult with their parents, counselors, teachers, department heads, and curriculum coordinators before making final decisions.



## **THE MASSACHUSETTS COMPREHENSIVE ASSESSMENT SYSTEM (MCAS)**

The Massachusetts Comprehensive Assessment System (MCAS) will be administered in Grade 10 in both English Language Arts (ELA) and Mathematics, while the administration of the Science MCAS will begin starting in Grade 9. According to the Education Reform Act, students are now required to meet specific Competency Determination (CD) standards for English Language Arts (ELA), Mathematics, and Science in order to receive a diploma, in addition to meeting all local graduation requirements.

Before earning their Somerville High School diplomas, students must pass MCAS exams in ELA, Mathematics, and one Science subject. Preparation for these MCAS exams is an integral part of major courses in Grades 9 and 10. Students who fail an MCAS exam are required to participate in additional preparation for their retests. This additional preparation may take the form of for-credit coursework. Students with a low passing score on the Math or ELA MCAS must also continue to progress in subject-area coursework to fulfill an Educational Proficiency Plan.

EPP REQUIREMENT – juniors and seniors who have passed the Mathematics and/or ELA MCAS exam with competency determination level 1 (low passing) are required by the DESE to be on an Educational Proficiency Plan (EPP). Students on an EPP will need to continue a course of study in mathematics by earning 5 credits in mathematics each year.

## **THE NINTH GRADE EXPERIENCE (NGE), TENTH GRADE EXPERIENCE (10GE), AND NEWCOMER EDUCATION SUCCESS TEAM (NEST)**

The goal of NGE is to assist incoming ninth grade students in adjusting to high school standards, expectations, and routines through a variety of educational and social opportunities. The ninth grade team consists of teachers from each core academic department (English, Mathematics, Science, and Social Studies), who work closely together to build community and maximize student potential. Students in the ninth grade follow a core curriculum that establishes a firm foundation for their later choices. The 10GE program supports students in grade 10 and NEST supports English learners in grades 9-12.

NGE, 10GE and NEST teachers meet together twice per week to address the needs particular to each program. The teams work closely with the school counselors and Assistant Principals to identify specific student needs, plan supports, and celebrate student successes. They also utilize weekly meeting time to communicate with families and create engaging and relevant interdisciplinary projects and units. Students' needs are served through theses program by providing the teacher teams with the time, resources, and flexibility to implement these innovative programs.

## REQUIREMENTS: GRADUATION, PROGRAM & PROMOTION

<b><u>PROGRAM REQUIREMENTS/RECOMMENDATIONS</u></b>		<b><u>CREDITS NEEDED TO BE PROMOTED</u></b>	
<b>Freshman (Grade 9)</b>	<b>Sophomore (Grade 10)</b>	to sophomore class	25 credits
English 1	• English 2	to junior class	50 credits
Mathematics	• Mathematics	to senior class	70 credits
Science (Biology)	• Science		
U.S. History 1	• U.S. History 2	Full-Year courses (2 semesters):	5 credits/class
Health Education 1	• Phys. Ed/Health	Half-Year courses (1 semester):	2.5 credits/class
World Language	• World Language		
<b>Junior (Grade 11)</b>	<b>Senior (Grade 12)</b>	<b>ALL STUDENTS in grades 9-12 must carry a full-time program equaling 990 hours of instruction each year.</b>	
English 3	• English 4		
Mathematics	• Mathematics		
World History Themes	• Phys. Ed/Health		
Phys. Ed/Health			
Science			

### GRADUATION REQUIREMENTS:

- Successful completion of **105** credits, with at least **20** credits earned in senior year
- Enrollment in high school for four years beyond eighth grade
- English 1, 2, 3 and 4 or appropriate ELL courses  
NOTE: Students may not take more than two major English courses in one year with the exception of senior year. A student who has failed a major English course must either pass the failed English course in the subsequent summer school session or enroll in an Edgenuity course during the summer or repeat the failed English course in the succeeding academic year. Placement in English courses should be sequential. An exception to the sequential rule can be made for seniors.
- Mathematics, 20 credits  
NOTE: Including a sequence of Algebra 1/Geometry/Algebra 2 or the equivalent (with approval of the Department Head)
- Science, 15 credits
- Social Studies, 15 credits, including U.S. History  
NOTE: Students are required to take U.S. History 1, U.S. History 2, and World History; students must pass at least one year of U.S. History to graduate.
- World Language, 10 credits  
NOTE: Students are required to pass two years of the same World Language. Student must be enrolled in the Career and Technical Education Program for four years, beginning with “Exploratory”, to be eligible for the modification of the World Language requirement. Consideration of the World Language requirement for Special Education students will be included as part of the I. E. P. Team decision. English Language Learners’ proficiencies in their native language will satisfy the graduation requirement.
- Physical Education, 5 credits and Health, 5 credits  
NOTE: All students are required to take a minimum of one Physical Education or Health Education course each year. All students are required to pass Health Education 1, Health Education 2, and two semester courses in Physical Education.  
 Suggested Physical Education/Health Education Course Sequence:  
 Grade 9 – Health Education 1                      Grade 10 – Physical Education  
 Grade 11 – Health Education 2                      Grade 12 – Physical Education
- Fine or Performing Arts, (Music, Visual Arts, Theatre, or *Media Art*), 5 credits.
- MCAS Prep courses may be counted in meeting requirements.



## **COURSE/GRADUATION REQUIREMENTS FOR CAREER AND TECHNICAL EDUCATION STUDENTS:**

A student must be enrolled in the Career and Technical Education Program for four years, beginning with “Exploratory”, to be eligible for the modification of the Math and World Language requirements. Students electing a vocational program for career-entry positions must also accumulate minimum credit requirements according to the following:

- Successful completion of **105** credits, with at least **20** credits earned in senior year
- English 1, 2, 3 and 4 or appropriate ELL courses  
NOTE: Students may not take more than two major English courses in one year with the exception of senior year. A student who has failed a major English course must either pass the failed English course in the subsequent summer school session or enroll in an Edgenuity course during the summer or repeat the failed English course in the succeeding academic year. Placement in English courses should be sequential. An exception to the sequential rule can be made for seniors.
- Mathematics, 20 credits  
NOTE: Freshmen, sophomores and juniors will take math courses offered in the math department, at minimum up to and including Algebra 2. If a student completes Algebra 2 with a passing grade and earns a proficient score on the Math MCAS, he/she will be eligible to earn a fourth year of math credit from the embedded academic portion in his/her career area.
- Science, 15 credits
- Social Studies, 15 credits, including U.S. History  
NOTE: Students are required to take U.S. History 1, U.S. History 2, and World History; students must pass at least one year of U.S. History to graduate.
- Physical Education, 5 credits and Health, 5 credits  
NOTE: All students are required to take a minimum of one Physical Education or Health Education course each year. All students are required to take and pass Health Education 1 and Health Education 2 along with two semester courses in physical education.
- One Fine or Performing Arts, (Music, Visual Arts, Theatre, or *Media Art*), either a 2.5 or a 5 credit course.
- MCAS prep courses may be counted in meeting requirements.



## GPA POLICY

1. Somerville High School calculates Grade Point Average (GPA) based on a weighted scale using the Grade Values in the chart below. Students wishing to calculate an unweighted GPA should use the CP values only.
2. GPA is available in student X2 accounts upon completion of four consecutive quarters at Somerville High.
3. All courses, with the exception of courses designated Pass/Fail in the Program of Studies, will be used to compute GPA.
4. All courses NOT designated in the Program of Studies as "Advanced Placement" or "Honors" or "CP" will be considered "CP" courses for the purpose of computing GPA.
5. Students who transfer into Somerville High School during their high school career will have their GPA computed after the completion of two semesters (one full school year) within Somerville High School. Courses completed prior to their entrance into Somerville High School will NOT be used in the computation.
6. Courses taken outside of SHS (i.e. online Edgenuity Course) and Credit Recovery Courses will not be used in the computation.
7. Courses taken as part of a pre-approved Dual Enrollment partnership with SHS will be factored into a student's GPA. All other college/university courses not in the dual enrollment program are not factored into a student's GPA.

Grade	GRADE VALUES		
	AP	Honors	CP
A+	5.333	4.833	4.333
A	5.000	4.500	4.000
A-	4.667	4.167	3.667
B+	4.333	3.833	3.333
B	4.000	3.500	3.000
B-	3.667	3.167	2.667
C+	3.333	2.833	2.333
C	3.000	2.500	2.000
C-	2.667	2.167	1.667
D+	2.333	1.833	1.333
D	2.000	1.500	1.000
D-	1.667	1.167	0.667
F	0.000	0.000	0.000

On the following page is an illustration of a student's GPA calculated for three full years at Somerville High School.



Year Course	Final	Credits	Value	Points
2014 English 1 Honors	B-	5.000	3.167	15.835
2014 U.S. History 1 Honors	B-	5.000	3.167	15.835
2014 Algebra 2 Honors	A-	5.000	4.167	20.835
2014 Biology 1 Honors	A	5.000	4.500	22.500
2014 French 1 Honors	A-	5.000	4.167	20.835
2014 Health Education 1	B-	2.500	2.667	6.668
2014 Personal Finance	A	2.500	4.000	10.000
2014 Lifetime Physical Education	C	2.500	2.000	5.000
2014 Studio Art	A-	2.500	3.667	9.168
YTD - Credits 35.0	Cumulative - Credits 35.0			
YTD - GPA Credits 35.0	Cumulative - GPA Credits 35.0			
YTD - GPA Points 126.675	Cumulative - GPA Points 126.675			
YTD - GPA 3.6193	Cumulative - GPA 3.6193			

Year Course	Final	Credits	Value	Points
2015 English 2	B	5.000	3.000	15.000
2015 U.S. History 2	A	5.000	4.000	20.000
2015 Geometry Honors	A	5.000	4.500	22.500
2015 Chemistry 1 Honors	B+	5.000	3.833	19.165
2015 French 2 Honors	A-	5.000	4.167	20.835
2015 Health Education 2	A	2.500	4.000	10.000
2015 Fitness Education	A	2.500	4.000	10.000
2015 Facing History & Ourselves	A-	5.000	3.667	18.335
YTD - Credits 35.0	Cumulative - Credits 70.00			
YTD - GPA Credits 35.0	Cumulative - GPA Credits 70.0			
YTD - GPA Points 135.835	Cumulative - GPA Points 262.510			
YTD - GPA 3.8810	Cumulative - GPA 3.7501			

Year Course	Final	Credits	Value	Points
2016 English 3	C+	5.000	2.333	11.665
2016 World History Themes	B+	5.000	3.333	16.665
2016 Precalculus Honors	A	5.000	4.500	22.500
2016 AP Physics 1	A-	5.000	4.667	23.335
2016 AP Biology	A-	5.000	4.667	23.335
2016 French 3 Honors	B	5.000	3.500	17.500
2016 AP Psychology	A-	5.000	4.667	23.335
YTD - Credits 35.0	Cumulative - Credits 105.0			
YTD - GPA Credits 35.0	Cumulative - GPA Credits 105.0			
YTD - GPA Points 138.335	Cumulative - GPA Points 400.845			
YTD - GPA - 3.9524	Cumulative - GPA 3.8176			

## SCHOOL COUNSELING DEPARTMENT

Students meet frequently with their counselors in various formats including individually, small groups, Advisory classes, and in a multitude of Counseling Department sponsored programs. Counselors help all students in the areas of academic achievement, personal/social development and career development to ensure that our students are college and career ready.

Please check our website [www.somerville.k12.ma.us/shs](http://www.somerville.k12.ma.us/shs) for the annual events hosted by the school counseling department.

Traci Small	School Counseling Director	617-625-6600 (x 6125)
Melanie Kessler	College and Career Readiness Director	617-625-6600 (x 6259)
Simone Braga	High School Registrar	617-625-6600 (x 6173)
Julie Phylis	School Counseling Administrative Assistant	617-625-6600 (x 6120)

HIGH SCHOOL COUNSELOR	Student Assignment	617-625-6600
Justin LaBerge	Beacon House (A-Doq)	x 6127
Jeremy Rischall	Elm House (Dor-Le)	x 6129
Paula Keymont	Highland House (Lf-Pi)	x 6128
Cathy Maguire	Broadway House (Pj-Z)	x 6126
Anne Herzberg Eden	ELE School Counselor	x 6130
Amber Miller	Redirect Counselor	x 6180
Anne Irwin	Adjustment Counselor/Bridge Program	x 6132
Meghan Sousa	CTE School Counselor	x 6112
Melanie Banks	College & Career Counselor	x 6288
Jonathan Carbutt	College & Career Advisor	x 6288
Gabrielle Reyes Jusino	College & Career Advisor	x 6288

## K-8 COUNSELOR EDUCATORS

ELEMENTARY SCHOOL COUNSELOR EDUCATORS	School	617-625-6600
Jackie Brown	Argenziano	x 6687
Kate Melillo	Brown	x 6421
Christiana Morgan	Capuano Early Education Center	x 3607
Carlie Calioro - Grades K-4	East Somerville	x 3791
Rebekah Prescott - Grades 5-8	East Somerville	x 3792
Karen Murdock	Healey	x 6541
Maureen Cullinane	Kennedy	x 6646
Dan McCaul	Next Wave	x 6820
Catricia Morris	West Somerville	x 6461
Tara Stead	Winter Hill	x 6770

## COURSE LEVEL DESCRIPTORS

**Advanced Placement (AP):** These courses are modeled upon comparable college courses and are aligned with national Advanced Placement curriculum guidelines and objectives set forth by the College Board. Students enrolled in AP courses are expected to take the corresponding Advanced Placement examination in May. Colleges and universities may award college-credit for earning qualifying scores on AP exams.

*Recommendations for enrollment:* teacher recommendation and a demonstrated ability to keep up with a demanding workload. See each course descriptor for content specific requirements or pre-requisites.

**Honors (H):** These courses are taught at an accelerated pace and students will have an increased independent workload that includes, but is not limited to, research-based projects and papers. In addition to the College Preparatory curriculum, students in honors-level courses may explore some topics in greater depth, study additional curricular topics, and read accompanying complex texts.

*Recommendations for enrollment:* teacher recommendation and an overall average of B or above in content-related College Preparatory classes.

**College Preparatory (CP):** These courses prepare students for college and careers. Please see the course descriptors for each course in each department.

*Recommendations for enrollment:* teacher recommendation.

**Sheltered English Immersion Program (SEIP) –** The Sheltered English Immersion Program (SEIP) is a program for students who have limited English proficiency and receive content instruction aligned to grade-level standards by teachers trained in their content areas. Instruction is primarily in English and teachers use sheltered instruction techniques, which may include grouping students by language proficiency level and native language, using adapted materials and texts, using an increased number of visuals, and using primary language support, in order to make lessons understandable.

**See each course description in the corresponding department section for content specific requirements or pre-requisites.**



# SOMERVILLE HIGH SCHOOL



## Course Offerings

The courses described herein will be offered each year provided that they can be scheduled, that a sufficient number of students select the course, that a qualified teacher can be assigned, and that suitable facilities are available.

### **COURSE DESCRIPTORS**

Art	15
Business Education	18
Center for Career and Technical Education	21
English	29
English Learner Education	32
Health Education/Family & Consumer Sciences	38
Library Media Services	40
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Music	47
Physical Education	53
Science	55
Social Studies	62
Special Education	67
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# ART

The Art Department offers a wide range of courses aimed at students of varying abilities and interests. All students have the opportunity to explore the visual arts and enrich their academic and life experiences. In addition, students who wish to pursue careers in art are offered specialized courses and portfolio preparation. Students who wish to pursue an Independent Study in art should contact the Art Department Supervisor.

“Art offers a way of understanding oneself and it enables connections between art and our own culture and the cultures of diverse peoples.” - Eliot Eisner, Stanford University

## COURSES

- Ceramics 1
- Advanced Ceramics
- Computer Art
- Advanced Computer Art
- Photography 1
- Advanced Photography
- Studio Art
- Design: 2-D to 3-D
- Cartooning
- Architectural Drawing and Design
- Creative Lettering & Design
- Art 1
- Art Major Foundations
- Art Major Explorations
- Art Major Innovations
- Art Major Portfolio Essentials
- Art Major Personal Portfolio



### **CERAMICS 1**

(837)

Grades 9, 10, 11, 12

2.5 credits (semester)

This course explores the many facets of clay. Students will be introduced to the traditional hand building methods of pinch, coil, and slab construction. Wheel throwing will be introduced as well as the use of underglazes in the creation of a ceramic artwork.

### **ADVANCED CERAMICS**

(838)

*Prerequisites: Ceramics 1 or Supervisor approval*

Grades 10, 11, 12

2.5 credits (semester)

This course develops sequential and advanced skills previously acquired in the Ceramics 1 course. The Advanced Ceramics course includes bisque and glaze kiln-loading; refinement and experimentation between hand-building/wheel-throwing; exploration of glaze techniques. Students may take this course more than once in subsequent semesters, providing that the student assumes personal responsibility to meet additional and more rigorous assignments designed to meet the needs of the individual skills of the student. Students will be required to create ceramic pieces with increased complexity, utilizing sources of inspiration such as Internet research of current, historical, or personal themes. A student may repeat this course to further their theme based studies, skill level, design and creative ability.

## **COMPUTER ART**

(807)

Grades 9, 10, 11, 12

2.5 credits (semester)

This course introduces students to digital art utilizing Adobe Creative Suite Programs. Students will develop proficiency in Adobe Photoshop and InDesign to create high quality blended electronic images with and without text, digitally paint, and design creative layouts. Projects include collages, digital drawings, comics, magazines, and more. Students will develop a digital portfolio of technically and conceptually notable art work.

## **ADVANCED COMPUTER ART**

(845)

Grades 9, 10, 11, 12

2.5 credits (semester)

This course has no prerequisites and introduces students to digital illustration and design. Students will develop proficiency in Adobe Illustrator, Fireworks, and Dreamweaver to create exciting illustrations, multimedia designs, and functional websites. Projects involve investigating modern art forms such as videogames, graphic novels, mangas, and more. Students will create artwork that is technically and conceptually impressive.

## **PHOTOGRAPHY 1**

(848)

Grades 9, 10, 11, 12

2.5 credits (semester)

This course is designed to emphasize the visual elements of "fine art" photography. Students will work in a traditional darkroom and learn how to process black and white photograms. Students will also learn how to integrate digital media with traditional photography and mixed media techniques with traditional techniques. This course will focus on the diverse trends in current and traditional photography and it will include a writing component as part of the syllabus.

## **ADVANCED PHOTOGRAPHY**

(849)

*Prerequisites: Photography 1 or Supervisor approval*

Grades 9, 10, 11, 12

2.5 credits (semester)

This course is a continuation of the study of Photography. This course focuses on the development of technical skills and artistic expression through visual imagery. Students will learn how to integrate digital media with traditional photography and to infuse current techniques with traditional ones. This course will focus on the diverse trends in current and traditional photography/media and it will include a writing component as part of the syllabus.

## **STUDIO ART**

(823)

Grades 9, 10, 11, 12

2.5 credits (semester)

Studio Art is a basic course in drawing, painting, and design involving a variety of media such as pencil, ink, brush, pen, watercolors, tempera paints, pastels, and charcoal and an introduction to electronic imaging.

## **DESIGN: 2-D TO 3-D**

(825)

Grades 9, 10, 11, 12

2.5 credits (semester)

In this course, students will explore and implement the Principles of Design to create 2-D and 3-D artwork using a variety of art media such as, collage, recycled materials, textiles, and found objects, etc. Students will apply varied techniques and skills that reflect diverse cultures, artists, and movements throughout the ages. This course will provide opportunities for students to experience traditional techniques with contemporary themes through dimensional art media.

## **CARTOONING**

(836)

Grades 9, 10, 11, 12

2.5 credits (semester)

This course emphasizes drawing skills necessary to produce caricatures, comic strips, comic books, political and sports cartoons. In addition, students explore the many commercial applications that make cartooning a marketable skill.

## **ARCHITECTURAL DRAWING AND DESIGN**

(818)

Grades 9, 10, 11, 12

2.5 credits (semester)

Explore local and international architectural styles through 2D and 3D media such as drawing, painting, digital art, and sculpture. Topics include one and two point perspective, historical and modern architectural styles, and designing and constructing Architectural structures and models.

## **CREATIVE LETTERING & DESIGN**

(835)

Grades 9, 10, 11, 12

2.5 credits (semester)

Designed for the student who wants to explore a wide range of media, techniques, and approaches to the visual arts as it relates to hand lettering. The class will begin with various studies on the Elements and Principles of Art/Design and move into more advanced concepts. Students will be exposed to drawing, painting, brush lettering, design, and various written forms. Topics to be covered: Historical/Current practices/content that includes Lettering, Calligraphy, Bullet Journaling, Stencil Art, Graffiti, Formatting/Design and other current trends in the Visual Arts.

## **ART 1**

SP (805)

Grades 9, 10, 11, 12

2.5 credits (semester)

Art 1 is a small two and three dimensional studio art program team-taught by art and special needs staff. This course is open only to Life Skills students.

## **ART MAJOR FOUNDATIONS**

(812)

Grades 9, 10, 11, 12

5 credits (full year)

This is a fine arts studio course offering an introduction/investigation of the Elements of Art and Principles of Design. Some of the topics include: one and two point perspective; line, color, light and shade; observational drawing and painting, printmaking and other art techniques. This course also includes famous artists, art works, and their significance past and present and it offers an introduction to computer applications such as Photoshop.

## **ART MAJOR EXPLORATIONS**

(822S)

*Prerequisites: Art Major Foundations or approval from Department Head/Art Teacher*

Grades 10, 11, 12

2.5 credits (semester)

This course builds upon previous concepts and skills learned in **Art Major Foundations** while exploring familiar and unfamiliar subjects through the art making process. Projects assigned will introduce students to a variety of new techniques/media that draw inspiration from art history and cultural experiences, such as impressionism, cubism, abstraction, architecture, and contemporary art. Students will engage in creative problem solving through researching traditional and contemporary art from diverse cultures.

## **ART MAJOR INNOVATIONS**

(832S)

*Prerequisites: Art Major Foundations or approval from Department Head/Art Teacher*

Grades 10, 11, 12

2.5 credits (semester)

This course builds upon previous concepts and skills learned in **Art Major Foundations** while focusing on innovative art making methods/techniques such as mixed media, assemblage sculpture, digital art, and printmaking. Students will strengthen their foundational skills using the Elements of Art and Principles of Design. This course will assist students in their creative thinking skills and problem solving skills by taking them outside of their artistic comfort zones. Through this process of expanding their knowledge with skills, techniques, and art media, students will become familiar with their own artistic preferences.

## ART MAJOR PORTFOLIO ESSENTIALS

(842S)

*Prerequisites: Art Major Foundations or approval from Department Head/Art Teacher*

Grade 10, 11, 12

2.5 credits (semester)

This course challenges students to take risks, experiment with new art media, and explore new ideas through assembling a body of work that demonstrates artistic and conceptual growth. **Art Major Portfolio Essentials** emphasize the essential components of an artist's portfolio, such as gesture and observation drawing, portraiture, landscape painting, and mixed media. Instruction concentrates on a refinement of individual styles and emphasizing the fundamentals of art and design while providing students with choices using specific media, style, and technique. Students will enrich their understanding of historically significant and contemporary artists and artistic styles as they begin to define their own unique artistic vision. Students are encouraged to take **Art Major Personal Portfolio** following **Art Major Portfolio Essentials** to earn up to 5 credits within the same school year.

\*This course may be taken more than one time with approval from Department Head/Art Teacher.

## ART MAJOR PERSONAL PORTFOLIO (Formerly semester two of Art Major 4)

(843S)

*Prerequisites: Art Major Foundations or approval from Department Head/Art Teacher*

Grade 10, 11, 12

2.5 credits (semester)

This course is for students who are enthusiastic about opportunities, enrichment, and possible careers in visual art. **Art Major Personal Portfolio** is appropriate for students who want to explore specific genres, mediums, and techniques that meet their distinctive artistic style. Students will develop a portfolio using a variety of innovative media and techniques, both for personal artistic expansion and/or college portfolio submissions. Students will develop the ability to clearly articulate his/her intent and meaning in their artistic work by responding with an artist's statement. Students will become familiar with a variety of artists and artistic styles while awakening their own unique style. Students are encouraged to take **Art Major Portfolio Essentials** prior to **Art Major Personal Portfolio** during the school year and earn up to 5 credits.

\*This course may be taken more than one time with approval from Department Head/Art Teacher.

# BUSINESS EDUCATION

The Business program is an integral part of a comprehensive secondary school curriculum. The goals of the Business Department are to develop computer literacy, provide skills and knowledge for careers in business and introduce students to life-long financial awareness. Through the various course offerings, students can elect the courses that would prepare them for their interests in the business world. This business curriculum is for students who are preparing to enter a four-year college/university, a two-year college/technical school, or employment after graduation.

## COURSES

- Accounting 1
- Business and Real Estate Law
- Entrepreneurship
- Negotiation
- Marketing and Advertising 1
- Marketing and Advertising 2
- Personal Finance 1
- Personal Finance 2
- Principles of Microsoft Suite
- School to Career
- Sports and Entertainment Marketing



## **ACCOUNTING 1**

H (562); CP (522)

Grades 10, 11, 12

5 credits (full year)

This course provides an introduction to accounting concepts. Topics include analyzing transactions, journalizing, posting, adjusting and closing entries, financial statements and post-closing trial balance. Practical application is stressed in all topic areas through the use of business simulations and computerized accounting.

This course provides an introduction to all phases of accounting. It offers students a solid foundation for further study of accounting or business. The fundamental concepts and principles of accounting will be covered. Topics include special journals, ledgers, work sheets, financial statements and payroll taxes. Practical application is stressed in all topics areas through the use of business simulations and computerized accounting.

## **BUSINESS AND REAL ESTATE LAW**

(597)

Grades 9, 10, 11, 12

5 credits (full year)

This course is designed for students interested in business and finance. Students seeking a career in business or finance will gain substantial knowledge and background in the following topics: law for consumers, contract law, credit law, employment law, business ownership and the law, real estate law, tenant/landlord rights, insurance law and home ownership. This course involves case studies and other real world situations, as well as informal preparation for real estate licensure. This course is taught in a computer lab.

## **ENTREPRENEURSHIP**

(529)

Grades 9, 10, 11, 12

2.5 credits (semester)

This course is designed to teach the basic skills necessary to start, own, and operate a business. Topics include the legal, social, economic, and financial management aspects of business ownership. Students will write a business plan for their teen-based business venture using current computer software such as Microsoft's Word, Excel, Publisher, and PowerPoint.

## **NEGOTIATION**

(517)

Grades 9, 10, 11, 12

2.5 credits (semester)

You negotiate every day in both your personal and professional life! Your ability to master this skill can be critical to your success especially in the business world. This half-year business course will help you understand different approaches and styles so that you can apply the right strategy to help you achieve your desired outcome. During the semester, you will hone your negotiation skills by participating in: simulations and interactive exercises, group discussions, demonstrations, journal writing assignments, guest speaker presentations, short lectures, and a field trip. Course time will also be spent on mediation.

## **MARKETING AND ADVERTISING 1**

(535)

Grades 10, 11, 12

5 credits (full year)

This is an introductory course for students who plan to work in retail, marketing, merchandising or other related fields. The subject matter includes a study of the various types of businesses, techniques of selling, and merchandising procedure. The students will work at The Hole in the Wall and learn the basics of school store operations. Student participation is also required in the DECA program and its activities.

## **MARKETING AND ADVERTISING 2**

(545)

*Prerequisites: Marketing Education 1 or Supervisor approval*

Grades 11, 12

5 credits (full year)

This course is designed to help the student understand the distribution of goods and services through the study of marketing. Subject matter includes: retailing, salesmanship, layout, and display advertising, personnel management,

product information, marketing process and organization. The students will work at The Hole in the Wall and learn the basics of school store operations. Student participation is also required in the DECA program and its activities.

### **PERSONAL FINANCE 1**

(525)

Grades 9, 10, 11, 12

2.5 credits (semester)

This course is designed to provide students with life application skills. It provides them with the practical knowledge and skills to manage their personal finances. Components of personal finance include checking and saving accounts, credit cards and consumer loans, investments in the stock market, retirement plans, social security benefit, home, vehicle, health and life insurance. Attention will be paid to individual students financial situations. Special attention will be spent on income tax preparation with emphasis on understanding the tax system. After completion of this course students will be able to deal with personal financial decisions. The topics of management and entrepreneurship will also be covered. Students will have the opportunity to hear many presentations from financial experts in the community. This course is taught in a computer lab.

### **PERSONAL FINANCE 2**

(526)

*Prerequisites: Personal Finance 1*

Grades 9, 10, 11, 12

2.5 credits (semester)

This course builds upon the fundamentals and principles of finance developed in Personal Finance 1. Banking, insurance, credit, money management, career planning, and the stock market will be explored in depth. Upon completion, students will be able to make sound financial decisions. Students will have the opportunity to hear many presentations from financial experts in the community. This course is taught in a computer lab.

### **PRINCIPLES OF MICROSOFT SUITE**

(500) Grade 9

(503) Grade 10, 11, 12

(502) Special Keyboarding and Principles of Technology

2.5 credits (semester)

This provides students with basic computer skills in word processing needed to function in school, college and work and allows students to demonstrate proficiency in the use of computers and applications as well as an understanding of concepts underlying hardware, software, and connectivity. This course will also allow students to demonstrate responsible use of technology and an understanding of ethics and safety issues in using electronic media and demonstrate the ability to use technology for research, problem solving, and communication.

### **SCHOOL TO CAREER**

(599)

Grades 10, 11, 12

2.5 credits (semester)

This course will give students an opportunity to explore careers and prepare them for a successful transition from school to career. Career planning, employment applications, resume writing, and letters of application are explored by students. Other important topics include personal development skills, communication skills, telecommunication, and information processing.

### **SPORTS AND ENTERTAINMENT MARKETING**

(547)

Grades 9, 10, 11, 12

2.5 credits (semester)

This course is designed to teach marketing concepts and theories that apply to sports and entertainment marketing and management. Real examples from the sports and entertainment industry will be used so that student can link key concepts to current events. Some topics covered include: distribution, marketing-information management, pricing, product/services management, promotion, and selling.



# THE CENTER FOR CAREER AND TECHNICAL EDUCATION

## A Certificate Program

Career & Technical Education programs are available to all students to pursue a career in an occupational area through an admissions policy which can be obtained in the Career and Technical Education office. Students will select a technical area after an exploratory process. Each program shall include related-theory (embedded academics) and intensive technical training to prepare for college or an entry-level position.

### MAJOR COURSE CRITERIA/REQUIREMENTS:

1. To be eligible for modification of math and world language requirements, a student must be enrolled in a CTE program for four years, beginning with "Exploratory Skills," and must accumulate minimum credit requirements as follows:

- |   |            |          |               |
|---|------------|----------|---------------|
| - English-  | 20 credits | Math-    | 20 credits ** |
| - Social Studies-                                     | 15 credits | Science- | 15 credits *  |
| - Physical Education-                                 | 5 credits  | Health-  | 5 credits     |
| - One Fine Arts Course (Music, Visual Arts, or Drama) |            |          |               |

2. Any CTE student who is fulfilling all academic requirements may add additional shop time in his/her junior and senior years. Any CTE student may add a semester or full year elective in Vocational Education programs where there is space available.

\*\* Students in Career & Technical Education will be required to take four-years of math. Freshmen, sophomores and juniors will take math courses offered in the math department, at minimum up to and including Algebra 2. If a student completes Algebra 2 with a passing grade and earns a proficient score on the grade 10 Math MCAS exam, he/she will be eligible to earn a fourth year of math credit from the embedded academic portion in his/her career area.

**COURSES/PROGRAMS:** The following fields are offered and listed in their respective clusters:

#### **Construction**

Carpentry  
Electrical

#### **Transportation**

Auto Technology

#### **Information Technology**

Information Support Services and Networking

#### **Manufacturing**

Architectural Design/Pre-Engineering  
Advanced Manufacturing/Fab-Lab  
Metal Fabrication and Welding

#### **Health Care and Human Services**

Early Education and Care -Child Development  
Care and Development of Young Children  
Dental Assistant Program  
Health Careers/Introduction Nursing Program

#### **Commercial Services**

Cosmetology  
Culinary Arts  
Graphic Design and Visual Communications

Should a student desire to pursue an occupational field not offered here at Somerville High, arraignments through the Shore Learning Collaborative can be made on behalf of the student. This Program is entitled "SOLVED," Shore Occupational Learning and Vocational Education Division, and a list of the available additional offerings is available in the Career and Technical Education office.

## **BUSINESS ENTREPRENEURSHIP FOR CAREER & TECHNICAL EDUCATION STUDENTS**

This is a required component of each program for Career & Technical Education seniors and concentrates on starting and growing new businesses. Students will investigate the concepts, tools, and practices of entrepreneurship. Students will learn to write and present a business plan that will be ready for investors review and possess a better understanding of their entrepreneurial capacity. Students will be scheduled for one quarter directly from their career major. This will be a requirement to attain a certificate of completion in CTE and will count towards 25% of the quarter grade.

- Identifying new venture opportunities
- Selecting a type of business ownership
- Writing a business plan
- Creating a logo, tagline, business card and brochure
- Creating an owner's resume
- Understanding which skills are necessary for success
- Business Ethics, Quality Management
- Principles of Technology for Business Plan Presentations

## **EXPLORATORY PROGRAM**

(TZ1)

Grade 9

5 credits (full year)

Initially, students enter the Career and Technical Education Program through the exploratory program. In this offering, they will examine their interests, abilities and career path options while exploring all career and technical programs offered at SHS from September through June by rotating through each program according to an established calendar.

This full year exploratory program is designed to help students learn about their talents and interests relative to a variety of career and technical programs thru active participation. Students will explore all 13 career majors one at a time in 10 day cycles. During the first 10 day cycle, students will set up a career cruising account, take a career assessment and begin a customized career plan to highlight each individual student's talents and interests. The career plan serves as a guide during exploration and beyond. Additionally, each student will write a reflection based upon their experience following each cycle. The student will review these reflections with the CTE Counselor or the Vocational Director as the lead in to an activity which will assist them in selecting their top 3 career and technical program placement choices.

The career and technical program instructors evaluate students during each exploratory cycle by an established grading rubric in the following areas: Workmanship/ Production; Safety; Career Awareness; Professionalism and Employability.

## **CO-OPERATIVE EDUCATION FOR CAREER & TECHNICAL EDUCATION STUDENTS**

Grade 12

10 to 25 credits (full year/multiple blocks)

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 career instructor and approved by the co-op coordinator. Students participating in this program work a rotating schedule according to the school block schedule. The employer reports student performance to the school on a regular basis and students are paid for their work. The career instructor and the co-op coordinator will perform bi-weekly site visits to evaluate student job performance and site safety evaluations.

Eligibility for CO-OP is met during the fourth quarter of the junior year and is based on the following criteria:

- A student must maintain a 95% attendance rate (no more than 9 days absent)
- A student must maintain a grade point average of 70% or better for the year and receive no grade lower than 60% during the fourth quarter in any course required for graduation
- A student must achieve acceptable completion of the junior year portfolio requirement
- A student must maintain an acceptable conduct/effort grade
- A student must meet minimum shop competency requirements and receive the recommendation of the Director of Career and Technical Education
- A completed Co-operative Education check list, along with a completed and signed application

## **CONSTRUCTION CLUSTER**

### **RESIDENTIAL CARPENTRY**

Grades 10, 11, 12

(TC2) Grade 10

(TC3) Grade 11

(TC4) Grade 12

(Period 1) 5 credits (full year/one block)

(Periods 2 & 3) 10 credits (full year/two blocks)

(Periods 5, 6 & 7) 15 credits (full year/three blocks)

Classroom and shop experiences involve layout, assembly, installation and repair of structural units. Using common systems and methods of frame construction, as well as various building techniques used in industry, students learn blueprint reading, drafting, applied mathematics and materials cost estimating. Students develop skills necessary to work safely with power tools. Individual students are exposed to the wide range of skills needed within the building industry and are encouraged to explore the opportunities available to skilled carpenters in the cabinet and construction industry.



### **ELECTRICAL**

Grades 10, 11, 12

(TE2) Grade 10

(TE3) Grade 11

(TE4) Grade 12

5 credits (full year/one block)

10 credits (full year/two blocks)

15 credits (full year/three blocks)

The electrical program offers a combination of electrical theory, safety training and hands on projects which provide skills such as pipe bending, blueprint reading, the study of Massachusetts and National Electrical Codes, motor controls, fire alarm systems and different wiring methods. A new addition is the study of Photo Voltaic Energy, complete with state of the art P/V trainers and equipment. An OSHA 10 hour general industry safety course is a graduation requirement. Upon completion of this 3 level, 1500 + hour program, students receive an "hours of completion" certificate that can be applied toward electrical license requirements. The top two senior students are eligible for placement in the IBEW local 103 in Boston. The electrical and mechanical skills learned in this program allow students to enter many associated fields, including continuing their education at a two or four-year college.

## **TRANSPORTATION CLUSTER**

### **AUTOMOTIVE TECHNOLOGY**

Grades 10, 11, 12

(TA2) Grade 10

(Period 1) 5 credits (full year/one block)

(TA3) Grade 11

(Periods 2 & 3) 10 credits (full year/two blocks)

(TA4) Grade 12

(Periods 5, 6 & 7) 15 credits (full year/three blocks)

The Automotive Technology program is certified by the National Institute for Automotive Service Excellence (ASE), evaluated and approved by the National Automotive Technicians Education Foundation (NATEF). Students receive training through hands-on experiences in an up-to-date facility, which closely replicates the modern repair shop. The curriculum is designed to prepare students with problem solving and diagnostic skills necessary to become ASE certified in the automotive industry. Upon graduation, students will enter a booming field of opportunity with the skills needed to start a challenging and rewarding career. Some of the job titles that the students will learn are: Engine Repair, Steering and Suspension, Electrical Systems, Engine Performance, Brakes, Service Writer or a Parts Specialist.

## **INFORMATION TECHNOLOGY SERVICES CLUSTER**

### **INFORMATION SUPPORT SERVICES AND NETWORKING**

#### **INTRO TO COMPUTER PRINCIPLES**

(TUZ) Grades 9, 10, 11, 12

5 credits (full year/one block)

#### **INTRO TO COMPUTER REPAIR**

(TU2) Grade 10

10 credits (full year/two blocks)

#### **A+ CERTIFICATION PREP (COMPUTER REPAIR)**

(TU3) Grade 11

10 credits (full year/two blocks)

#### **NET+ CERTIFICATION PREP (NETWORK ADMINISTRATION)**

(TU4) Grade 12

10 credits (full year/two blocks)

This is an instructional program that prepares students to apply basic engineering principles and technical skills in using and upgrading computer systems. The course includes instruction in basic computer design and architecture as well as various types of programming; emphasis is also on component and system maintenance and inspection procedures, and diagnosing and repairing hardware and software systems. Students will gain an understanding of multiple operating systems and their interaction with computer software applications. Students will learn the fundamentals of networking by interconnecting the PC's- Troubleshooting/problem solving skills will be emphasized throughout the class and grow in complexity along with the systems that the pupils build. Participants will be exposed to popular software applications and programming concepts including web design.

### **APPLICATIONS/CONCEPTS**

(TUBH)

*Prerequisites: TU3, Bunker Hill CC RDG095 Accuplacer reading test, and proof of residence BHCC CIT-110*

Grade 12

5 credits (full year)

This survey course covers the use and application of modern computer systems. This course includes detailed coverage of fundamental computer concepts, terminology, applications, and theory. Students will get extensive "hands-on" personal computer experience and gain a good working knowledge of MS WINDOWS™ and MS OFFICE™. Upon completion of this course, students will have a grasp of important computer concepts and terminology, an understanding of INTERNET use and applications, a high degree of competence with personal computer hardware and software, as well as an understanding of the effects of information technology on the individual, organizations, and society. All Learner Outcomes and Competencies in this course are based on accepted, published ICT Industry Standards. Students who participate are enrolled in BHCC and must attend the class at Bunker Hill after school or on weekends

## **CISCO ACADEMY**

(TUCA1) **Introduction to Networks**

(TUCA2) **Routing and Switching Essentials**

(TUCA3) **Scaling Networks**

(TUCA4) **Connecting Networks**

Grades 10, 11, 12

2.5 credits (semester)

The first two classes in the sequence of four classes prepares students to take the CCENT exam the third and fourth prepares students for the CCNA (Cisco Certified Network Associate) exam.

## **INTRO TO JAVA PROGRAMMING**

(TUIJ)

*Prerequisites: TU3 UMass Amherst*

Grades 11, 12

5 credits (full year)

This Class iJava is an interactive e-book developed by Robert Moll of UMass Amherst and is used to teach Java on their campus. It has been made available to SHS free of charge along with their LMS (Learning Management System) OWL (Online Web Learning) Students learn Java programming in a "learn-by-doing" web-based method that dovetails with the pedagogy of this vocational shop. Upon successful completion students receive a transcript from UMass Amherst.

## **MANUFACTURING CLUSTER**

### **ARCHITECTURAL DESIGN/ PRE-ENGINEERING**

Grades 10, 11, 12

(TDS) Grades 10, 11, 12

2.5 credits (semester)

(TD2) Grade 10

5 credits (full year/one block)

(TD3) Grade 11

10 credits (full year/two blocks)

(TD4) Grade 12

10 credits (full year/two blocks)

The goal of our Architectural Design/Pre-engineering program is to inspire a new generation of designers, engineers and architects through the implementation of industry-leading software, curriculum and multi-media content. Our Architectural Design/Pre-engineering program allows students the ability to explore career paths through real world projects, while establishing a solid understanding of science, engineering, architecture, technology and mathematics. Our goal is to bring together some of the foremost design, engineers, drafting and industry professionals to share knowledge and teach a foundation of design and engineering principles with practical application.

The Architectural Design/Pre-engineering curriculum includes fundamental design/drafting concepts and principals, mechanical engineering drawing and design, architectural drafting and design, and electronic/electrical engineering. *Pre-engineering* is a hands-on, project-based approach to learning that introduces students to the scope, rigors and discipline of engineering prior to entering college. Students are encouraged to pursue top architectural and engineering programs such as Northeastern, Wentworth and the Boston Architectural Center (BAC).

### **ADVANCED MANUFACTURING/ FAB LAB**

(TMS) Grade 10,11,12

(Period 1) 2.5 credits (1/2 year/one block)

(TMZ) Grade 10,11,12

(Period 1) 5 credits (full year/one block)

(TM2) Grade 10

(Period 1) 5 credits (full year/one block)

(TM3) Grade 11

(Period 2-3) 10 credits (full year/two blocks)

(TM4) Grade 12

(Period 5,6,7) 15 credits (full year/three blocks)

Whether it is solving a global crisis like the need for clean water or travelling even deeper into space, advanced manufacturing is opening the doors to the next great human revolution. Advanced manufacturing strengthens the U.S. economy and national security, produces high income jobs, and generates technological innovation—driving long-term economic prosperity and growth. Advanced manufacturing further supports the missions of many Federal agencies, from protecting national security and building U.S. competitiveness to strengthening the scientific and engineering enterprise and providing transformative science and technology solutions, and beyond.

Students who choose this challenging program become proficient in the following areas: machine tool set-up and operation on lathes, milling machines and grinders; the use of precision measuring instruments such as micrometers, layout tools and verniers; the interpretation of drawings and prints used in machining and manufacturing finished

products; related and applied mathematical topics and the programming of computer controlled machines (CNC). Students will also explore the principles of engineering and manufacturing applicable to machine technology. Students selecting the machine shop program will experience the added benefits of shop collaboration with the metal fabrication and welding technology program, acquiring a more comprehensive knowledge about all aspects of the metal trades.

## **METAL FABRICATION/ WELDING**

Grades 10, 11, 12

(TFS) Grade 10,11,12

(Period 1) 2.5 credits (1/2 year/one block)

(TF2) Grade 10,11,12

(Period 1) 5 credits (full year/one block)

(TF2) Grade 10

(Period 1) 5 credits (full year/one block)

(TF3) Grade 11

(Period 2-3) 10 credits (full year/two blocks)

(TF4) Grade 12

(Period 5,6,7) 15 credits (full year/three blocks)

In this program, students become proficient in safely working with metals from learning the various methods of fastening or binding metal (welding, soldering and riveting) to fabricating and installing metal products (steel, copper and brass).

Students will also learn the technical terms related to different welding processes, blueprint reading, electrical principles, welding symbols, and mechanical drawing. Instruction in this program will also provide an introduction to the principles of engineering manufacturing as they apply to welding and metal fabrication. Under the supervision of an instructor, students will practice and become adept at industrial welding, one of the most widely used methods of joining metals, demonstrating multiple welding positions on steel, stainless steel, aluminum and brass. Students will become skilled in applying various welding processes that include oxyacetylene, mig and tig, and arc (shielded metal, gas tungsten, and gas metal) welding, brazing, and in performing plasma arc cutting. Students choosing the metal fabrication and welding program will also experience the added benefits of shop collaboration with the machine technology program, acquiring a more comprehensive knowledge about all aspects of the metal trade.

## **HEALTH CARE AND HUMAN SERVICES CLUSTER**

### **EARLY EDUCATION AND CARE - CHILD DEVELOPMENT**

*Prerequisite: Vocational Director's approval.*

Grades 10, 11, 12

(TH2) Grade 10

(Period 6) 5 credits (full year 1 Block)

(TH3) Grade 11

(Period 3 & 4) 10 credits (full year/two blocks)

(TH43) Grade 12

**Seniors must take all 3 periods.** (Period 1, 2 & 3) 15 credits (full year/three blocks)

(TH4) Grade 12

(Period 1, 2, 3 & 7) 20 credits (full year/four blocks)

The Child Development Program provides an opportunity for 11<sup>th</sup> and 12<sup>th</sup> grade students to experience the exciting and rewarding challenge of working with and studying about young children. Students learn and practice theory and methods of teaching, and are given an internship practicum in a classroom setting in one of Somerville's public schools. Students receive hands-on training with our city's younger students and work closely with a professional cooperating teacher/supervisor. Classroom research and methods are augmented by an exploration of career and educational choices. The Child Development course is offered to 11<sup>th</sup> and 12<sup>th</sup> grade students through application, interview and recommendation procedures. Students may be eligible for an Early Childhood Teaching Certificate or college credits after successful completion of the 2-year program.

### **CARE AND DEVELOPMENT OF YOUNG CHILDREN**

(THCD)

Grade 10

2.5 credits (semester)

This course is offered 1st semester only. It will focus on the preparation of caring for young children and the responsibilities that are entailed. Students will be educated on milestones of infants through preschool with an emphasis on normal growth and development.



## DENTAL ASSISTANT PROGRAM

*Students must successfully complete Chemistry and Human Anatomy & Physiology through the Science Department.*

Grades 10, 11, 12

(TO2) Grade 10

5 credits (full year/one block)

(TO3) Grade 11

10 credits (full year/two blocks)

(TO4) Grade 12

15 credits (full year/three blocks)

Our new Dental Assistant program introduces students to the dental health team. The basis for the dental curriculum will be to give students preparation in health sciences and technology required to be efficient dental assistants. Clinical training will be given to the students during senior year with participating community dentists and patients. Safety of the students is our first priority and is communicated and practiced every year. Graduates will be prepared for entry-level positions that require the chair-side skills and administrative knowledge needed to work in a dental facility. Students in this program also have the ability to go on to further their education as a hygienist or dentist.

Within the Massachusetts Elementary and Secondary Education Vocational Technical Education Frameworks, we will reflect upon topics with content through which learning strategies will include critical thinking, ethics, problem-solving, professionalism, diversity, and self-evaluation. The hands-on learning strategies will help to develop the student's ability to be successful in the program. These will include but are not limited to virtual reality (computer simulations), web-based learning, skills (used and practiced in externships), and interpersonal and communication skills.



## HEALTH CAREERS - INTRODUCTION NURSING PROGRAM

*Prerequisite: Vocational Director's approval*

*Students must successfully complete Chemistry and Human Anatomy & Physiology through the Science Department.*

Grades 10, 11, 12

(TN2) Grade 10

(Period 4) 5 credits (full year/one block)

(TN3) Grade 11

(Period 6 & 7) 10 credits (full year/two blocks)

(TN4) Grade 12

**Seniors must take all 3 periods.** (Period 1, 2, & 3) 15 credits (full year/three blocks)

The Health Careers Program is designed to prepare interested students for career entry opportunities for advancement, and continuing education by introducing them to a broad range of career opportunities and options. The Health Careers introductory course provides an opportunity for career exploration and research in health care. Through cooperatively planned interdisciplinary activities students will study health care systems, anatomy and physiology, medical terminology, human growth and development, legal and ethical issues, communication and interpersonal skills. Students will be certified in CPR, First Aid, OSHA and basic nursing skills. In the Nursing Assistant Program, students develop and demonstrate technical skills. Students gain experience in the classroom, laboratory, and provide patient care in a variety of supervised clinical settings. Students will be eligible to sit for the Department of Public Health Nursing Assistant examination.

## PHARMACY ASSISTANT PATHWAY

*Prerequisite: Vocational Director's approval*

*Students must successfully complete Chemistry and Human Anatomy and Physiology through the Science Department*

(TNP3) Grade 11

(Period 5 & 6) 10 credits (full year/two blocks)

(TNP4) Grade 12

(Period 5, 6 & 7) 15 credits (full year/three blocks)

Pharmacy Technicians work with pharmacists to help prepare and give out prescription medication. Working in pharmacies and hospitals, pharmacy techs work behind the counter performing various jobs. They take prescriptions over

the phone and in person, work with health professionals and customers, help mix medicines, count pills, measure medication, label and give instructions for medicine, and help take payments. Pharmacy techs are the liaison between the public and pharmacists, helping set up consultations and recommendations. Students will gain customer service skills by talking to customers and health care professionals and relaying information directly to the Pharmacists. Upon successful completion students will be eligible to sit for the Pharmacy Technician Certification Exam.

Sophomore year students will be enrolled in the Health Careers Program. At the end of sophomore year, they may choose to enter the Pharmacy Tech Program.

## **COMMERCIAL SERVICES CLUSTER**

### **COSMETOLOGY – State Licensing Course**

*Students successfully complete Human Anatomy & Physiology through the Science Department*

Grades 10, 11, 12

(TQ2) Grade 10 5 credits ((full year/one block)

(TQ3) Grade 11 10 credits (full year/two blocks)

(TQ4) Grade 12 20 credits (full year/four blocks)

The Cosmetology Program is a state licensed course governed by the Commonwealth of Massachusetts. The student will study and be prepared in all aspects of Cosmetology to complete the State Board Exam given in the Commonwealth of Massachusetts. The Cosmetology Program is designed to provide the student with the basics of the arts, science and business aspects of the Cosmetology profession. The program is designed to prepare the student to become competent, qualified professional meeting entry-level industry standards. The student will study and specialize in areas of hair care, including hairstyling and cutting, chemical services, perming, relaxing and coloring. Also covered are esthetics, skin care, make-up artistry, spa services such as aromatherapy and facial massage, and nail technology including manicuring and acrylic nail application. Salon management and job readiness are also included. In the two-year sequence, the students may complete 1000 hours required for licensing in the Commonwealth of Massachusetts.

### **CULINARY ARTS**

Grades 10, 11, 12

(TK2) Grade 10 (Period 1) 5 credits (full year/one block)

(TK3) Grade 11 (Periods 2 & 3) 10 credits (full year/two blocks)

(TK4) Grade 12 (Periods 4, 5 & 6) 15 credits (full year/three blocks)

The Culinary Arts program offers training for those students interested in becoming professional chefs, bakers and restaurant managers. Students enrolled in the program operate The Highland Cafe, which is open to the public. Students also prepare hot and cold foods, fresh baked goods, and catered events on a daily basis. The students work and learn in a state-of -the-art kitchen and restaurant facility. The program provides training in classical as well as advanced culinary techniques, which enables the student to continue their formal education or become placed in a food service career path.

### **GRAPHIC DESIGN AND VISUAL COMMUNICATIONS**

*(An Official Certiport Authorized Testing Center)*

Grades 10, 11, 12

(TG2) Grade 10 (Period 1) 5 credits (full year/one block)

(TG3) Grade 11 (Periods 2 & 3) 10 credits (full year/two blocks)

(TG4) Grade 12 (Periods 5, 6 & 7) 15 credits (full year/three blocks)

From conception to finished product students will get an introduction to converting ideas, information, and emotions into successful design. They will gain design skills using typography, illustration, photography, and electronic media. Programs from the Adobe Design Suite are offered with comprehensive instruction. Using this state of the art digital imaging, digital video, illustration and page layout software and equipment, students learn to apply their creativity to communications media. Projects include logo/identity design, perspective illustration, commercial photography, poster, packaging, advertising, and web design. Several Techniques include print production, storyboarding, filming and editing video footage and more! Students will also learn how the digital print industry translates the process designers use to produce the designs, using modern state of the art digital printing equipment and offset printing equipment. Students are also given an opportunity to obtain an Adobe Certification in several programs, allowing them the edge needed in their future.

# ENGLISH

The English Department is dedicated to exposing our students to literature from a variety of genres and periods. In every grade and at every academic level, students develop and hone writing, close reading, critical thinking, speaking, and listening skills. In addition to required English classes, the English Department offers an array of elective courses that allow students to deepen their engagement in areas of literature and the language arts.

## MAJOR COURSE CRITERIA/REQUIREMENTS:

1. To graduate, a student must pass four years of major English courses: English 1, 2, 3 and 4 or an Advanced Placement course in lieu of an English course or an ELL course.
2. Students may not take more than one major English course during an academic school year. A student who did not pass a major English course must either pass the English course in the summer school session following that academic year or repeat the English course in the succeeding academic year. Placement in English courses should be sequential. An exception to the sequence can be made for seniors.
3. MCAS preparation semester courses are suggested for juniors and seniors until they have passed the English Language Arts MCAS examination. In certain cases, students may apply for exemption from this requirement through their counselor and the English Department Head.
4. EPP REQUIREMENT – juniors and seniors who have passed the Mathematics and/or ELA MCAS exam with competency determination level 1 (low passing) are required by the DESE to be on an Educational Proficiency Plan (EPP). Students on an EPP will need to continue a course of study in mathematics by earning 5 credits in mathematics each year.

## COURSES

- English 1
- English 2
- AP English Literature and Composition
- English 3
- AP English Language and Composition
- English 4
- Writing Lab 1
- Writing Lab 2
- Journalism 1: Investigative Reporting
- Journalism 2: 21<sup>st</sup> Century Media Production
- SAT Preparation: Critical Reading and Writing
- Creative Expressions: Your Story



## ENGLISH 1

H (011); CP (012)

Grade 9

5 credits (full year)

English 1 begins with an intense writing focus that lays the foundation for upcoming units and requires students to shift from concrete to abstract thinkers. Students practice, with explicit guidance, the reading strategies necessary to comprehend and analyze texts. Throughout the year, students read a variety of short stories, novels, autobiographies, poems, and plays, and they learn the important components of each genre. Students who enroll in the honors section will read three additional novels outside of class that are paired with selected units of study.

## ENGLISH 2

H (021); CP (022)

Grade 10

5 credits (full year)

English 2 solidifies the writing foundation from English 1 and requires students to perform increasingly sophisticated tasks in reading, writing and thinking. Students will read and analyze a wide range of texts and write often, fluently and for a variety of purposes. Students read a variety of anchor texts and a wide range of informational texts and poems that help

us examine our world and ourselves. Students who enroll in the honors section will read an additional three novels outside of class that are paired with selected units of study.

### **ADVANCED PLACEMENT ENGLISH LITERATURE AND COMPOSITION**

AP (040)

*Prerequisites for Grade 10 students: English teacher recommendation/ placement examination during Quarter 3 of grade 9.*

Grade 10, 11, 12

5 credits (full year)

This course provides an intensive, college-level study of literature and composition, designed to prepare students to take the AP Examination in English Literature and Composition in May. Intended to complement and culminate the readings and writing students have completed in their other courses, this course focuses on British and continental literature. Writing assignments focus on critical analysis of literature and include expository, analytical, and argumentative essays. In this introductory college-level survey class, students prepare for and are expected to take the AP examination in May.

### **ENGLISH 3**

H (031); CP (032)

Grade 11

5 credits (full year)

English 3 focuses on reading complex texts to write synthesis essays and a variety of argument pieces. Students use the process of writing and research to focus, clarify, deepen and expand their thinking. They learn to support their reasoning with coherent arguments and specific evidence from multiple sources. This process lays the foundation for their Senior Capstone and a performance based assessment that all students complete at the end of the course. Students who enroll in the honors section will read an additional three novels outside of class that are paired with selected units of study.

### **ADVANCED PLACEMENT ENGLISH LANGUAGE AND COMPOSITION**

AP (030)

Grades 12

5 credits (full year)

Students learn to understand and analyze complex works by a variety of authors in order to achieve a higher level of learning and analysis. Students are instructed in the different forms and functions of rhetoric in order to analyze written works, as well as to write on various topics through argumentation, narration, exposition, and analytical writings. In this introductory college-level survey class, students prepare for and are expected to take the AP examination in May.

### **ENGLISH 4: LOOKING CRITICALLY AT IDENTITY**

H (041B); CP (042B)

Grade 12

5 credits (full year)

Preparing for life after high school is a significant source of confusion, discussion, and debate in the modern world. By examining students' individual passions and strengths, through introspection, students will develop a sense of self to more clearly understand how they can participate actively and successfully in all aspects of daily life. The course takes a look inward with the personal statement and career paper. The course shifts to the outward when all students select an issue in the school or community to study. This process lays the foundation for the Capstone paper, project, and exhibition which is a required performance based assessment for the course. The course ends by using a variety of lenses to analyze literature. Students who enroll in an honors section will read three additional novels that are paired with each unit of study and complete a variety of additional writing tasks.

### **WRITING LAB 1**

(073)

Grades 9 and 10

2.5 credits (semester)

This course is designed to meet the needs of all students and will provide support and/or enrichment to students based on their individual needs. This course will complement the foundational writing skills learned in class and begin to prepare students for the rigors of high school writing. Students will use class time to revise and improve their work that is assigned throughout the semester.

## **WRITING LAB 2**

(074)

Grades 11 and 12

2.5 credits (semester)

This course will continue to prepare all students for the rigors of high school writing and will be differentiated based on the students' needs. As a result, this course will support students who need additional writing preparation for the MCAS examination, are struggling with College Preparation writing assignments and/or support students who need enrichment to prepare for Honors and Advanced Placement English courses. Students will use class time to revise and improve their work that is assigned throughout the semester.

## **JOURNALISM 1: INVESTIGATIVE REPORTING (Not being offered in SY20-21)**

(077)

Grades 9, 10, 11, 12

2.5 credits (semester)

Journalism 1 covers the elements of the newspaper with special emphasis on the development of journalistic writing skills. Students also learn the history of the print media and the unique responsibilities and challenges of this profession. Students learn the terminology and desktop publishing/graphic arts technology of newspaper production. Students must be willing and able to complete both classroom and homework writing assignments in a variety of journalistic genres and styles. A student may receive credit for this course in subsequent semesters, if he or she is willing and able to assume reportorial, editorial, and commercial responsibilities involving publishing *The Piper*, the school newspaper.

## **JOURNALISM 2: 21<sup>ST</sup> CENTURY MEDIA PRODUCTION (Not being offered in SY20-21)**

(078)

*Prerequisites: Journalism 1: Investigative Reporting or Department Head approval*

Grades 9, 10, 11, 12

2.5 credits (semester)

In this interdisciplinary elective, students in grades 10-12 are trained in executive positions such as Editor-in-Chief, Tech/Video Editor and Section Editors. Journalism II students are responsible for running the production of the school newspaper, *The Piper*, and overseeing staff and contributing writers. Students receive advanced instruction in reporting, interviewing, writing, editing, and layout, as well as in the history and ethics of journalism. Journalism 2 students will help teach the basics to new reporters and will train Journalism 2 students to be management staff. Students may take this course for credit more than once.

## **SAT PREPARATION: CRITICAL READING AND WRITING (Not being offered in SY20-21)**

Grade 11 (089) 2<sup>nd</sup> semester

Grade 12 (088) 1<sup>st</sup> semester

2.5 credits (semester)

Students will receive valuable test-taking strategies and knowledge building strategies to help improve their SAT score using Khan Academy and other online academic sites. When students complete the course, they will be able to organize thoughts for a timed essay, interpret and analyze selected reading passages, use diverse vocabulary and determine correct sentence structure. In addition, this course is designed to pinpoint the student's strengths and weaknesses, take multiple practice tests, monitor progress and chart improvements and build the confidence to tackle the reading and writing sections of the SAT. Grade 12 students who select this elective will have time to work on their Capstone Project after taking the SAT in November.

## **CREATIVE EXPRESSIONS: YOUR STORY**

(076)

Grades 11, 12

2.5 credits (semester)

This course offers further study in creative expression for students who have a love for innovation and creativity. Students will explore their passions and develop original pieces that allow them to express their unique perspectives and viewpoints. This course also provides a space for student writers who want to publish their writing in the SHS literary magazine, *The Piper*, or other independent publications.

# ENGLISH LEARNER EDUCATION PROGRAM

The English Learner Education Program is sequentially designed to meet the needs of English learners in the study of English as an additional language and in Content Area Instruction. Students who are designated as English Learners (ELs) are enrolled in an ESL course according to their proficiency level for intensive language instruction and practice. Students may also opt for Bilingual classes in Math, Science and Social Studies. In Bilingual courses, transitional bilingual instruction is offered in Spanish, Portuguese, Haitian Creole, and French\*. English learners may also enroll in content area classes where instruction is provided in English using Sheltered English Instruction (SEI) techniques. These SEI courses are listed in the respective department sections of the Program of Study. \*Please note that Bilingual Course offerings may vary depending on student need and instructor availability.



## THE SEAL OF BILITERACY

The Seal of Biliteracy is an award given by a school in recognition of students who demonstrate high level of proficiency in English and an additional language by graduation. See the “Special Programs” section for more details.

**English Learner Welcome Center:** Multilingual staff members enroll new English learners, conduct initial language and academic assessment, discuss school information with students and family members, and assist in orientation to SHS. Ongoing support to students and family members is available at the Welcome Center, including referrals for school-based supports and community resources.

## English Learner Pathways at Somerville High School

### The GOAL Program

The GOAL Program offers over-age English learners an alternative pathway toward their high school diploma. The students served in the GOAL Program can face academic, language, social/emotional, work/life balance, and engagement challenges that make the traditional path to high school graduation extremely difficult. This program is the preferred option for students who enroll in high school when they are 17 to 20 years old and 3 or 4 credit years behind their traditional high school peers. GOAL students begin their high school careers at Somerville High School, where they benefit from beginner ESL instruction as well as foundational math and science courses. GOAL students at SHS are integrated with SHS students and take courses from the SHS course catalog in every department. They also participate in GOAL Seminar for targeted academic and social/emotional supports as well as community building and transition planning. GOAL students at Somerville High School receive additional support through flexible scheduling, an expanded school year with a summer component, and wraparound support services. After advancing to SCALE (Somerville Center for Adult Learning Experiences), students continue their academic preparation in English Language Arts, Mathematics, and Biology in order to pass the three MCAS exams. Finally, students complete the Adult Diploma Program (ADP) in order to receive their high school diploma. The program philosophy is that young adult students can achieve their GOAL through **G**oal Setting, **O**pen Dialogue, **A**cademic Preparation, and **L**anguage Practice.

### English Learner Intensive

This program is designed for students who have significant personal or family circumstances that limit their ability to attend a full school schedule. These circumstances may include, but are not limited to: working full-time to support their family or themselves or care of their child, sibling, or other family member. Juniors or seniors who are on pace to graduate can enroll in an approved, reduced course-load that still preserves their original intended graduation date. All courses are from the SHS course catalog. Students are then able to begin their school day at 9:00, end at 1:30, or both. Students who would benefit from this pathway are encouraged to accumulate credit for graduation early in their academic careers via traditional means, extended school day study, blended learning using technology, and summer credit-bearing study. They benefit from daily check-ins with the English Learner Pathways teacher and coordinator and access to tutors and homework help as needed.



### **Somerville SAFE for SIFE Program, “Students Accessing Formal Education”**

Students with Interrupted Formal Education (SIFE) are offered a cluster of courses to prepare them academically for full engagement in Somerville High School curriculum.

**ESL 1 (Beginner)** Double block introductory course

**ESL 2 (Early Intermediate)** Double block continuing course

**ESL Semester Social Studies** Practice in reading, writing, speaking, and listening in the context of Social Studies

**Literacy ESL (A and B)** Support for the development of basic literacy skills

**SAFE Daily Seminar**

**SAFE Basic Math** (Bilingual: Spanish)

**SAFE Pre-Algebra** (Bilingual: Spanish)

**Algebra 1** (Bilingual: Spanish)

**Biology Foundations** Foundational skills required for the successful study of Biology (Science Department course)

**Pre-Biology** Biology (Science Department course)

A SIFE student’s course of study is determined by the EL counselor after review of the student’s educational history. Ongoing support for these students is supplemented by the English Learner Pathways teacher and coordinator. Students are enrolled in “SAFE Daily Seminar” which offers the development of independent skills for school success, socio-emotional systems of support, and contextual learning opportunities. SAFE for SIFE Students are also encouraged to take advantage of extended learning time after school and/or academic tutoring before and after school at the SHS EL Welcome Center and may enroll in the Summer EL Newcomer Program to receive intensive English Language Development and Math Instruction. SAFE Program teachers and the EL Welcome Center multilingual staff meet on a regular basis to review students’ academic progress and need for additional social supports and community resources.

### **COURSES**

- ESL 1 – Beginner
- ESL 2 – Early Intermediate
- ESL 3 – Intermediate
- ESL 4 – Transitioning
- ESL Semester Social Studies
- ESL Semester Common Core
- Literacy ESL
- Academic Literacy
- General Support for English Learners
- Resource ESL
- SAFE Seminar for SIFE Students
- GOAL Seminar
- Bilingual Common Core Math Concepts 1
- SAFE Basic Math
- SAFE Pre-Algebra
- Bilingual Algebra 1
- Bilingual Geometry
- Bilingual US History 1
- Bilingual US History 2
- EL College & Career Readiness Seminar



### **ESL 1 – BEGINNER**

(7A1)

Grades 9, 10, 11, 12

10 credits (full year/two blocks)

English as a Second Language (ESL) 1 is an introductory course for English learners with little or no English language background. The course focuses on basic grammar and vocabulary. Listening and oral language skills are particularly stressed in this class. Phonics and decoding skills are also taught within a variety of contexts. Students are introduced to

texts related to content across curriculum areas. A wide variety of material is used including print, non-print and multi-media. Students maintain a portfolio, and participate in common department assessments for reading, writing, and speaking. Computer skills are introduced. English learners in ESL 1 are also introduced to and practice standardized test-taking procedures for the MCAS and ACCESS exams. This course can be taken more than once for credit.

## **ESL 2 – EARLY INTERMEDIATE**

(7A2)

Grades 9, 10, 11, 12

10 credits (full year/two blocks)

English as a Second Language (ESL) 2 is a course for English learners who have achieved an early intermediate level of English proficiency demonstrated by successful completion of ESL 1 or a placement test demonstrating equivalent mastery of the skills covered in ESL 1. The course focuses on developing students' academic listening, speaking, reading and writing skills in English. Vocabulary development, sentence structure and patterns, verb tenses, reading, and writing skills are taught in a holistic and integrated manner. Course content is genre driven and taught within a variety of contexts. Students engage with texts related to content across curriculum areas. Students maintain a portfolio, complete projects, develop interdisciplinary activities, and engage in process writing. English learners in this course also participate in common department assessments for reading, writing, and speaking. A wide variety of materials, print, non-print and multi-media, are used to develop oral, aural and written language skills. The development of reading and writing skills is emphasized in this course, which also includes preparation for the MCAS and ACCESS exams. This course can be taken more than once for credit.

## **ESL 3 – INTERMEDIATE**

(7B2)

Grades 9, 10, 11, 12

10 credits (full year/two blocks)

English as a Second Language (ESL) 3 is a course for English learners who have achieved an intermediate level of English proficiency demonstrated by successful completion of ESL 2 or a placement test demonstrating equivalent mastery of the skills covered in ESL 2. The structure, process, and activities in ESL 3 are similar to those noted in ESL 2. However, course content becomes more complex and additional language skills are introduced. The development of academic listening, speaking, reading, and writing skills continue to be stressed with particular emphasis given to the development of literacy and writing skills in alignment with the MA (2017) English Language Arts and Literacy Standards. Students engage with texts related to content across curriculum areas. English learners in this course also participate in common department assessments for reading, writing, and speaking. Preparation for the MCAS and ACCESS exams is also included. This course can be taken more than once for credit.

## **ESL 4 – TRANSITIONING**

(7C2)

Grades 9, 10, 11, 12

5 credits (full year)

The structure, process, and activities in English as a Second Language (ESL) 4 are similar to those noted in ESL 3. However, course content becomes more complex and additional skills are introduced. Students continue to develop oral proficiency while reading and writing skills are emphasized. Students engage with texts related to content across curriculum areas. The course also includes the analysis of literature with an emphasis on: the identification of literary genres, an understanding of common literary terms, literary techniques, and recurrent motifs and themes in alignment with the MA (2017) English Language Arts and Literacy Standards. English learners in this course also participate in common department assessments for reading, writing, and speaking. Standardized test preparation (MCAS and ACCESS) is integrated into instruction. This course can be taken more than once for credit.

## **ESL SEMESTER SOCIAL STUDIES**

(7AS)

Grades 9, 10, 11, 12

2.5 credits (semester)

Beginner and Early Intermediate Level English learners who are enrolled in the content-based ESL course will practice reading, writing, speaking and listening of English in the context of Social Studies. They will use maps, charts, graphs, and primary and secondary source readings to build their foundational knowledge of World and United States history, government and geography while developing academic language and study skills. This course can be taken more than once for credit.

## **ESL SEMESTER COMMON CORE**

(7AC)

Grades 10, 11, 12

2.5 credits (semester)

English learners who are enrolled in this content-based ESL course will practice academic reading and writing skills in alignment with the MA (2017) English Language Arts and Literacy (Common Core) Standards in preparation for the English Language Arts MCAS exam. This course can be taken more than once for credit.

## **LITERACY ESL**

(785)

Grades 9, 10, 11, 12

2.5 credits (semester)

This course is designed to support the developing English language and literacy skills of beginning English learners and students with interrupted formal education. The course incorporates oral language development, as well as targeted instruction in phonemic awareness, phonics, sight words, fluency, vocabulary, and comprehension strategies for beginning readers of English. Students develop English language and literacy skills as well as foundational content concepts through the reading of high interest science and social studies texts. This course can be taken more than once for credit. Two levels of Literacy ESL (A and B) are offered over four semesters of study.

## **ACADEMIC LITERACY**

(781) 1<sup>st</sup> semester

(782) 2<sup>nd</sup> semester

Grades 9, 10, 11, 12

2.5 credits (semester)

This course is designed for English learners who are enrolled in an English Department course, but are also in need of additional targeted support in English language development. This semester course stresses English writing composition (development and organization of multi-paragraph compositions; writing expository and persuasive essays; and research essays and projects) as well as a continued focus on grammar, usage, and mechanics. Students develop academic vocabulary, critical thinking skills, and study skills to be applied in all subject areas. Through the reading of selected non-fiction texts and literary works, students develop skills in literary analysis, writing about literature, as well as research and expository writing skills. An additional focus is placed on reading comprehension, building background knowledge, and test taking strategies for MCAS and SATs. This course can be taken more than once for credit.

## **GENERAL SUPPORT FOR ENGLISH LEARNERS**

(790ALCS)

Grades 9, 10, 11, 12

2.5 credits (semester)

Specialized academic support is offered to English Learners in this semester course. In this course, students receive individualized support in content area classes, with materials provided in both English and native language when appropriate. Students develop academic vocabulary, literacy skills, critical thinking skills, and study skills to be applied in all subject areas. English learners in need of additional academic support can enroll in this course with a referral from a classroom teacher and/or the EL school counselor. Grading is done on a pass/fail basis. This course can be taken more than once for credit.

## **RESOURCE ESL**

(789)

Grades 9, 10, 11, 12

5 credits (full year)

ELL students who are also enrolled in special education will receive ESL and academic literacy support. Resource ESL stresses English listening, speaking, reading comprehension and writing composition skills as students develop academic vocabulary, critical thinking skills, and study skills to be applied in all subject areas. A wide variety of materials, print, non-print and multi-media, are used to develop oral, aural and written language. Assessment of student progress is ongoing in order to provide targeted and focused instruction in English grammar, usage and mechanics. Test taking strategies and MCAS preparation is also included. Grading is done on a pass/fail basis. This course can be taken more than once for credit.

## **SAFE SEMINAR FOR SIFE STUDENTS**

(791SAFE)

Grades 9, 10, 11, 12

2.5 credits (semester)

SAFE Seminar is a classroom-based program that provides individualized support and monitoring to English Learner students who have had life experiences characterized by limited or interrupted formal education. Students participate in

a community-building circle to build relationships among students in the cohort and the adults who support them. Additional curriculum topics emerge from the needs of the group and include listening, speaking, reading, and writing in various contexts. Students may develop skills related to: math fact fluency, beginning literacy, emotion self-regulation, peer-to-peer communication, and executive functioning skills. When possible, contextualized learning opportunities relate subject matter to students' lives as family members, citizens, and workers.

### **GOAL SEMINAR**

(791GOAL)

Grades 9, 10, 11, 12

2.5 credits (semester)

GOAL Seminar is a classroom-based program that provides individualized support and monitoring to English Learner students who are in the GOAL program. Special attention is paid to the outside work responsibilities and math placements of these students. Students participate in a community-building circle to build relationships among students in the cohort and the adults who support them. Additional curriculum topics emerge from the needs of the group and include listening, speaking, reading, and writing in various contexts as well as academic support across the content areas. Students may develop skills related to: workplace self-advocacy, emotion self-regulation, decision-making skills, and academic skills. Students enrolled in this course receive a grade of Pass (P) or Fail (F), and this course can be taken more than once for credit.

### **BILINGUAL COMMON CORE MATH CONCEPTS 1**

(790MA4)

Grade 9

2.5 credits (semester)

Enrollment in this course is required for students in grade 9 who need additional math support and it should be taken concurrently with Algebra 1. Instruction will include topics from the Common Core conceptual categories of Number and Quantity, Algebra, and Functions (Math Concepts 1). This course integrates critical thinking skills with test-taking strategies to prepare students for the MCAS and other standardized tests. Students will practice answering multiple choice, short answer and open response questions with and without the use of calculators. Bilingual instruction and support is offered in English, Spanish, Portuguese, Haitian Creole, and French. This course counts as math credit and can be taken more than once for credit.

### **SAFE BASIC MATH**

(791MA1)

Grade 9

2.5 credits (semester)

This course provides EL students in the SAFE for SIFE program at Somerville High School with an opportunity to develop basic math knowledge and skills that are required for success in high school math courses. Instruction will be individualized, depending on students' prior educational experiences, strengths, and needs. Bilingual instruction and support is offered in English, Spanish, Portuguese, Haitian Creole, and French. This course counts as a math credit and can be taken more than once for credit.

### **SAFE PRE-ALGEBRA**

(791MA0)

Grade 9

2.5 credits (semester)

This course, which is fully aligned with the Common Core and includes the Standards for Mathematical Practice, prepares students for a successful transition from their prior study of mathematics to future study of algebra and geometry. The purpose of the course is to review key algebra readiness skills from the middle grades while reviewing concepts in number and operations, expressions and equations, ratio and proportion, and basic functions. A foundation for algebra is developed by the use of variables in pattern generalizations, abbreviations in formulas, and one-step equations and inequalities. Instruction will focus on these critical areas: developing problem-solving skills, performing operations on rational numbers and using them to simplify expressions, representing a variety of real-world problems with mathematical and algebraic expressions and equations, exercising proportional thinking and using it to analyze the connections among ratio, proportion, and percent, and using measures of central tendency to examine data. Students will be exposed to standardized test-taking skills and strategies to prepare for the MCAS and other standardized tests. Performance assessments are regularly taken to ensure students complete the course with the appropriate knowledge of concepts and skills to prepare them for college and future careers. Bilingual instruction/support and materials may be offered in English, Spanish, Portuguese, Haitian Creole, and French. This course counts as math credit and can be taken more than once for credit.

**BILINGUAL ALGEBRA 1**

(790MA1)

Grades 9, 10, 11, 12

5 credits (full year)

This course, which is fully aligned with the Common Core and includes the Standards for Mathematical Practice, introduces students to algebraic thinking beyond concepts learned in the middle grades. The purpose of the course is to further student understanding that unknown values can be expressed with variables. Instruction will focus on these critical areas: simplifying, evaluating, and writing algebraic expressions; solving linear equations and inequalities; mathematical functions; writing and graphing linear functions that model linear relationships; solving systems of linear equations; exploring properties of higher order functions, particularly exponential and quadratic functions; and exploring properties of polynomials and performing polynomial operations. Students will be exposed standardized test-taking skills and strategies to prepare for the MCAS and other standardized tests. Performance assessments are regularly taken to ensure students complete the course with the appropriate knowledge of concepts and skills to prepare them for college and future careers. Bilingual instruction/support is offered in English, Spanish, Portuguese, Haitian Creole, and French. This course counts as math credit.

**BILINGUAL GEOMETRY**

(790MA2)

Grades 9, 10, 11, 12

5 credits (full year)

This course, which is fully aligned with the Common Core and includes the Standards for Mathematical Practice, introduces students to complex geometric situations and deepens their explanations of geometric relationships. The purpose of the course is to formalize and extend students' geometric experiences from the middle grades. Instruction will focus on these critical areas: establishing criteria for congruence of triangles based on rigid motions; establishing criteria for similarity of triangles based on dilations and proportional reasoning; developing explanations of circumference, area and volume formulas; applying the Pythagorean Theorem to the coordinate plane; and proving basic geometric theorems. Students will be exposed to standardized test-taking skills and strategies to prepare for the MCAS and other standardized tests. Performance assessments are regularly taken to ensure students complete the course with the appropriate knowledge of concepts and skills to prepare them for college and future careers. Bilingual instruction/support is offered in English, Spanish, Portuguese, Haitian Creole, and French. This course counts as math credit.

**BILINGUAL US HISTORY 1**

(790SS1)

Grades 9, 10, 11, 12

5 credits (full year)

This course is intended as part one of a two-year sequence in the study of American History. Students make use of a multi-faceted approach including, research, interpretation of primary source materials, and critical analysis of the America of today. Emphasis is placed on connecting historic events to the nation we have become. Students use print media, and computer-generated material, as well as audio-visual resources in examining such topics as: Colonial America, the seeds of rebellion, the American Revolution and the struggle for independence, launching the new government, rise of democracy, westward expansion and conflict, slavery and the road to war, the Civil War and Reconstruction. Bilingual instruction and support is offered in English, Spanish, Portuguese, Haitian Creole, and French. This course counts as social studies credit.

**BILINGUAL US HISTORY 2**

(790SS2)

Grades 9, 10, 11, 12

5 credits (full year)

This course is intended as part of a two-year sequence in the study of American History. In it, students will make use of a multi-faceted approach including research, interpretation of primary source materials, and critical analysis of the sweeping political, social, economic and intellectual movement leading to the America of today. Emphasis is placed on connecting to the nation we have become. Students use print media, computer generated materials, as well as audio-visual resources in examining such topics as: The Gilded Age, The Age of Imperialism, The Progressive Era, The Roaring Twenties, The Great Depression, The World Wars, The Cold War; the Civil Rights Movement; The Vietnam Era, and the U.S. in an era of terrorism. Bilingual instruction/support is offered in English, Spanish, Portuguese, Haitian Creole, and French. This course counts as social studies credit.

**EL COLLEGE & CAREER READINESS SEMINAR**

(799)

Grades 11 &amp; 12

2.5 credits (semester)

This course provides English learners at Somerville High School with a better understanding of the higher education, vocational training, workforce, and other post secondary options available to them. Topics covered in this course include the types of degrees offered by colleges, an overview of the college application process for community colleges, four-year public schools, and four-year private schools, an overview of the financial aid application process, and an overview of vocational training programs available to students and the application process for them. This course will also cover resume writing, cover letter writing, interview practice, and transition support for graduating seniors. Students in this course will receive individualized support in all aspects of the college application process, including:

- SAT/ACT preparation and registration
- College research and list making
- College majors
- College essay writing
- Financial planning and financial aid applications

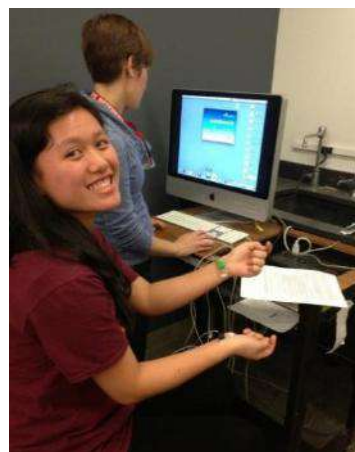
Students enrolled in this course receive a grade of Pass (P) or Fail (F), and this course can be taken more than once for credit.

## HEALTH EDUCATION/FAMILY AND CONSUMER SCIENCES

The Health Education and Family and Consumer Sciences Department is committed to providing an educational program that meets the personal, cultural, creative, and career needs of our students. The program offers the student an opportunity to master many life skill competencies that will assist him/her in becoming a concerned, responsible, contributing member of society. Health Education encourages the student to develop habits and attitudes that will help achieve "wellness" throughout his/her lifetime. Family and Consumer Sciences and Health Education are two disciplines involved in implementing the Massachusetts Department of Education's Health Framework.

### COURSES

- Health Education 1
- Health Education 2
- Wellness Survival Guide for the College-Bound Freshman
- Wellness Survival Guide for the Career Ready Student
- Fashion 1 (formerly Clothing 1)
- Fashion 2 (formerly Clothing 2 Workshop)
- Family Life
- Shape Up Nutrition



### **HEALTH EDUCATION 1**

CP (600); SEIP (600E); SP (601)

Grades 9, 10, 11, 12

2.5 credits (semester)

This course offers topics of instruction that will be helpful for the health and wellness of students now and in adulthood. This is the first of two health related courses. Areas covered will include: human body systems, genetics and heredity, human sexuality and reproduction, nutrition, alcohol, tobacco and drugs, self-discovery skills, STD's and HIV/AIDS, communicable diseases, mental/emotional health and community health resources. This course is required for all ninth grade students.

### **HEALTH EDUCATION 2**

CP (605); SEIP (605E); SP (606)

Grades 9, 10, 11, 12

2.5 credits (semester)

This program of instruction will build on the content of Health Education I and introduce various new topics. Emphasis is on understanding how the body's structure and function is affected by our health behavior. Areas covered will include: violence prevention, personal safety (first aid and CPR), substance abuse prevention (alcohol, tobacco and drugs), human sexuality, non-communicable diseases, sexually transmitted diseases and HIV/AIDS, community health, fitness and lifetime health.



## **WELLNESS SURVIVAL GUIDE FOR THE COLLEGE-BOUND FRESHMAN**

(607)

Grades 11, 12

2.5 credits (semester)

*Pre-requisite: Health I*

This skills-based health course will provide students with the knowledge and skills to lead a healthy lifestyle while in college. Students will learn and demonstrate their ability to successfully navigate topics such as seeking out health center and counselors, academic advisors, support groups, healthy eating habits for the early morning classes, late night study sessions, and making healthy choices at the university convenience store. Additionally, this course will prepare students for living on a budget, sleep its effect on the brain, and exercise, among other topics. Students will demonstrate their skills by participating in hands-on projects and analyzing different college campuses.

## **WELLNESS SURVIVAL GUIDE FOR THE CAREER READY STUDENT**

(608)

Grades 11, 12

2.5 credits (semester)

*Prerequisite: Health I*

This skills-based Health course will prepare the career ready student to enable them to live a healthy and well-balanced lifestyle while embarking on professional career. Topics will include health centers and health insurance, grocery shopping and cooking for the working individual, developing and maintaining a budget, stress management, preventing injuries, exercise, social awareness and involvement, substance abuse and prevention, interview skills, resume building, and navigating the workplace, among other things.

## **FASHION 1**

(621)

Grades 9, 10, 11, 12

2.5 credits (semester)

Students are offered the opportunity to gain self-confidence through the construction of a garment that fits his/ her figure. Fabric selection and care, line, color and design, and proper care and use of the sewing machine are incorporated into the course. A unit on career opportunities in small businesses related to the clothing and textile field is incorporated.

## **FASHION 2**

(622)

*Prerequisites: Fashion 1 or Department Head approval*

Grades 10, 11, 12

2.5 credits (semester)

The course expands students' knowledge and experience by providing instruction in advanced garment construction. The topics of fitting standards, handling complex fabrics and tailoring techniques, wardrobe planning, consumer issues, knowledge of the apparel industry and its related careers are presented. Students will be required to participate in a community service project. Students will also be required to complete three garments of increasing complexity in keeping with their increasing knowledge and abilities. The students will provide the materials for these garments. Students may elect this course for credit each year.

## **SHAPE UP NUTRITION**

(647)

Grades 9, 10, 11, 12

2.5 credits (semester)

This is a one-semester course designed for students in Grades 9-12. The course will provide opportunities for students to develop skills that will be important to them now and as they become adults. Topics covered include: making healthy choices, the food groups and using food nutrition standards and guidelines, dietary guidelines for Americans, the 6 nutrients, weight and control, eating disorders, obesity, food labels, food sanitation and safety and food preparation techniques. Nutrition and menu planning throughout the developmental life cycle will be emphasized. Discussion on the impact of ethnic cultures and nutrition will be looked at and there will be demonstrations by the instructor.

# LIBRARY MEDIA SERVICES

The primary goal of the Library Media Department is to help develop information literate students who can thrive in a digital, knowledge-based world. Those students are able to locate information in a variety of formats (including text based, audiovisual, digital and Web-based). These skills are best taught through integration of library media skills into subject specific activities, including research papers, projects, computer generated presentations, etc. Working cooperatively with staff and students, the library media specialists develop activities that reinforce and expand classroom learning. Our goal is to ensure that students graduate as critical and ethical users and producers of ideas and information.

Our state of the art Media Lab is a collaborative learning space for the creation of multi-media curriculum related projects including audio and video projects, digital imaging, digital portfolios and more. The department also offers several elective courses that provide students with learning experiences that enhance their "real world" experiences.

## COURSES

- Media Production 1
- Media Production 2
- Media Production 3
- Film Studies
- Audio / Visual Technical Production 1
- Audio / Visual Technical Production 2
- Social Media & Digital Citizenship & Production



### **MEDIA PRODUCTION 1**

(909)

Grades 9, 10, 11, 12

2.5 credits (semester)

This introductory hands-on course allows students to develop basic television production skills. Students will write, produce and direct their own programs. Emphasis will be placed on developing technical skills necessary for using a variety of video and audio equipment, including traditional cameras and editing equipment as well as more modern digital equipment. Students will explore the various components of production that include concept development, story boarding, script writing, taping, and editing. Students will work in the classroom, studio and on-location settings.

### **MEDIA PRODUCTION 2**

*Prerequisites: Media Production 1*

(908)

Grades 10, 11, 12

2.5 credits (semester)

Students will further develop their technical skills through advanced study of cinematography, lighting and sound. Students will also work together in a production crew as a director, producer, cameraperson, sound technician, lighting director, grip or production assistant. Students will learn practical media job skills such as interviewing, client professionalism and communication, creating production packets, drafting lighting plots and composing production budgets and schedules. Students will also learn proper screenwriting technique. Capstone projects in this course will be a short film and research-based community documentary.

### **MEDIA PRODUCTION 3**

*Prerequisites: Media Production 2 and written Instructor Approval*

(903)

Grades 10, 11, 12

2.5 credits (semester)

Building on knowledge of basic concepts learned in MEDIA PRODUCTION 1 & 2, students will work together to produce and improve sophisticated studio programs and will assemble elaborate segments utilizing remote and editing equipment. Students will further explore the roles of production personnel, learn advanced director techniques for both studio and field shoots, and methods of advanced editing. From pre-production to post-production, Media Production 3 offers essential training for students interested in pursuing a career in media - including mentoring, assisting, leading and directing students currently enrolled in Media Production 1&2. Major projects include planning, producing, and directing the Senior Class Day Video, writing and supervising The Morning Announcements, and producing professional-level productions for the School District. Student productions will air on SHS TV, The Somerville TV/Media YouTube Channel and could air on local Somerville cable channels. Out-of-class time commitments will be required.

## **FILM STUDIES**

(907)

Grades 9, 10, 11, 12

2.5 credits (semester)

This class will discuss films starting from the silent film era to today. Films will be discussed and viewed based on their technical innovation and political and social implications for each era. Students will learn about the structure of a film, distribution, public perception, etc. This class will be writing intensive. At the end of each film screened, students will be required to write a response. Some responses will be in the format of a film review. Students may post these reviews in movie review publications.

## **AUDIO / VISUAL TECHNICAL PRODUCTION 1**

(901)

Grades 9, 10, 11, 12

2.5 credits (semester)

Students will learn how to plan, produce and execute live and recorded stage and studio productions. Any production, assembly or presentation originating on the Somerville High School Centennial Auditorium stage will be staffed, planned and run by students of the Audio/Visual Technical Production Course, who will learn proper sound mixing and design, microphone placement and utilization, stage lighting techniques and programming, and professional stage management and production. Students will learn proper safety and rigging techniques for lighting, electrical components, sets, stage decorations and more. They will learn how to produce complex multimedia presentations including musical, artistic, dramatic performance and professional lecture presentations and celebrations of different forms of media. Students will learn how to safely run the lighting and sound control boards, spotlights, projectors, rigs and more. Students will be expected to become actively involved in all aspects of a production to insure its success. Out-of-class time commitments will be required.

## **AUDIO / VISUAL TECHNICAL PRODUCTION 2**

*Prerequisites: A/V Tech Production 1*

(902)

Grades 9, 10, 11, 12

2.5 credits (semester)

Students will further develop their technical and organizational skills through advanced study of stage design and multimedia-infused live production. Students will also work together in a stage production crew as a director, stage manager, house manager, cameraperson, sound technician, lighting director, grip or production assistant to help produced professional-level school functions, presentations and assemblies. They will coordinate with classmates and staff to produce the Holiday Show, Class Day, and many other important presentations, performances and celebrations. Students will learn practical technical job skills such as client professionalism and communication, advanced lighting and sound design, and composing production budgets, programs and schedules, and more. Out-of-class time commitments will be required.

## **SOCIAL MEDIA & DIGITAL CITIZENSHIP & PRODUCTION**

(904)

Grades 9, 10, 11, 12

2.5 credits (semester)

This social media course will allow students to explore how social media has changed communication, how it affects their future, and how they can use it as an advantage in almost any profession in the 21st Century. They will study the history of social media and its place in the current cultural climate; proper, legal and safe standards and practices of social media professionals, and - most importantly - how to conduct and protect properly themselves online. Students will be expected to participate safely and responsibly on various social media platforms, including twitter, Facebook and Snapchat, among others. Students will learn how to safely use social media as students, young professionals and citizens of the digital age. Students will safely and responsibly engage target audiences and promote school functions, assemblies and happenings via these social media channels, and learn how to interweave live and recorded video and multimedia production into their posts. Students will learn all aspects and responsibilities of a social media producer/manager in a professional setting. Out-of-class time commitments will be required.

# MATHEMATICS

The Mathematics Department offers a wide assortment of courses to meet the mathematics and computer programming needs of Somerville students regardless of their plans after high school. Course offerings are meaningful and have real world applications and connections to help prepare students for college and future careers in our global society. The content of all mathematics course offerings reflects the standards of instruction developed by the National Council of Teachers of Mathematics and is consistent with our district curriculum guidelines, the Massachusetts Curriculum Frameworks and the Common Core State Standards.

The Mathematics Department also offers computer programming courses. These courses provide students with a rich background in computer programming fundamentals that are essential to careers in the computer industry, business and financial worlds, and engineering environments.

The Mathematics Department offers Advanced Placement courses in Calculus AB, Calculus BC, Computer Science and Statistics. Students enrolled in these courses are expected to take the corresponding Advanced Placement Examinations administered by the College Board.

## **MAJOR COURSE CRITERIA/REQUIREMENTS:**

1. Students must fulfill prerequisite requirements with passing grades, and must be grade level appropriate in order to enroll in any and all courses in which said requirements are listed, unless Department Head approval has been granted.
2. Additional Math MCAS Prep courses are required for juniors and seniors until they have passed the Math MCAS exam. In certain cases, *students may apply for exemption from this requirement through their counselor and the Math Department Head.*
3. EPP REQUIREMENT – juniors and seniors who have passed the Mathematics and/or ELA MCAS exam with competency determination level 1 (low passing) are required by the DESE to be on an Educational Proficiency Plan (EPP). Students on an EPP will need to continue a course of study in mathematics by earning 5 credits in mathematics each year.
4. All students are required to pass 20 credits of math including Geometry and Algebra 2 or the equivalent (with the approval of the Department Head).
5. Additional semesters of math support classes are required in grades 9 and 10 for all students identified as needing additional support. Common Core Math Concepts 1 and 2 will be taken concurrently with Algebra 1 and Geometry.

## **COURSES**

- Algebra 1
- Common Core Math Concepts 1
- Geometry
- Common Core Math Concepts 2
- Algebra 2
- Advanced Math
- Pre-Calculus
- Calculus
- AP Calculus AB
- AP Calculus BC
- AP Statistics
- Statistics
- Data Analysis 1
- Data Analysis 2
- MCAS Prep Math
- Introduction to Java Programming
- Introduction to Hardware Engineering
- Exploring Computer Science 1
- Exploring Computer Science 2
- AP Computer Science



## **ALGEBRA 1**

CP (212); SEIP (212E)

Grades 9, 10

5 credits (full year)

In this course, which is fully aligned with the Common Core and includes the Standards for Mathematical Practice, students will be introduced to algebraic thinking beyond concepts learned in the middle grades. The purpose of the course is to further student understanding that unknown values can be expressed with variables. Instructional time will focus on these critical areas: simplifying, evaluating, and writing algebraic expressions; solving linear equations and inequalities; introduction of mathematical functions; writing and graphing linear functions that model linear relationships; solving systems of linear equations; exploring properties of higher order functions, particularly exponential and quadratic functions; and exploring properties of polynomials and performing polynomial operations.

Students will be exposed to a variety of standardized test-taking skills and strategies to prepare for the MCAS and other types of standardized tests. Performance assessments are regularly taken to ensure that students complete the course with the appropriate knowledge of concepts and skills that will help prepare them for college and future careers.

## **COMMON CORE MATH CONCEPTS 1**

CP (215); SEIP (215E)

Grades 9, 10

2.5 credits (semester)

Enrollment in this course is required for students in grades 9 and 10 who need additional math support, and it should be taken concurrently with Algebra 1. Instruction will include topics from the Common Core conceptual categories of Number and Quantity, Algebra, and Functions. This course integrates critical thinking skills with test-taking strategies to prepare students for the MCAS and other standardized tests. Students will practice answering multiple choice, short answer and open response questions with and without the use of calculators.

## **GEOMETRY**

Grade 9: H (221); CP (223); SEIP (222E)

Grades 10, 11: H (221); CP (222); SEIP (222E)

5 credits (full year)

*Prerequisites: Algebra 1 or Department Head approval*

In this course, which is fully aligned with the Common Core and includes the Standards for Mathematical Practice, students will explore complex geometric situations and deepen their explanations of geometric relationships. The purpose of the course is to formalize and extend students' geometric experiences from the middle grades. Instructional time will focus on these critical areas: establishing criteria for congruence of triangles based on rigid motions; establishing criteria for similarity of triangles based on dilations and proportional reasoning; developing explanations of circumference, area and volume formulas; applying the Pythagorean Theorem to the coordinate plane; and proving basic geometric theorems. Students will be exposed to a variety of standardized test-taking skills and strategies to prepare for the MCAS and other types of standardized tests. Performance assessments are regularly taken to ensure that students complete the course with the appropriate knowledge of concepts and skills that will help prepare them for college and future careers.

## **COMMON CORE MATH CONCEPTS 2 (Not being offered in SY20-21)**

CP (225); SEIP (225E)

Grades 10, 11

2.5 credits (semester)

Enrollment in this course is required for students in grade 10 who need additional math support, and it should be taken concurrently with Geometry. Instruction will include topics from the Common Core conceptual categories of Modeling, Geometry, and Statistics and Probability. This course integrates critical thinking skills with test-taking strategies to prepare students for the MCAS and other standardized tests. Students will practice answering multiple choice, short answer and open response questions with and without the use of calculators.

## **ALGEBRA 2**

H (231); CP (232); SEIP (232E)

*Prerequisites: Geometry or Department Head approval*

Grades 9, 10, 11, 12

5 credits (full year)

In this course, which is fully aligned with the Common Core and includes the Standards for Mathematical Practice, students will explore many types of functions. The purpose of the course is to formalize and extend students' algebraic knowledge and proficiency beyond Algebra 1. Instructional time will focus on these critical areas: linear, quadratic, polynomial, rational, exponential, and trigonometric functions; symbolic manipulation with polynomials, exponents, and radicals; writing equations as mathematical models; solving equations and systems of equations; and probability,

sequences, and series. Students will be exposed to a variety of standardized test-taking skills and strategies to prepare for the MCAS, SAT and other types of standardized tests. Performance assessments are regularly taken to ensure that students complete the course with the appropriate knowledge of concepts and skills that will help prepare them for college and future careers.

### **ADVANCED MATH**

CP (242)

*Prerequisites: Algebra 2*

Grades 11, 12

5 credits (full year)

This year-long course in quantitative reasoning focuses on Probability and Statistics during 1st semester and Functions and Modeling during 2nd semester. This capstone course engages students in relevant problems and prepares them for a range of future options in non-algebraically-intensive college majors or for entering workforce training programs. The materials prepare students to use a variety of mathematical tools and approaches to model a range of situations and solve problems. This is a project based course with no tests and where the majority of assignments will be completed in class. The units of study for this class are Analyzing Numerical Data, Probability and Statistical Studies, Using Recursion in Models & Decision Making, Using Functions in Models & Decision Making, and Decision Making in Finance.

### **PRECALCULUS**

H (250) CP (247)

*Prerequisites: Algebra 2 or Advanced Math or Department Head approval*

Grades 10, 11, 12

5 credits (full year)

This course will provide students with the necessary background to pursue the study of Calculus and other areas of mathematics. Topics include polynomial and rational functions, exponential and logarithmic functions, unit circle trigonometry and identities, trigonometric functions and modeling, transformations, sequences, series and limits. Graphing calculators are used extensively throughout the course.

### **CALCULUS**

H (252)

*Prerequisites: Pre-Calculus or Department Head approval*

Grade 12

5 credits (full year)

This course develops a sound understanding of the concepts of derivatives and integrals as they relate to polynomial, trigonometric, exponential and logarithmic functions in theoretical and real world problem solving applications. An introduction to the theory of limits will also be a focus of study in this course. Students will utilize graphing calculators as a reasoning tool to illustrate, hypothesize and analyze problem-solving applications, as well as to understand their limitations. The technical and analytical approaches of problem solving are integrated in this course.

### **ADVANCED PLACEMENT CALCULUS AB**

AP (251)

*Prerequisites: Pre-Calculus or Department Head approval*

Grade 10, 11, 12

5 credits

(full year)

This course provides an intensive college level study of Calculus designed to prepare students to take the Advanced Placement AB Calculus examination. The course follows Advanced Placement guidelines set by the College Board. Emphasis is placed on the rule of five in problem solving situations: analytic, algebraic, graphical, numerical and verbal. Applications of derivatives and integrals using polynomial, trigonometric, exponential and logarithmic functions as they relate to real world settings are presented. Derivatives, as rates of change, integrals as the limits of Riemann sums, the Fundamental Theorem of Calculus and its implication, the theory of limits and slope fields are topics of major study in the course. Use of graphing calculators to model, analyze, hypothesize and construct proofs using analytical methods is an integral part of the course. Other topics include polar and parametric equations, differential equations and related rates.

### **ADVANCED PLACEMENT CALCULUS BC (Not being offered in SY20-21)**

AP (271)

*Prerequisite: Pre-calculus Honors or Department Head Approval*

Grades 10, 11, 12

5 credits (full year)

AP Calculus BC extends the content learned in AB to different types of equations (polar, parametric, vector-valued) and new topics (such as Euler's method, integration by parts, partial fraction decomposition, and improper integrals), and



introduces the topic of sequences and series. The AP course covers topics in differential and integral calculus, including concepts and skills of limits, derivatives, definite integrals, the Fundamental Theorem of Calculus, and series. The course teaches students to approach calculus concepts and problems when they are represented graphically, numerically, analytically, and verbally, and to make connections amongst these representations. Students learn how to use technology to help solve problems, experiment, interpret results, and support conclusions.

### **ADVANCED PLACEMENT STATISTICS**

AP (256)

*Prerequisites: Algebra 2 or Department Head approval*

Grades 11, 12

5 credits (full year)

This course is equivalent to a non-calculus based introductory college course in statistics and prepares students to take the Advanced Placement exam in Statistics. The course provides students with an introduction to the major concepts and tools for collecting, analyzing and drawing conclusions from data. Students will be exposed to four broad conceptual themes: exploring data (describing patterns and departures from patterns), sampling and experimentation (planning and conducting a study), anticipating patterns (exploring random phenomena using probability and simulation), and statistical inference (estimating population parameters and hypothesis testing). Students will use statistical software and graphing calculators to explore a variety of approaches to a problem.

### **STATISTICS**

H (257)

*Prerequisites: Algebra 2 or Department Head approval*

Grades 11, 12

5 credits (full year)

This course provides students with an introduction to the major concepts and tools for collecting, analyzing and drawing conclusions from data. Students will be exposed to four broad conceptual themes: exploring data (describing patterns and departures from patterns), sampling and experimentation (planning and conducting a study), anticipating patterns (exploring random phenomena using probability and simulation), and statistical inference (estimating population parameters and hypothesis testing). Students will use statistical software and graphing calculators to explore a variety of approaches to a problem.

### **DATA ANALYSIS 1 (Not being offered in SY20-21)**

(248)

*Prerequisites: Algebra 2 or Department Head approval*

Grades 11, 12

2.5 credits (semester)

This course (*formerly Discrete Math*) enables students to experience mathematics as a useful tool in human decision making. The topics upon which the course will focus include the mathematics of social choice and election theory, applications of matrices and graph theory, and an introduction to the process of optimization, algorithm construction, counting, and finite probability. The course will emphasize problem solving, communication, reasoning and modeling, and a variety of test-taking skills to familiarize students with SAT and MCAS testing formats.

### **DATA ANALYSIS 2 (Not being offered in SY20-21)**

(249)

*Prerequisites: Algebra 2 or Department Head approval*

Grades 11, 12

2.5 credits (semester)

Students will design and conduct hands-on experiments to collect, organize and analyze data, to expose them to experiences which foster a sense of value for mathematics, develop mathematical habits of mind, and highlight the role of mathematics in human affairs. Students will be encouraged to explore, guess, conjecture, test, and build arguments regarding the reliability and validity of their hypotheses. The course emphasizes problem solving, communication, reasoning, and modeling, and a variety of test-taking skills to familiarize students with SAT and MCAS testing formats. Students will develop an awareness of the role data analysis plays in business, industrial, medical, and social contexts.

### **MCAS PREP MATH (Not being offered in SY20-21)**

CP (292); SEIP (292E) 1<sup>st</sup> semester

CP (293); SEIP (293E) 2<sup>nd</sup> semester

Grades 11, 12

2.5 credits (semester)

Enrollment in this course is automatic and required for students who have yet to pass the Grade 10 Math MCAS test or a subsequent retest as stated at the beginning of this booklet. This course integrates higher order thinking skills with test

preparation strategies in an attempt to enable students to gain the confidence and knowledge required to pass the MCAS math test or retest. The topics of this course, embedded in problem solving activities and sample released test items, include the Common Core conceptual categories of Number and Quantity, Algebra, Functions, Geometry, and Statistics and Probability. As some test sections allow the use of scientific calculators and some do not, students are encouraged to solve problems with and without technological aid. Students may apply for exemption from these requirements through their counselor and the Math Department Head.

### **INTRODUCTION TO JAVA PROGRAMMING**

(253)

*Prerequisite: None*

Grades 9, 10, 11, and 12

2.5 credits (semester)

Students will learn the basics of computer programming, including if/else logic, loops, input/output, tracing, compiling, and debugging. In this project-based course, students will write programs including several simple games. Higher-level topics may be taught as pacing permits. Taught in Java, this course prepares students for success in the AP Computer Science course.

### **INTRODUCTION TO HARDWARE ENGINEERING (Not being offered in SY20-21)**

(254)

*Prerequisite: None*

Grades 9, 10, 11, and 12

2.5 credits (semester)

This introductory, overview class covers a wide range of Hardware topics which can include: programming LEDs, building a circuit, 3D computer modeling, using motors, Wearable Technology, and more. This class uses an electronics platform called Arduino which is intended for making interactive projects. Arduino senses the environment by receiving inputs from many sensors, and affects its surroundings by controlling lights, motors, and other actuators. You can tell your Arduino what to do by writing code in the Arduino programming language.

### **EXPLORING COMPUTER SCIENCE 1 (Not being offered in SY20-21)**

(255)

*Prerequisite: Algebra 1*

Grades 9, 10, 11, 12

2.5 credits (semester)

In this project-based course, students will first learn about human-computer interaction and become "computational thinkers" by applying a variety of problem-solving techniques as they create solutions to problems in a range of contexts. Students will then apply this knowledge in order to design and create basic websites and computer programs (including apps for mobile devices).

### **EXPLORING COMPUTER SCIENCE 2 (Not being offered in SY20-21)**

(265)

*Prerequisite: Exploring Computer Science 1*

Grades 9, 10, 11, 12

2.5 credits (semester)

In this project-based course, students will use the skills they've acquired in Part 1 of the Exploring Computer Science course to further explore how computing facilitates new methods of managing and interpreting information. Students will write and use computer programs (including apps for mobile devices) to translate, process, and visualize data in order to find patterns and test hypotheses. In addition, students will learn how to design, construct, and program basic robots in order to control their movements, gain sensory feedback from them, and use them for information processing.

### **ADVANCED PLACEMENT COMPUTER SCIENCE**

AP (261)

*Prerequisites: Geometry or Algebra 2 or Department Head approval*

Grades 10, 11, 12

5 credits (full year)

This course is equivalent to a college-level introductory course in Computer Science, and prepares students to take the Advanced Placement exam. Students will learn to program in the object-oriented Java language. Topics include programming logic; loops including recursion; writing and calling methods; writing and using interacting classes; sorting and searching algorithms; and common Object types such as Strings, Arrays, and Array Lists. Students will also learn about computer history and ethics.

# MUSIC



As Music Educators, it is our mission to inspire and guide every student in active music making through the use of a sequential and creative curriculum that nurtures the human spirit and promotes cultural understanding. The fundamental purpose of music education in the high school is to develop in each student, as fully as possible, the ability to perform, understand and value music. The offerings listed below seek to achieve these goals by providing a variety of experiences that enable students to develop musical skills, understandings and values. Any course listed below satisfies the fine arts requirement.

## PERFORMING ARTS AND HIGHLANDER THEATRE COMPANY

Somerville High School's Performing Arts and Highlander Theatre Company encourages students to explore creativity, collaboration and self-expression. Theatre Arts is an art form concerned with the representation of people in time and space, their actions, and the consequences of their actions. Theatre education expands the ability to understand others and communicate through language and action, and provides a unique opportunity for integrating the arts, linking dance, music, and visual arts elements in performance and production. Theatre includes acting, improvisation, storytelling, mime, playmaking and playwriting, directing, management, design and technical theatre, and related arts such as puppetry, film, and video.

\*In order to receive credit for courses marked with an asterisk (\*), the student is required to perform and attend **all** formal concerts, athletic events, parades, competitions, and other performances as required by the department.

### COURSES

- Band
- Chorus
- Orchestra
- Comprehensive Music Theory
- CTE Band
- CTE Chorus
- CTE Orchestra
- Jazz Band
- Show Choir
- Drum Set Lab
- Drum Line
- Advanced Drum Line
- World Percussion Ensemble
- Introduction to Guitar
- Guitar Lab
- Advanced Guitar Ensemble
- Introduction to Piano
- Advanced Piano Studies
- Musical Theatre Workshop
- Fundamentals of Acting
- Introduction to Theatre
- Music Technology and Production
- Hip Hop Lab
- Music 1
- SEI Music Ensemble
- Theatre & Society Performing Arts/Social Studies Department
- Technical Theatre and Design
- Playwriting & Composition

### BAND\*

H (873); CP (872)

*Prerequisites for Honors: Juniors and seniors only; completion of two years in a band, instructor recommendation, required audition or Supervisor approval*

Grades 9, 10, 11, 12

5 credits (full year)

Band is an instrumental ensemble of students who perform music from a variety of different cultures and styles (rock, classical, contemporary, and jazz). During the school year, the group performs at athletic events, parades, competitions, festivals, and concerts. Through rehearsal and performance, students learn technique and develop knowledge of instrument mechanics. This course is designed to progressively develop musicianship through practice in a supportive community of students.

In the Honors section, students will focus on advanced instrumental techniques, collegiate level range and articulation and current performance practice in varied genres of instrumental music. Students will be required to be sectional leaders and peer mentors. Participation in MMEA Eastern District Festival or MICCA Solo/Ensemble Festival auditions is required. Participation in all extra-curricular and civic performances will be required. Students will be responsible for the research and writing of program notes as well as a semester paper researching the social and cultural elements of a certain composer or genre. Students will also be required to participate in quarterly rehearsals with middle school students in our district ensembles. Students may take this class more than once for credit.

## **CHORUS\***

H (863); CP (862)

*Prerequisites for Honors: Juniors and seniors only; completion of two years in a chorus, instructor recommendation, required audition or Supervisor approval*

Grades 9, 10, 11, 12

5 credits (full year)

Students develop a basic knowledge of vocal technique and how to follow a vocal score. Students' progress in singing music from a variety of genres and languages with appropriate expression and articulation and in common performance practice and etiquette. Performance opportunities include concerts at Somerville High School, tours of elementary schools, community fund-raisers, concerts with combined choirs from other schools and organizations, and festival competitions. Smaller ensembles may be formed from the membership of the larger group.

In the Honors section, students will focus on advanced choral techniques, exemplary posture and diction, and current performance practice in different genres of choral music. Students will be required to be sectional leaders and peer mentors. Participation in MMEA Eastern District Festival or MICCA Solo Ensemble Festival auditions is required. Participation in all extra-curricular performance opportunities is required. Students will be responsible for the research and writing of program notes as well as a semester paper researching the social and cultural elements of a certain composer or genre. Students will also be required to participate in quarterly rehearsals with middle school students in our district ensembles. Students may take this class more than once for credit.

## **ORCHESTRA\***

H (853); CP (852)

*Prerequisites: Juniors and seniors only; completion of two years in an orchestra, instructor recommendation, required audition or Supervisor approval*

Grades 9, 10, 11, 12

5 credits (full year)

Orchestra is an instrumental music ensemble made up of players of: violin, viola, cello and acoustic bass. The Orchestra is open to beginning thru advanced musicians who are interested in playing music from varying genres and styles.

Orchestra students will be trained in elements of traditional music literacy as well as improvisation and non-traditional musicianship. The course is designed to progressively develop musicianship in a supportive community of teachers and students. Participation in performances is required.

In the Honors section, students will focus on advanced orchestral techniques, second and third position fingerings, advanced bowing and articulation, and current performance practice in varied genres of orchestral music. Students will be required to be sectional leaders and peer mentors. Participation in MMEA Eastern District Festival or MICCA Solo/Ensemble Festival auditions is required. Participation in all extra-curricular performance opportunities is required. Students will be responsible for the research and writing of program notes as well as a semester research paper on the social and cultural elements of a certain composer or genre. Students will also be required to participate in quarterly rehearsals with middle school students in district ensembles. Students may take this class more than once for credit.

## **COMPREHENSIVE HONORS MUSIC THEORY**

H (874)

Grades 9, 10, 11, 12

5 credits (full year)

This honors-level course is a wide-ranging study of how music works. The goal is to provide students advanced musical knowledge that is applicable to music performance, music composition, enjoyment, and advanced study. It examines the language and notation of music as well as all elements of Western music from the Medieval age to Modern music. The course offers study in music notation (reading and writing music), melody, rhythm, harmony, form, and structure. The students will gain advanced knowledge of compositional techniques and demonstrate this knowledge in their own music compositions. The course will also focus on listening, and ear-training, all vital elements of musicianship.

## **CTE BAND\***

(872S)

Grades 9, 10, 11, 12

2.5 credits (semester)

This course is for students who have limited or no prior experience and who are interested in performing in Band. The instruments offered are flute, trumpet, trombone, clarinet, French horn, tuba, saxophone, baritone horn and percussion. This course will be designed to introduce basic band instrument technique and pedagogy and will include the development of necessary music literacy skills and performance experience to ready the student for participation in the Somerville High School Band. This course is also offered for students enrolled in Vocational Exploratory who have been recommended for performance ensembles. Students may take this class more than once for credit.

**CTE CHORUS\***

(862S)

Grades 9, 10, 11, 12

2.5 credits (semester)

This course is designed for students who are interested in developing the necessary skills for performing with the Somerville High School Chorus. This course is designed to introduce and develop basic singing techniques, sight-reading skills and basic music theory concepts. The group performs in concert three times a year. Attendance required at all performances. This course will not have an audition requirement and is geared for students with no previous experience in choral singing. This course is also offered for students enrolled in Vocational Exploratory who have been recommended for performance ensembles. Students may take this class more than once for credit.

**CTE ORCHESTRA\***

(852S)

Grades 9, 10, 11, 12

2.5 credits (semester)

This course is for students interested in violin, viola, cello or bass who have limited musical experience in this genre. This course will be designed to introduce basic string technique and pedagogy and will include the development necessary music literacy skills and performance experience to ready the student for participation in the Somerville High School Orchestra. This course is also offered for students enrolled in Vocational Exploratory who have been recommended for performance ensembles. Students may take this class more than once for credit.

**JAZZ BAND\* (Prerequisites: Required audition)**

(875)

Grades 9, 10, 11, 12

2.5 credits (semester)

Through listening to recordings, critiquing, analyzing, discussion and application, students will learn and perform a variety of musical styles labeled as "Jazz." Students will explore the history of jazz, its musicians and culture. Students will study and experience the foundations of jazz music through listening and playing a variety of music including blues, swing, bebop, funk, fusion, modern jazz and Latin jazz. Students will participate in building the skills of improvisation and will study and play the basic theoretical elements of jazz music construction. Students will perform, as a group and as soloists, for their peers and their community. Students may take this class more than once for credit.

**SHOW CHOIR\* (Prerequisites: One year of Chorus, required audition or Supervisor approval)**

(864)

Grades 10, 11, 12

2.5 credits (semester)

Show Choir is an advanced performing choir for students who have demonstrated aptitude and commitment for choral performance. This course emphasizes a strong combination of singing, dancing, and performing for an audience. The student will be expected to have demonstrated a mastery of basic elements of music and the principles of vocal, choral technique (including such skills as reading music, analyzing, creating, improvising, composing, and evaluating). The class will cover singing solo, one-, two-, three-, or four- part music, as well as singing accompanied or a cappella music from a variety of different genres. The out-of-class assignments could include but are not limited to attending at least one music concert at any college or university and composition of a written critique. Students will also sing at special events, contests, Solo/Ensemble Festivals, and District/State Choral Festivals. Students may take this class more than once for credit.

**DRUM SET LAB \***

(867)

Grades 9, 10, 11, 12

2.5 credits (semester)

Drum Set Lab will prepare students to flourish as drum set drummers in a modern music setting. Students will learn the skills to play drum set in a variety of musical environments/genres and will explore the cultural elements that inspired those styles. Individualized and group instruction will be used. Topics covered will be: fundamental techniques and vocabulary (rudiments), establishing a groove, improvisation/soloing, reading notation, aural skills and correct technique to prevent injury. Styles will include: back beat (funk, rock, pop, R & B, Hip-Hop), Jazz, Latin, Afro-Cuban and Brazilian drumming. Students will be assessed through rubric-based playing assessments, group projects and ensemble performances. There is a performance requirement (\*).

## **DRUM LINE\***

(869)

Grades 9, 10, 11, 12

2.5 credits (semester)

Drum line students learn to become active members in a working and performing drum corps. All students will be expected to demonstrate competency on snare drum, bass drum, cymbals, and instruments of the battery. The 40 Snare Drum Rudiments of the Percussive Arts Society will be included in instruction. Grades are based on participation, attendance, practice, and rehearsal technique. Drum line performs at concerts, assemblies, and sporting events throughout the year. Extra-curricular performances are mandatory. Students may take this class more than once for credit.

## **ADVANCED DRUM LINE\*** (*Prerequisites: Supervisor or Music Teacher recommendation*)

(868F)

5 credits (full year)

(868)

2.5 credits (semester)

Grades 9, 10, 11, 12

Advance Drum Line is a college preparatory class encompassing the further development of music literacy, advanced rudiments, and music theory that will ready students for continuing their passion for music into college by preparing students for collegiate auditions and placement. All 40 of the Percussive Arts Society rudiments will be taught as well as advanced field technique, marching and advanced mallet percussion. This course is designed for students who have excelled in the introductory course and have been recommended by the instructor or the department head.

## **WORLD PERCUSSION ENSEMBLE\***

(871)

Grades 9, 10, 11, 12

2.5 credits (semester)

This course is a social/cultural examination of drumming from earliest civilization to the modern era. It includes study of specific cultures, their use of the drum in rituals, and the significance of music in the development of civilization. Students learn about different cultures and civilizations while participating in making music that is/was important to them. There is a constant element of performance on drums pertaining to the culture studied. The course culminates in a performance using 21<sup>st</sup> century percussion techniques. There is no previous knowledge of drumming necessary to take this course. Students may take this class more than once for credit.

## **INTRODUCTION TO GUITAR**

(870)

Grades 9, 10, 11, 12

2.5 credits (semester)

Students develop rudimentary technique on acoustic guitar. Students learn TAB (tablature), and standard notation, along with chord symbols, accompaniment patterns, and common progressions. Ensemble skills as well as independent practice are expected. Students may take this class more than once for credit.

## **GUITAR LAB** (*Prerequisites: Introduction to Guitar or Supervisor approval*)

(885)

Grades 9, 10, 11, 12

2.5 credits (semester)

Guitar Lab is a self-directed and individualized curriculum for students at all levels who are interested in improving their technique while not being active in a performance ensemble.

## **ADVANCED GUITAR ENSEMBLE\*** (*Prerequisites: Introduction to Guitar or Supervisor approval*)

(880)

Grades 9, 10, 11, 12

2.5 credits (semester)

Advanced Guitar Ensemble is a continuation of Introduction to Guitar for students interested in performance experience and greater exposure to advanced techniques and music theory application. Students will learn through improvisation, modern rehearsal technique and group and individual performance. Musical selections will focus on modern music with an emphasis on popular styles of guitar playing. This course is also offered to students who are proficient in bass guitar as well as drum set. Students must be willing and able to work independently and collectively in a musical environment. Participation in a school performance is required. Students may take this class more than once for credit.



## **INTRODUCTION TO PIANO**

(886)

Grades 9, 10, 11, 12

2.5 credits (semester)

This course introduces piano basics for the beginner. This course is designed for students who have not had extensive musical training and would like to gain enough knowledge and skill to pursue playing the piano independently. Students develop the ability to read music, improvise simple melodies, add chordal accompaniment to melodies, and play scales with appropriate fingering and smooth execution. Students may take this class more than once for credit.

## **ADVANCED PIANO STUDIES\***

(887)

Grades 9, 10, 11, 12

2.5 credits (semester)

Advanced Piano Studies is designed for piano students who have developed intermediate keyboarding skills and have demonstrated working knowledge of the treble and bass clef, intermediate musical notation recognition, and intermediate scale knowledge. The student will learn appropriate musical theory and technique to play scales in multiple keys, to understand and play major/minor and augmented/diminished chords in various positions, and use articulation and phrasing to portray the intent of the composer. The course will also encompass composition. There is a performance requirement. Upon teacher recommendation, students will perform either in class or for a public recital, based on readiness and comfort.

## **MUSICAL THEATER WORKSHOP\***

(878)

Grades 9, 10, 11, 12

2.5 credits (semester)

Students in Musical Theatre Workshop will explore the history of the American Musical through song. Students will have the choice of concentrating on performance technique or musical production. Those concentrating on performance will learn foundational vocal technique and the musical theatre style; students concentrating on production will focus on the business and technical roles in a musical. All students will have the opportunity to apply these techniques to a live, touring musical performance at the end of the term.

## **FUNDAMENTALS OF ACTING\***

(893)

Grades 9, 10, 11, 12

2.5 credits (semester)

Students in Fundamentals of Acting will explore the study of acting, from the various interpretations of the Stanislavski “method” to performance styles and techniques such as improvisation, voice/dialects, and movement for the actor. Students will study and perform in monologues and scenes from classic and contemporary plays and will learn basic audition techniques. Students will also have the opportunity to showcase their work in a live public performance.

## **INTRODUCTION TO THEATRE\***

(895)

Grades 9, 10, 11, 12

2.5 credits (semester)

In Introduction to Theatre, we will explore how plays are translated from the page to the stage. Students will learn the basics of how to read and discuss a play before exploring the many roles that go into mounting a full production, from acting, directing, and writing, to lighting, sound, props, and costumes. Students will have the opportunity to step into any of these roles through the experience of mounting their own mini-productions.

## **MUSIC TECHNOLOGY AND PRODUCTION**

(851)

Grades 9, 10, 11, 12

2.5 credits (semester)

This course enables students to develop music skills by using a digital music studio to create original music. This course will focus on various sources of sound, as well as the ways in which computers enable the creation of music through techniques such as recording, editing, mixing, compressing, and looping. The course also explores musical structure, ear-training, analysis of musical events in a composition, maintenance of equipment, acoustical principles, historical aspects of recording, and draws connections to other educational disciplines. A study of microphone recording techniques as well as sound board editing techniques in a digital recording studio will also be covered. The featured software is GarageBand and Audacity. Students may take this class more than once for credit.

## **HIP HOP LAB**

(861)

Grades 9, 10, 11, 12

2.5 credits (semester)

Hip Hop Lab is a semester course that will explore the cultural and historical origins of Hip Hop music and the significance it has played in shifting understanding of urban culture. The influences of Hip Hop will be explored, which include: slave work chants, spirituals, West African rhythmic foundations, Blues, American Jazz and early Rhythm and Blues and Funk. Creating hip hop music electronically will be integrated into the curriculum. Students will be tasked with writing their own lyrics and recording them to beats and tracks using Garage Band. A final project (an EP) will allow students to share their appropriate creations with their community. Performance is not mandatory.

## **MUSIC 1**

SP (855)

Grades 9, 10, 11, 12

2.5 credits (semester)

Music 1 is an active music making experience for Life Skills students using movement, rhythm instruments, and vocalizations in response to feelings, culture and socialization. Elements of music therapy such as: emotions in music, active listening and scaffold participation would be experienced by students. Music will be used for relaxation and to alter perceptions of discomfort. Music 1 can also be effective at stimulating and motivating speech, and providing a means for nonverbal communication. This class will provide opportunities for expressing and experiencing a variety of emotions and to control and alter the mood of those listening and participating. The success that Life Skills students will achieve in music will also have a positive effect on self-esteem. Students may take this class more than once for credit.

## **SEI MUSIC ENSEMBLE**

(890)

Grades 9, 10, 11, 12

2.5 credits (semester)

The SEI Music Ensemble Course provides English Learners an entry level supported class for integration into Somerville High School's full year music ensembles. The class will be co-taught with an English Language Education professional. The course will provide the opportunity for students to build musicianship and ensemble skills in a structured and tiered environment. The goal of this class is to ease the transition into full year integrated ensembles. The curriculum will focus on active music making in a variety of genres, small group instruction, practice skills, performance and composition. There will be a focus on music from culturally relevant repertoire and using music from the student's background to develop technique and skill.

## **THEATRE AND SOCIETY PERFORMING ARTS/SOCIAL STUDIES DEPARTMENT**

(891) *performing arts credits* or (191) *social studies credits*

Grades 9,10,11,12

2.5 credits (semester)

This course explores the social and political roles that theatre has played in history. Students will learn about various social movements by exploring the theatre created in response to those movements. Students will explore how political theatre continues to evolve and activate audiences today. The course will culminate in an original piece of theatre, created by the students, that addresses a contemporary issue or issues important to the Somerville High School Community. Students must decide if they want to earn 2.5 Theater Credits or 2.5 Social Studies Credits when they enroll in the course.

## **TECHNICAL THEATRE AND DESIGN**

(892)

Grades 9,10,11,12

2.5 credits (semester)

In this course, students will learn about the various technical roles involved in producing a play and/or musical. Topics will include: Stage, Management, Producing, Lighting Design, Set Design, Sound Design, Costume Design and Makeup Design. The course will culminate in students designing their own final project and implementing elements of previously learned content.

## **PLAYWRITING AND COMPOSITION**

(894)

Grades 9,10,11,12

2.5 credits (semester)

This course introduces students to the discipline of playwriting. Students will learn the fundamentals of play structure and

composition, as well as the functional tools necessary to produce a playscript. Elements for play writing will include: formatting, copyright law, promoting and “pitching” your script. Students will leave the course having written an original short play which will be featured during an evening of stage readings produced by the Highlander Theatre Company.

## PHYSICAL EDUCATION

The goal of the Physical Education Program is to encourage students to develop habits, attitudes and mastery of life management skills that will promote physical and mental “wellness.” The core concepts of health and physical education literacy, healthy self-management and health promotion are woven into the curriculum. Physical Education course topics are aligned with the Massachusetts Department of Elementary and Secondary Education Physical Education Framework standards.

### **COURSES**

- Team Sports and Activities
- Competitive Sports Activities
- Introduction to Dance
- Yoga
- Introduction to Weight Training
- Lifetime Physical Education
- Non-Competitive and Non-Traditional Physical Education
- Fitness Education
- Sports Medicine

### **TEAM SPORTS AND ACTIVITIES**

(910)

Grades 9, 10, 11, 12

2.5 credits (semester)

This course presents curriculum topics and developmental approaches to physical education. The students will demonstrate proficiency in some sports skills and competence in others. The emphasis is placed upon team sports and the critical movement skills involved. This class will have a more developmental focus on basic rules and simple strategies and incorporating game play. The class will be taught at a pace conducive to incorporating various skill levels and can be repeated by students. This class will also include basic cardiovascular fitness activities. Students may take this course more than once for credit.

### **COMPETITIVE SPORTS ACTIVITIES** (*Prerequisites: Team Sports and Activities or Supervisor approval*)

(911)

Grades 10, 11, 12

2.5 credits (semester)

This course presents curriculum topics and approaches to physical development. The student will demonstrate proficiency in some skills and competence in others. The emphasis will be on team sports and movement and will approach further refinement of skills and movements taught in Team Sports and Activities. Additionally, more complex strategies will be implemented and demonstrated during game play. Further emphasis will be placed on rules as they relate to game play. This class will also include cardiovascular fitness activities. Students may take this course more than once for credit.

### **INTRODUCTION TO DANCE**

(935)

Grades 9, 10, 11, 12

2.5 credits (semester)

In this introductory course, students will strengthen their self-esteem, explore their personal creativity, and broaden their sense of self-expression through the study of various dance styles including Ballet, Jazz, Modern, Hip-Hop, Contemporary and Ballroom dance. Throughout each unit, students will study the history, culture and social impact of dance figures and events, as well as explore basic choreographic principles, movement patterns and musical elements. Students will practice proper physical technique of dance movements by improving core strength, upper/lower connectivity, joint mobility and injury prevention awareness.

This course serves as a foundation to prepare students for future study of Ballet, Jazz, and Contemporary dance and is

designed for students with no previous dance experience. Students may be required to participate in scheduled performances. Students may take this course more than once for credit.

## **YOGA**

(937)

Grades 9, 10, 11, 12

2.5 credits (semester)

This Yoga course is a stress management and fitness-based course. Students will increase their flexibility and core strength while reducing stress and building a foundation for their practice. This course will combine hatha and asana components, focusing on the breath and mindful meditation, connecting the body, mind, and soul. Students will learn to flow through poses in a way that strengthens their inner and outer selves.

Yoga can be taken more than once for credit

## **INTRODUCTION TO WEIGHT TRAINING**

(933)

Grades 9, 10, 11, 12

2.5 credits (semester)

Introduction to Weight Training offers instruction and practice in proper techniques of the development of muscular strength, endurance and flexibility. Emphasis is placed on the application of scientific principles and methods used to build, improve and maintain proper muscular fitness. Additionally, body composition and nutrition for health and fitness are discussed.

## **LIFETIME PHYSICAL EDUCATION**

(920)

Grades 9, 10, 11, 12

2.5 credits (semester)

This course present curriculum topics that emphasize lifetime activities, including golf, archery, and a variety of net and court activities for recreation and well-being. Additionally, this course includes various teamwork, trust-building, and cooperative activities and games. Students may take this course more than once for credit.

## **NON-COMPETITIVE & NON-TRADITIONAL PHYSICAL EDUCATION**

(930)

Grades 9, 10, 11, 12

2.5 credits (semester)

This course presents curriculum topics emphasizing the non-competitive side of well-being. The indoor ropes course, with emphasis on teamwork, trust, problem solving and physical challenges, will be the main ingredient in this course. Students will have the opportunity to explore other areas of non-competitive fitness, such as aerobics, golf and archery. Students may take this course more than once for credit.

## **FITNESS EDUCATION**

(931)

Grades 9, 10, 11, 12

2.5 credits (semester)

This course presents curriculum topics in a clinical approach to fitness. Topics include the four areas of fitness: cardiovascular, muscular strength, endurance and flexibility. This course has particular value for students seeking a greater knowledge of nutrition and its relationship to various types of fitness. This course may be used to fulfill a health requirement with the approval of the Family & Consumer Sciences/Health Supervisor's approval. Students may take this course more than once for credit.

## **SPORTS MEDICINE**

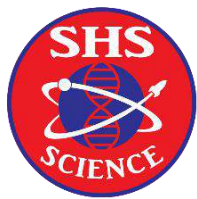
(915)

Grades 11, 12

2.5 credits (semester)

This course presents curriculum topics in a clinical approach to an allied health career. The student, through laboratory and classroom instruction, will become familiar with career opportunities, care, prevention and rehabilitation of injuries, emergency and medical first-aid procedure, and basic physiological and anatomical principles. Preference will be given to seniors and students enrolled in the Human Anatomy and Physiology course in the Science Department.

# SCIENCE



The study of science allows us to systematically interact with and understand the world we live in. The SHS Science Program consists of courses and experiences designed to allow students to develop scientific literacy and to experience empirical inquiry as a method of investigation. Emphasis is placed on the practices of science, which require students to utilize specific skills while applying content knowledge to complex problems. Laboratory-based science courses provide students with opportunities to develop scientific reasoning and inquiry skills while mastering rigorous content. Lab experiences provide opportunities for students to formulate testable questions, design investigations, safely use instruments, tools and materials to collect and analyze data, and discuss findings to deepen their understanding and knowledge that can be applied in making decisions in an age influenced by science and technology.

Successful completion of one Science MCAS exam is a graduation requirement. Students who have not yet fulfilled this requirement must be enrolled in a full-year MCAS testable science course (Biology, Chemistry, or Physics) and/or MCAS Prep Biology as per the requirements outlined below. It may be necessary to adjust the course sequence and to provide remediation for students who have not passed an MCAS Science exam.

## MAJOR COURSE CRITERIA/REQUIREMENTS:

1. The following is the suggested course sequence for students in science: Biology, Chemistry, Physics, and an elective science course of the student's choice. Additional elective courses and/or AP courses may be taken concurrently or, in some cases, in lieu of the suggested sequence.
2. Students must fulfill prerequisites with at least passing grades, and must be grade level appropriate in order to enroll in any and all courses in which said requirements are listed, unless Department Head approval has been granted.
3. In consultation with the Science Department Head, the science teacher will recommend student placement in all major science courses after reviewing the student's academic performance during the school year. The counselor and the Science Department Head will meet with individual students and/or parents to discuss final placement in science courses, when necessary.
4. Engaging in scientific inquiry and conducting scientific research is an important aspect of the SHS science program. As such, all students are required to complete an independent science research project in the 10<sup>th</sup> and 11<sup>th</sup> grade. Students enrolled in Honors sections of science courses in those grades are required to complete projects that meet all of the requirements for entry into the MA State Science and Engineering Fair. Any student in any grade or course level can choose to complete an independent research project for participation in the SHS Science and Engineering Fair, and support will be made available through participation in the Science Fair Club that meets from October – February after school.
5. MCAS Prep Biology is strongly recommended for all non-9<sup>th</sup> grade students who have not yet passed a Science MCAS exam. It is a required course for juniors who are not enrolled in Biology and for all seniors. In certain cases, students may apply for exemption from these requirements through their counselor and the Science Department Head.
6. Beginning with the class of 2016, a student's score on the Science MCAS exam will count toward eligibility for the John and Abigail Adams Scholarship.

## COURSES

### Full-Year courses:

- Pre-Biology (ELL students only)
- Biology
- AP Biology
- Chemistry
- AP Chemistry
- Physics
- AP Physics 1
- AP Physics C
- AP Physics 2
- AP Environmental Science
- Environmental History
- Human Anatomy and Physiology

### Semester courses:

- Engineering 1
- Engineering 2
- Astronomy I: Our Solar System
- Astronomy II: Stars, Galaxies, and Cosmology
- Biology Foundations I
- Biology Foundations II
- Biotechnology 1
- Biotechnology 2
- Oceanography
- Science Research Methods
- MCAS Prep Biology



## PRE-BIOLOGY

SEIP (323E)

Grades 9, 10, 11

5 credits (full year)

This course is designed to help English Language Learner students broaden their knowledge of Biology, while continuing to develop their academic knowledge of English. The course will go into more depth than Biology Foundations, addressing topics outlined in the Massachusetts Frameworks for High School Biology, including an introduction to biochemistry and genetics, cell structure and function, ecology, and evolution. This course serves as a foundation for SEIP Biology, an MCAS preparatory course.

## BIOLOGY (*laboratory science*)

Grade 9: H (311); CP (312)

Grades 9, 10, 11, 12; SEIP (322E)

5 credits (full year)

This course presents curriculum topics and lab activities relevant to the study of life. The Biology curriculum follows the Massachusetts Frameworks for High School Biology and prepares students for successful completion of the Biology MCAS exam. Topics include biochemistry, cell biology, genetics, human anatomy and physiology, evolution and biodiversity, and ecology. Emphasis is placed on the interrelated nature between form and function at all levels of life.

## ADVANCED PLACEMENT BIOLOGY (*laboratory science*)

AP (371)

5 credits (full-year)

AP (371L)

2.5 credits (full-year lab, two periods per week)

*Prerequisite: Chemistry or Department Head approval (Grade of B- or better in Chemistry or Honors Chemistry recommended)*

Grades 11, 12

This AP course is the equivalent of 2 college-level, freshman Biology courses. Topics include molecular biology, cellular biology, developmental biology, molecular genetics, evolution, ecology, and diversity of plants and animals. Research using current media and technology is the foundation of the laboratory-based program. Students will prepare for and are expected to take the Advanced Placement Biology Examination administered by the College Board in May. The course



meets for a total of 6 periods/week for the full year, with a lab block that meets opposite physical education or Health. Students will receive a pass/fail grade for the additional 2.5 credit AP Biology Lab, which will not be factored into the calculation of a student's GPA.

**CHEMISTRY** (*laboratory science*)

H (331); CP (332); SEIP (332E)

*Prerequisites for Honors and College Prep: Algebra 1 (may be taken concurrently)*

Grades 10, 11, 12

5 credits (full year)

This course presents curriculum topics and practical approaches relevant to the study of chemistry. The Chemistry curriculum follows the Massachusetts Frameworks for High School Chemistry and prepares students for successful completion of the Chemistry MCAS exam. Topics include classification of matter, physical and chemical properties and changes, measurement and units, atomic structure, periodic trends, chemical bonding, formula nomenclature and reactions, stoichiometry, gas laws, solutions, and acids and bases. This course is required for students enrolled in Health Careers and the Dental Assisting Program through the Center for CTE beginning with the Class of 2018.

**ADVANCED PLACEMENT CHEMISTRY** (*laboratory science*) (*Restricted to seniors only*)

AP (361)

5 credits

(full-year)

AP (361L)

2.5 credits (full-year lab, two periods

per week)

*Prerequisite: Chemistry or Department Head approval (Grade of B- or better in Chemistry or Honors Chemistry recommended)*

**Grades 11, 12**

This AP course is the equivalent of 2 college-level, freshman Chemistry courses. Topics include structure of matter, stoichiometry, chemical bonding, states of matter, intermolecular forces, thermodynamics, chemical kinetics, equilibrium, acid base reactions, electrochemistry, organic chemistry, and chemical calculations. Students will apply and demonstrate conceptual understanding of chemistry through writing, diagrams, and mathematical calculations. Quantitative and qualitative laboratory investigations are integrated with course content. Students should have already completed Algebra 2. Students will prepare for and are expected to take the Advanced Placement Chemistry Exam administered by the College Board in May. The course meets for a total of 6 periods/week for the full year, with a lab block that meets opposite physical education or Health. Students will receive a pass/fail grade for the additional 2.5 credit AP Biology Lab, which will not be factored into the calculation of a student's GPA.

**PHYSICS** (*laboratory science*)

H (341); CP (342); SEIP (342E)

*Prerequisites for Honors: Geometry and Algebra 2 (may be taken concurrently)*

*Prerequisites for College Prep: Algebra 1 and Geometry (may be taken concurrently)*

Grades 10, 11, 12

5 credits (full year)

This course is designed to show physics as a continuing process by which students seek to understand the nature of the physical world. This is accomplished through group discussions, interactive demonstrations, problem-solving, laboratory activities, and the use of technology. Topics include Newtonian mechanics, waves and optics, the nature of light and sound, electricity, and magnetism. The Honors section involves a deeper understanding of algebra, geometry, and trigonometry, as well as a deeper understanding of physics concepts, and will prepare students for Advanced Placement Physics 2.

**ADVANCED PLACEMENT PHYSICS 1** (*laboratory science*) (*Restricted to juniors only*)

AP (381)

5 credits (full-year)

AP (381L)

2.5 credits (full-year lab, two periods per week)

*Prerequisite: Algebra 2 (Grade of B- or better in Algebra 2 or Algebra 2 Honors recommended)*

**Grades 11, 12**

This AP course is the equivalent of 1 college-level, algebra-based Physics course commonly titled "Mechanics," and would be taken as an alternative to Physics 341, 342, or 342E. The course provides a comprehensive study of the main principles of physics with special emphasis given to advanced problem-solving techniques and laboratory activities. Topics include Newton's laws, momentum, energy, waves, sound, and an introduction to electrostatics and electric circuits. AP Physics 1 is a more rigorous alternative to Honors Physics and will prepare students for Advanced Placement Physics 2. Students will

prepare for and are expected to take the Advanced Placement Physics 1 Exam administered by the College Board in May.

**ADVANCED PLACEMENT PHYSICS C (laboratory science) (Restricted to juniors only)**

AP (383) 5 credits (full-year)

AP (383L) 2.5 credits (full-year lab, two periods per week)

*Prerequisites: Department Head Approval (Grade of B or better in Pre-Calculus Honors recommended)*

**Grades 11, 12**

This AP course is equivalent of one college-level, calculus-based Physics, usually titled “Mechanics for Scientists and Engineers”, and is more indicative of the Physics class a science or engineering student would take in college. This course would be taken as an alternative to Physics 341, 342, or 342E. The course is designed to show physics as a continuing process by which students seek to understand the physical world. This is accomplished through group discussions, interactive demonstrations, advanced problem solving and critical thinking activities, laboratory experiences, and the use of technology. This class focuses on mechanics: Newton’s Laws of Motion, work, energy and power, systems of particles and linear momentum, circular motion and rotation, oscillations, and gravitation. This class models phenomena using graphs, algebraic expressions, as well as calculus. AP Physics C is a more mathematically rigorous alternative to AP Physics 1 and will prepare students for Advanced Placement Physics 2. The calculus topics needed for the course (basic derivatives and integrals) will be taught within the course, and prior calculus knowledge is not needed, but will be helpful. Students will prepare for and are expected to take the Advanced Placement Physics C: Mechanics Exam administered by the College Board in May.

**ADVANCED PLACEMENT PHYSICS 2 (laboratory science)**

AP (382) 5 credits (full-year)

AP (382L) 2.5 credits (full-year lab, two periods per week)

*Prerequisites: Physics or Dept. Head approval (Grade of B- or better in CP Physics, or Honors/ AP Physics 1 recommended)*

Grade 12

This AP course is the equivalent of 1 college-level, algebra-based Physics course commonly titled "Electricity and Magnetism," and is taken after a student has completed a prior Physics course. The course provides a comprehensive study of the main principles of physics with special emphasis given to advanced problem-solving techniques and lab activities. Topics include fluid mechanics, thermodynamics, waves, light, optics, electrostatics, electromagnetism, electric circuits, and modern/nuclear physics. Students are expected to have some exposure to pre-calculus or calculus. Students will prepare for and are expected to take the Advanced Placement Physics 2 Exam administered by the College Board in May.

**ADVANCED PLACEMENT ENVIRONMENTAL SCIENCE (laboratory science) (Not being offered in SY21)**

AP (375) 5 credits (full-year)

AP (375L) 2.5 credits (full-year lab, two periods per week)

*Prerequisites: Biology and Chemistry (Chemistry may be taken concurrently)*

Grades 10, 11, 12

This AP course is the equivalent of 1 college-level course in Environmental Science. The course provides a comprehensive study of the living and physical aspects of the environment and integrates major themes of biology, chemistry, physics, and Earth science. Topics include Earth systems and resources, the living world, populations, land and water use, energy resources and consumption, pollution, and global change. There is particular emphasis given to the impact of humans on environmental systems. This course includes significant laboratory and field investigation components including field trips to places of environmental significance such as waste/water treatment plants, solar energy farms, offshore wind turbines, nature preserves, and local/organic farms. Students will prepare for and are expected to take the Advanced Placement Environmental Science Examination administered by the College Board in May.

**ENVIRONMENTAL HISTORY (laboratory science if selected for science credit) (Restricted to seniors only)**

CP (377) science credit or CP (177) social studies credit

**Grades 10, 11, 12**

5 credits (full year)

Environmental History is an interdisciplinary course co-taught by a social studies and science teacher that focuses on how history, culture, and politics impact the environment. Students will explore the following essential questions: “How does a society balance the pursuit of wealth and a high standard of living for its citizens, with the conservation of nature and natural resources?” “How does access to power and representation impact environmental policies?” “What are the most

pressing current environmental issues, and what are the different approaches to addressing these issues?" A requirement of the course will be to complete a capstone project where students must research a current environmental issue and propose a political solution which is supported by scientific evidence. Students must decide if they want to earn five science credits or five social studies credits when they enroll in the course.

### **HUMAN ANATOMY AND PHYSIOLOGY** (*laboratory science*)

H (348); CP (347)

*Prerequisites:* Biology or Department Head approval

Grades 10, 11, 12

5 credits (full year)

This course is an in-depth study of the structures and functions of the human body. Students investigate physiological principles through laboratory experiments and dissection. The Honors section is an accelerated class recommended for students with a strong interest in pursuing careers in the medical field and has a substantial laboratory component, term projects, and an in-depth independent research project. This course is required for students enrolled in Cosmetology, Health Careers, and the Dental Assisting Program through the Center for CTE beginning with the Class of 2018.

### **ENGINEERING I** (*laboratory science*) (**Restricted to seniors only**)

Honors (388)

CP (389)

*Prerequisites for Honors:* Algebra 2 and Physics Honors, or Department Head approval

*Prerequisites for College Prep:* Algebra 1 and Physics, or Department Head approval

Grades 11, 12

2.5 credits (semester)

This course is the first of a two-course sequence designed to introduce students to the world of technology and engineering. Students engage in project-based learning, explore practical, real-world connections, and have an opportunity to see how science, mathematics, and engineering are part of their everyday world. Term projects will require research in various aspects of the engineering process and technology. This course focuses on basic engineering design principles and their application to project design mainly using 2-dimensional software. This course is meant to be taken as part of a two-course sequence with Engineering 2 in order to get a full engineering experience. The Honors level is intended for students interested in pursuing engineering or architecture in college and will require students to reach more advanced and complex levels of design for each project than the College Prep level. The Honors level models the Introductory Engineering curriculum of a college engineering program. *This is an open honors course, which means that students can choose to take the course for Honors or College Preparatory credit by a designated deadline. If Honors credit is chosen, there will be additional coursework and more rigorous evaluation of assignments.*

### **ENGINEERING 2** (*laboratory science*) (**Restricted to seniors only**)

Honors (390)

CP (391)

*Prerequisites for Honors:* Algebra 2 and Physics Honors, or Department Head approval

*Prerequisites for College Prep:* Algebra 1 and Physics, or Department Head approval

Grades 11, 12

2.5 credits (semester)

This course is the second of a two-course sequence designed to introduce students to the world of technology and engineering. Students engage in project-based learning, explore practical, real-world connections, and have an opportunity to see how science, mathematics, and engineering are part of their everyday world. Term projects will require research in various aspects of the engineering process and technology. This course focuses on expanding the application of the engineering design process into 3D modeling, 3D printing and product design, green engineering and basic robotics. **This class is intended to be taken after Engineering 1, but in special circumstances with Department Head approval could be taken alone.** The Honors level is intended for students interested in pursuing engineering or architecture in college and will require students to reach more advanced and complex levels of design for each project than the College Prep level. The Honors level models the Introductory Engineering curriculum of a college engineering program. *This is an open honors course, which means that students can choose to take the course for Honors or College Preparatory credit by a designated deadline. If Honors credit is chosen, there will be additional coursework and more rigorous evaluation of assignments.*

**ASTRONOMY I: OUR SOLAR SYSTEM** (*laboratory science*) (*Restricted to seniors only*)

CP (358)

Grades 9, 10, 11, 12

2.5 credits

(semester)

This course is designed for students who are taking their third or fourth year of science. It is a first semester class that complements *Astronomy II: Stars, Galaxies, and Cosmology*, though students can enroll in one course and not the other. This course will focus on topics *inside* the solar system, and include the planets, the Sun-Earth-Moon system, human exploration of space, and the Earth's place in the universe. The curriculum follows the relevant content standards of the Massachusetts Frameworks for High School Earth and Space Science. When available, students may participate in citizen science projects and extra-curricular opportunities related to topics such as light pollution, meteor showers, and solar and lunar eclipses.

**ASTRONOMY II: STARS, GALAXIES, AND COSMOLOGY** (*laboratory science*) (*Not being offered in SY21*)

CP (359)

Grades 9, 10, 11, 12

2.5 credits (semester)

This course is designed for students who are taking their third or fourth year of science. It is a second semester class that complements *Astronomy I: Our Solar System*, though students can enroll in the course without enrolling in the first semester astronomy course. The course will focus on things *outside* the solar system, including the Big Bang Theory, stellar evolution and explosions, galaxy formation and evolution, planets in other stellar systems, the probability of extraterrestrial life, and cosmology. Students are pushed to think deeply about relative scales of size and time.

**BIOLOGY FOUNDATIONS I**

SEIP (315E)

Grades 9, 10, 11

2.5 credits (semester)

This course is designed for newcomer English Language Learner students as an entry point into studying biology. Students will develop the foundational skills for studying science, including learning and practicing technical vocabulary; developing reading, writing, and speaking skills; and learning about laboratory rules and practices in the context of biology. This first semester course will focus on themes in the human body. Additional supports are available for students, including native language support from the classroom teacher or Welcome Center staff. This course complements Biology Foundations II, and serves as a foundation for Pre-Biology.

**BIOLOGY FOUNDATIONS II**

SEIP (316E)

Grades 9, 10, 11

2.5 credits (semester)

This course is designed for newcomer English Language Learner students as an entry point into studying biology, and complements Biology Foundations I. Students will develop the foundational skills for studying science, including learning and practicing technical vocabulary; developing reading, writing, and speaking skills; and learning about laboratory rules and practices in the context of biology. This second semester course will focus on the natural world. Additional supports are available for students, including native language support from the classroom teacher or Welcome Center staff. Students may enroll in the course without having taken Biology Foundations I. This course serves as a foundation for Pre-Biology.

**BIOTECHNOLOGY 1** (*laboratory science*)

CP (349)

*Prerequisites for Grade 10 students:**Department Head approval**Prerequisites for Grade 11 and 12 students:**Biology 1 or Department Head approval*

Grades 10, 11, 12

2.5 credits (semester)

This course explores introductory topics in biotechnology and career awareness regarding the biotechnology industry. Topics include cloning, genetics, basic biotechnology skills, proteomics and a general overview of the applications of biotechnology. Additionally, students will explore career interest and awareness, skill sets needed for jobs, education needed for advanced positions, and workplace attitudes and values in the field of biotechnology. There are often opportunities for class participation in unique projects with community partners such as Tufts University and the Broad Institute, which vary from semester to semester.

## **BIOTECHNOLOGY 2** (*laboratory science*)

CP (350)

*Prerequisites for Grade 10 students:*

*Department Head approval*

*Prerequisites for Grade 11 and 12 students:*

*Biology 1 or Department Head approval*

Grades 10, 11, 12

2.5 credits (semester)

This course will continue the investigation of practical applications of biotechnology. It will include a more in-depth review of the theories and application of biotechnology in medicine and research. Topics include microbiology, forensics, immunological assays, and bioethics. Students will continue to refine their interests in the field and explore job outlook and availability in the biotechnology field. There are often opportunities for class participation in unique projects with community partners such as Tufts University and the Broad Institute, which vary from semester to semester.

## **OCEANOGRAPHY** (*laboratory science*) (*Restricted to seniors only*)

CP (339)

Grades 9, 10, 11, 12

2.5 credits (semester)

This course provides a basic understanding of the ocean. Topics include the chemical properties of the oceans, physical movements of ocean currents around the globe, geological activity below the oceans, along with biological oceanography and the different habitats within the oceans. Students will explore the social and cultural appreciation of the oceans and their effect upon mankind, in conjunction with mankind's effect on the oceans both historically and in present day.

## **SCIENCE RESEARCH METHODS** (*laboratory science*)

CP (355)

1<sup>st</sup> semester

*Prerequisites:* Full year laboratory-based science course taken concurrently or Department Head approval

Grades 10, 11, 12

2.5 credits (semester)

This course provides students with the opportunity to conduct authentic scientific research. Students will be guided through the steps of the scientific method to develop a research topic, conduct experiments, and present an analysis of their results. Students may also work on skills such as statistical analysis, primary research, and oral and visual presentation techniques. Some students may receive support from local scientists and volunteers. Exemplary projects will earn admittance to the school science fair, usually held in March. Successful projects from the school fair earn students entry to the Region IV Science Fair where students may earn opportunities for financial and scholarship awards, travel, and networking opportunities within the scientific community.

## **MCAS PREP BIOLOGY** (*Not being offered in SY21*)

CP (392)

1<sup>st</sup> semester

Grades 10, 11, 12

2.5 credits (semester)

This course is for students who have not yet fulfilled their High School MCAS science requirement. This course is intended to prepare students for the MCAS Biology Exam administered in February of each year and covers the learning standards as addressed in the Massachusetts Frameworks for High School Biology. Sophomores who have not yet passed a Science MCAS exam and are not enrolled in Biology are strongly encouraged to take this course. Juniors who have not yet passed a Science MCAS exam and are not enrolled in Biology must take this course. All seniors who have not yet passed a Science MCAS exam must take this course. Students may apply for exemption from these requirements through their counselor and the Science Department Head.





# SOCIAL STUDIES

In accordance with the Massachusetts state frameworks, “The primary purpose of a history and social science education is to prepare students to have the knowledge and skills to become thoughtful and active participants in a democratic society and a complex world.” The Somerville High School Social Studies department focuses on preparing our students to be informed, engaged citizens of their local, national, and global communities. In addition to gaining an understanding of historical events, students will explore essential questions such as “What factors impact change in society?” “What is the role of the United States in the World?” “What is the impact of globalization?” or “How can one person change the world?” Students will also develop important reading, writing, speaking, and critical thinking skills through projects, essays, debates, and through the close reading and analysis of Primary and Secondary Sources. All students will complete a thematic “Capstone” research paper and project in their World History course.

In addition to taking the required US History and World History courses, students may also choose from electives such as Facing History and Ourselves, Women’s and Gender Studies, Human Behavior, Psychology, Economics, Government and Politics, Current Events, Practical Law, and Discovering Somerville’s History. AP offerings include AP US History, AP World History, AP Government and Politics and AP Psychology.

## MAJOR COURSE CRITERIA/REQUIREMENTS:

1. Required Sequence: 9<sup>th</sup> graders take US History 1, 10<sup>th</sup> graders take US History 2 or AP US History, and 11<sup>th</sup> graders take World History Themes or AP World History. Exceptions to this may be made with Department Head approval for transfer or English learners.
2. In consultation with the Social Studies Department Head, a student’s Social Studies teacher will recommend student placement in all major Social Studies courses after reviewing the student’s academic performance during the school year.
3. The counselor and the Social Studies Department Head will meet with individual students and/or parents to discuss final placement in Social Studies courses, when necessary.

## COURSES

- United States History 1 (1765-1898)
- United States History 2 (1900-Present)
- AP United States History
- World History Themes
- AP World History: Modern
- Current Events
- Environmental History
- Human Behavior
- Street Law: A Course in Practical Law
- Facing History and Ourselves
- Economics
- Government and Politics
- AP U.S. Government and Politics
- Discovering Somerville’s History
- American Identities
- African-American History Through Film
- Introduction to Psychology
- AP Psychology
- Women’s and Gender Studies
- Debate
- Theatre & Society Performing Arts/Social Studies Department





## **UNITED STATES HISTORY 1 (1765-1898)**

H (111); CP (112); SEIP (112E)

Grade 9

5 credits (full year)

This course is intended as part one of a two-year sequence in the study of American History. Students make use of a multi-faceted approach including, but not limited to, research, interpretation of primary source materials, and critical analysis of the America of today. Emphasis is placed on connecting historic events to the nation we have become. Students analyze primary and secondary sources to examine such topics as Colonial America, the American Revolution, Launching the New Government, Nationalism and Sectionalism, The Age of Jackson, Westward Expansion, Slavery and the Road to War, the Civil War and Reconstruction.

## **UNITED STATES HISTORY 2 (1900-Present)**

H (121); CP (122); SEIP (122E)

Grade 10

5 credits (full year)

US History II is taught thematically. The course is designed to give students a comprehensive understanding of issues very much alive in the US today. Students look at the history of immigration, the role of the government in the economy, the role of the US in the world, and the struggle for rights and equality for all of America's diverse groups. In each unit, teachers ask students to consider how history has impacted current events, and asks students to explore their own political identity. Throughout the course, students develop skills important to the study of history, including identifying and analyzing bias, designing and conducting research projects, analyzing primary sources, and writing Document-Based Questions.

## **ADVANCED PLACEMENT UNITED STATES HISTORY**

AP (152)

*Prerequisites: U.S. History 1 or Department Head approval (Grade of B- or better in U.S. History 1 Honors recommended)*

Grade 10

5 credits (full year)

Only those students of demonstrated ability/habits who are preparing to take the AP examination should elect this course. This course presents curriculum approaches and topics appropriate to the study of college level American history. Topics include: a review of U.S. History 1; The Gilded Age, The Age of Imperialism, The Progressive Era, The Roaring Twenties, The Great Depression, The World Wars, The Cold War; the Civil Rights Movement; The Vietnam Era, and the U.S. in an era of terrorism, and A.P. preparation. The course emphasizes interpretation and analysis of primary source material through research and writing. In addition, the course explores the relationship between literature and history through required readings and interdisciplinary projects. Students are expected to take the Advanced Placement exam in May.

## **WORLD HISTORY THEMES**

H (131); CP (132); SEIP (132E)

Grade 11

5 credits (full year)

Students will learn about major themes that dominate world history and current world events. These themes include: colonialism, imperialism, political and economic systems, revolution and independence movements, impact of religion and ethnicity on historical events, geography and globalization. To illustrate themes, the course will examine case studies from Asia, the Middle East, North and Sub-Saharan Africa in one semester and Europe, the Caribbean, Central and South America and Australia in the other semester. Students will complete a research "Capstone" project over the course of the year.

## **ADVANCED PLACEMENT WORLD HISTORY: MODERN**

AP (130)

*Recommendations for enrollment: Grade of B- or better in an honors class is highly recommended*

Grades 11, 12

5 credits (full year)

This course may be taken *instead of or after* World History Themes. In AP World History: Modern, students investigate significant events, individuals, developments, and processes from 1200 to the present. Students develop and use the same skills, practices, and methods employed by historians: analyzing primary and secondary sources; developing historical arguments; making historical connections; and utilizing reasoning about comparison, causation, and continuity and change over time. The course provides six themes that students explore throughout the course in order to make connections among historical developments in different times and places: humans and the environment, cultural developments and interactions, governance, economic systems, social interactions and organization, and technology and innovation.

Students enrolled in the course are expected to take the AP World History exam in May.

## **CURRENT EVENTS**

(160)

Grades 9, 10, 11, 12

2.5 credits (semester)

In this semester elective, students will become aware of major events going on in the United States and around the world. Students will learn more about the historical context and potential implications of current events, identify and evaluate different sources of information, formulate opinions on current events, and begin to understand their own role in the world. Students will develop presentation, discussion, and research skills. Students will learn about key current events together as a class; students will do independent projects and presentations on other events that interest them.

## **ENVIRONMENTAL HISTORY** (*laboratory science if selected for science credit*) (**Not being offered in SY21**)

CP (177) *social studies credit* or CP (377) *science credit*

Grades 10, 11, 12

5 credits (full year)

Environmental History is an interdisciplinary course co-taught by a social studies and science teacher that focuses on how history, culture, and politics impact the environment. Students will explore the following essential questions: “How does a society balance the pursuit of wealth and a high standard of living for its citizens, with the conservation of nature and natural resources?” “How does access to power and representation impact environmental policies?” “What are the most pressing current environmental issues, and what are the different approaches to addressing these issues?” A requirement of the course will be to complete a capstone project where students must research a current environmental issue and propose a political solution which is supported by scientific evidence. Students must decide if they want to earn five science credits or five social studies credits when they enroll in the course.

## **HUMAN BEHAVIOR** (**Not being offered in SY21**)

(138)

Grades 9, 10, 11, 12

2.5 credits (semester)

This course is primarily designed to promote self-understanding by student. Topics include: personality, physical, intellectual, emotional, and social growth, gender differences, motivation and emotion, and mental health.

## **STREET LAW: A COURSE IN PRACTICAL LAW** (**Not being offered in SY21**)

(137)

Grades 10, 11, 12

2.5 credits (semester)

This course seeks to engender in students a practical understanding of law and our legal system. Case studies will illustrate legal issues in the context of real-life and hypothetical situations. Students will develop their analytical and critical thinking skills as they consider the legal aspects of social, economic, moral and political issues. Practical information to deal with various legal problems will be included.

## **FACING HISTORY AND OURSELVES** (**Not being offered in SY21**)

(156)

Grades 11, 12  
(semester)

2.5 credits

This course follows the Facing History and Ourselves curriculum, which seeks to engage “students of diverse backgrounds in an examination of racism, prejudice, and antisemitism in order to promote the development of a more humane and informed citizenry...that practices civility and preserves human rights.” Students in this semester elective will examine the historical development of the Holocaust and other examples of genocide, and will be asked to make connections between history and the moral choices they confront in their own lives. Students will learn to consider multiple perspectives through discussion, character exploration, primary source material, and projects. Students will see that “history is the collective result of every individual’s thoughts and actions,” including their own.

## **ECONOMICS** (**Not being offered in SY21**)

(149)

Grades 11, 12

5 credits (full year)

This course presents the fundamental principles of economics to ensure greater opportunities for advancement in the business field. Problems of marketing, organization, finance, credit, distribution, budgeting, employee relationships, and government regulation of business are included.

## **GOVERNMENT AND POLITICS (Not being offered in SY21)**

(154)

Grades 11, 12

5 credits (full year)

This course prepares students to become more informed and responsible citizens through a greater understanding of the impact government has on their lives. Materials are covered in a detailed and comprehensive manner using both primary and secondary sources. Topics include the U.S. Constitution, organization and operation of the federal, state and local governments, political parties, campaigns and elections, and civil, criminal and constitutional law in practice. Emphasis is on making connections to the student's world and to the current national and global situation.

## **ADVANCED PLACEMENT U.S. GOVERNMENT AND POLITICS**

AP (153)

*Recommendations for enrollment: Grade of B- or better in an honors class is highly recommended*

Grades 11, 12

5 credits (full year)

This course is designed to give students an analytical perspective on government and politics in the United States. It will include both the study of general concepts used to interpret U.S. politics and the analysis of specific examples. It also requires familiarity with the various institutions, groups, beliefs and ideas that constitute U.S. politics. Topics will include: Constitutional underpinnings of United States government; political beliefs and behaviors; political parties, interest groups and mass media; institutions of national government; and public policy. Students are expected to take the Advanced Placement Examination in May.

## **DISCOVERING SOMERVILLE'S HISTORY (Not being offered in SY21)**

(158)

Grades 11, 12

2.5 credits (semester)

Students will learn Somerville's already documented history, including the city's earliest residents, its role in the revolution, its architecture, and its transformation into one of the country's most densely populated cities. In addition to the set curriculum, each student will conduct an extended original research project on Somerville history. Students will "do history" by selecting a topic, finding and analyzing primary and secondary sources, and compiling their findings in an essay or project. The independent projects will be shared with the public via venues such as History Day, student publications, museum exhibits, or websites. With instructor approval, a student may take the course more than once in order to complete long-term projects.

## **AMERICAN IDENTITIES**

*Prerequisite: Teacher recommendation or Department Head approval*

H (157)

Grade 12

5 credits (full year)

American Identities is offered in collaboration with the American Studies Department at UMass-Boston, and students are eligible to earn college credit for AMST 100 (the department's required introductory course). The central academic and personal question of this UMass-Boston course is: "What is an American?" The subject of this course is how the diverse identities of North Americans are constructed, defined, and explained. Through a variety of resources—including historical sources, material artifacts, fiction, poetry, film, and music—and using the concepts and methodologies of American Studies, students explore individual, family, community, ethnic, class, gender, and racial identities in relation to regional, national, and transnational identities. Over the course of the semester, students will be guided in writing a three-generation family history that incorporates political, cultural and family events from 1945 to the present. After successful completion of this course, students will receive UMass college credit.

## **AFRICAN-AMERICAN HISTORY THROUGH FILM (Not being offered in SY21)**

CP (159)

Grades 11, 12

2.5 credits (semester)

This semester-long course grapples with a central question: Given that Americans rely on popular media to make sense of the past, to what extent do contemporary films accurately portray the African-American experience? This class uses movies and documentaries to examine a variety of topics, including American slavery, African American culture, racial violence, Jim Crow, the civil rights and Black Power movements, and contemporary conflicts between the police and Black communities. Students will also learn to identify recurring themes that appear in films about the African-American

experience, such as the subordinate role of black women and the use of white characters as narrative vehicles. Thoughtful class participation is required, as is the completion of frequent one-page written reflections and 4 critical analysis papers.

### **INTRODUCTION TO PSYCHOLOGY (Not being offered in SY21)**

H (139)

Grade 12

5 credits (full year)

Psychology is the scientific study of behavior and mental processes. Major content areas include methods of research, physiological bases of behavior, learning, memory, intelligence, personality, stress and health, abnormal behavior and therapies, social psychology, and states of consciousness. Teaching methods include discussion, group activities, and experiments. Please note that this is an Honors level course, and that a college-level book will be used as the main text.

### **ADVANCED PLACEMENT PSYCHOLOGY**

AP (140)

*Recommendations for enrollment: Grade of B- or better in an honors class is highly recommended*

Grades 11, 12

5 credits (full year)

Only those students of demonstrated ability who are preparing to take the AP examination should elect this course. This course follows the APA guidelines for Advanced Placement Psychology, and students are expected to take the AP exam. Areas covered include: history of psychology; research methods; biological bases of behavior; sensation and perception; cognitive psychology; physical, social and emotional development; abnormal behavior and therapies; social psychology; and gender differences. Careers in the field will be explored. In addition to the text, students will summarize and analyze journal articles, case histories, and experiments in human and animal behavior and mental processes.

### **WOMEN'S AND GENDER STUDIES (Not being offered in SY21)**

CP (143)

Grades 11, 12

2.5 credits (semester)

This semester long course will introduce students to Women's and Gender studies. The primary goal of this course is to familiarize students with key issues, questions and debates in Women's and Gender Studies, both historical and contemporary. Students will examine issues of gender and power in a range of social spheres, geographical locations and times and places in history. Students will examine cultural assumptions about sex, gender, and sexuality. An emphasis will be placed on studying and understanding the intersectionality of gendered identities. Students will have choices in their topics of study, with the goal of guiding them to learn more about factors that impact their own understandings of self and the communities in which they live.

### **DEBATE**

CP (165)

Grades 9, 10, 11, 12

2.5 credit (semester)

Debate offers a wonderful way for students to develop their critical reading, writing, and public speaking skills through policy debate. This class will cover the main components of debate and major policy issues ranging from immigration to foreign policy. The course will call on students to put forth strong arguments based on evidence and reasoning, develop compelling oral arguments, and engage in whole-class and tournament debate. This elective will cover the following topics and skills: Components of a Basic Argument; Making a Strong Argument; Textual Analysis; Evidence-Based Reasoning; Responding to Counterarguments; Structuring a Complex Argument; Public Speaking; Policy Debating. Students enrolled in this class may choose to participate in formal debate competitions. This course may be taken more than once.

### **THEATRE AND SOCIETY PERFORMING ARTS/SOCIAL STUDIES DEPARTMENT (Not being offered in SY21)**

(191) social studies credits or (891) performing arts credits

Grades 9,10,11,12

2.5 credits (semester)

This course explores the social and political roles that theatre has played in history. Students will learn about various social movements by exploring the theatre created in response to those movements. Students will explore how political theatre continues to evolve and activate audiences today. The course will culminate in an original piece of theatre, created by the students, that addresses a contemporary issue or issues important to the Somerville High School Community. Students must decide if they want to earn 2.5 Theater Credits or 2.5 Social Studies Credits when they enroll in the course.

# SPECIAL EDUCATION

The Special Education Department at Somerville High School provides an array of instructional and related services to students identified as having specific disabilities. A continuum of services is provided across disability groups and grades. Services include small group academic instruction, vocational opportunities, and school-to career transition services, counseling and related therapies. The organization of the teaching staff, choice of curriculum materials and course content evolve from the goal of providing access to the general curriculum in the least restrictive environment along with the understanding and appreciation of the unique needs of each student. Various inclusion classes are offered in English, Social Studies, Science and Math through IEP team recommendations. This provides students with direct access to core curriculum areas, while allowing for specially designed instruction. Federal and state laws (IDEA-2004 and Massachusetts State Regulations 603 CMR 28.00) establish the structure and guidelines for the TEAM and IEP processes. Compliance with these mandates is central to the department's mission.

Prior to enrollment, students must have a current, valid IEP that specifically references participation in any of the offered classes.

## COURSES

- Resource English
- Inclusion English
- Resource Algebra 1
- Resource Geometry
- Resource Algebra 2
- Resource Math 4
- Inclusion Math
- Inclusion Social Studies
- Resource US History 1
- Resource US History 2
- Resource World History
- Inclusion Science
- Reading Foundations
- Study Skills
- Life Skills Program
  - Life Skills
  - Literacy for Life Skills
  - Math for Life Skills
  - Pre-Vocational Work Readiness
  - Social Science and Community Application
- Ship Program
  - Adaptive Literacy for Life Skills
  - Adaptive Life Skills
  - Adaptive Math for Life Skills
  - Adaptive Pre-Vocational Work Readiness
  - Adaptive Social Science and Community Application
- Foundations of Physical Education
- Art 1
- Music 1
- Transition Prep
- Transition Program Work Internship

## **RESOURCE ENGLISH**

(652) Grade 9

(653) Grade 10

(654) Grade 11

(655) Grade 12

5 credits (full year)

The sequence of Resource English classes, parallels, in a small group setting, the scope and sequence of the general education curriculum as described in the College Prep English course descriptions. In a small group setting comprehension, vocabulary, and writing skills are addressed with adapted literary materials to meet the individual learning needs of identified special education students. Speaking and listening skills are emphasized and further developed to prepare the students for postsecondary challenges.

## **INCLUSION ENGLISH**

(668) Grade 9

(657) Grade 10

(658) Grade 11

(659) Grade 12

5 credits (full year)

Inclusion classes are offered to provide identified students with direct access to the core English curriculum while allowing for specially designed instruction. Inclusion classes combine students with IEPs that call for specially designed English instruction with students from the general education population. Inclusion classes are taught by either a teacher certified in both Special Education and General Education or a General Educator and a Special Educator teaching the class as a team. Educators plan for the instruction of the class as a whole while also ensuring that students with disabilities receive the specialized instruction, accommodations and modifications that they require based on their IEP.

## **RESOURCE ALGEBRA 1**

(672) Grade 9

5 credits (full year)

This course is designed for freshman who require specially designed instruction in a small group setting and who require significant modifications to curriculum content. A range of topics aligned to Algebra 1 will be covered. (See descriptor of Algebra 1) The focus of this course is to build and maintain basic and problem-solving math skills in order to continue to a higher level of math. MCAS preparation activities are built into daily instruction. Modification of instruction and evaluation is based on the specific needs outlined in IEPs.

## **RESOURCE GEOMETRY**

(674) Grade 10

5 credits (full year)

This course is designed for sophomores who require specially designed instruction in a small group setting and who require significant modifications to curriculum content. A range of topics aligned to Geometry will be covered. (See descriptor of Geometry) The focus of this course is to build and maintain basic and problem-solving math skills in order to continue to a higher level of math. MCAS preparation activities are built into daily instruction. Modification of instruction and evaluation is based on the specific needs outlined in IEPs.

## **RESOURCE ALGEBRA 2**

(673) Grades 11, 12

5 credits (full year)

This course is designed for juniors or seniors who require specially designed instruction in a small group setting and who require significant modifications to curriculum content. A range of topics aligned to Algebra 2 will be covered. (See descriptor of Algebra 2) The focus of this course is to build and maintain basic and problem-solving math skills in order to continue to a higher level of math. Modification of instruction and evaluation is based on the specific needs outlined in IEPs.

## **RESOURCE MATH 4**

(671) Grades 11, 12

5 credits (full year)

This course is designed for juniors or seniors who require specially designed instruction in a small group setting and who require significant modifications to curriculum content. This course offers a review of basic algebraic and geometric process, and then focuses on building upon skills with a focus on life application skills.

## **INCLUSION MATH**

(678) Grades 9 Algebra 1

5 credits (full year)

(677) Grades 10 Geometry

5 credits (full year)

(680) Grades 11, 12 Algebra 2

5 credits (full year)



(681) Grades 11, 12 Advanced Math	<i>(New for SY21)</i>	5 credits (full year)
(676) Grades 11, 12 Data Analysis 1	<i>(Not being offered in SY21)</i>	2.5 credits (half year)
(679) Grades 11, 12 Data Analysis 2	<i>(Not being offered in SY21)</i>	2.5 credits (half year)

Algebra 1, Geometry, Algebra 2, and Advanced Math classes are taught by either a teacher certified in both Math and Special Education or a General Educator and Special Educator teaching the class as a team. Inclusion classes are offered to provide identified students with direct access to the core Mathematics curriculum while allowing for specially designed instruction. Inclusion classes combine students with IEPs that call for specially designed Mathematics instruction with students from the general education population. Educators plan for the instruction of the class as a whole while also ensuring that students with disabilities receive the specialized instruction, accommodations and modifications that they require based on their IEP.

#### **INCLUSION SOCIAL STUDIES**

(669) Grade 9 US History 1 (1765-1898)	5 credits (full year)
(665) Grade 10 US History 2 (1815-2004)	5 credits (full year)
(667) Grade 11 World History Themes	5 credits (full year)

Inclusion classes are offered to provide identified students with direct access to the core Social Studies curriculum while allowing for specially designed instruction. Inclusion classes combine students with IEPs that call for specially designed Social Studies instruction with students from the general education population. Inclusion classes are taught by either a teacher certified in both Special Education and General Education or a General Educator and a Special Educator teaching the class as a team. Educators plan for the instruction of the class as a whole while also ensuring that students with disabilities receive the specialized instruction, accommodations and modifications that they require based on their IEP.

#### **RESOURCE US HISTORY 1 & 2**

(670) Resource US History 1	5 credits (full year)
(666) Resource US History 2	5 credits (full year)

These courses are designed for 9<sup>th</sup> and 10<sup>th</sup> graders who required specially designed instruction in a small group setting. The curriculum from US History I and US History II courses will be followed. The purpose of the course is to help students master history content while building reading, writing, and critical thinking skills. US History I and US History II may be offered on alternate years depending on student need.

#### **RESOURCE WORLD HISTORY**

(656) Resource World History	5 credits (full year)
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This course is designed for 10<sup>th</sup> and 11<sup>th</sup> graders who require specially designed instruction in a small group setting. The curriculum from the World History course will be followed. The purpose of the course is to help students master history content while building reading, writing, and critical thinking skills. Resource History courses may be offered on alternate years depending on student need.

#### **INCLUSION SCIENCE**

(675) Grade 9 Biology	5 credits (full year)
(683) Grade 10 Chemistry	5 credits (full year)
(684) Grade 11 Physics	5 credits (full year)

Inclusion classes are offered to provide identified students with direct access to the core Science curriculum while allowing for specially designed instruction. Inclusion classes combine students with IEPs that call for specially designed Science instruction with students from the general education population. Inclusion classes are taught by either a teacher certified in both Special Education and General Education or a General Educator and a Special Educator teaching the class as a team. Educators plan for the instruction of the class as a whole while also ensuring that students with disabilities receive the specialized instruction, accommodations and modifications that they require based on their IEP.

#### **READING FOUNDATIONS**

(685) Grades 9, 10, 11, 12 (semester)	2.5 credits
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This course is designed for those students who require Reading instruction in a small group setting using a sequential, rules-based approach, such as those prescribed in the Wilson and Orton-Gillingham Reading Programs. The further development of both decoding and comprehension strategies are stressed. Individual student modifications are provided as outlined in IEPs. This course can be taken more than once for credit.

## **STUDY SKILLS**

(694) Semester 1	2.5 credits (semester)
(695) Semester 2	2.5 credits (semester)
(694S) Semester 1	2.5 credits (semester)
(695S) Semester 2	2.5 credits (semester)
(694B) Semester 1	2.5 credits (semester)
(695B) Semester 2	2.5 credits (semester)

In all sections, students will develop executive functioning, organization, time management skills, and practical application of such skills to real life and post-secondary goals. Specific study skills strategies such as: pre-teaching, test-prep, executive functioning, organization, breaking down long and short term assignments, time management, life planning, essay writing, and resume writing. An assignment notebook system will be employed and will be a requirement of all students. This course will include specific teaching of strategies and application to course materials and homework. Some sections (694S and 695S) are taught by one of our adjustment counselors for students who need an additional counselor check-in or self-regulation instruction in addition to executive function instruction. Some sections (694B and 695B) are taught by our Resource Teacher for students who need additional instruction in social skills and sensory strategies in addition to executive function instruction.

## **LIFE SKILLS PROGRAM**

Life Skills Program is a self-contained program serving students in grades 9 through 12 who present with developmental, physical, and/or cognitive disabilities. Integrated programming includes social learning instruction, communication services, community experiences and daily living skill and pre-vocational instruction.

### **LIFE SKILLS**

(690)	5 credits (full year)
Focus on ADL and Life Skill Acquisition	

### **LITERACY FOR LIFE SKILLS**

(688)	5 credits (full year)
Focus on developing reading/literacy skills aligned with curriculum frameworks and modified to individual student level with a strong emphasis on application to everyday life.	

### **MATH FOR LIFE SKILLS**

(687)	5 credits (full year)
Focus on developing math/computation skills aligned with curriculum frameworks and modified to individual student level with a strong emphasis on application to everyday life.	

### **LIFE SKILLS PRE-VOCATIONAL WORK READINESS**

(689)	5 credits (full year)
Focus on developing pre-vocational skills aligned with curriculum frameworks and modified to individual student level with a strong emphasis on application to everyday life.	

### **LIFE SKILLS SOCIAL SCIENCE AND COMMUNITY APPLICATION**

(686)	5 credits (full year)
Focus on science/social science/community skills aligned with curriculum frameworks and modified to individual student level with a strong emphasis on application to everyday life.	

## **SHIP PROGRAM**

The SHIP Program is a self-contained program serving students in grades 9-post secondary who present with intensive medical, developmental, physical, and/or cognitive disabilities. Integrated programming includes social learning instruction, communication services, community experiences and daily living skill instruction.

### **ADAPTIVE LITERACY FOR LIFE SKILLS**

(698)	5 credits (full year)
Focus on developing reading/literacy skills aligned with curriculum frameworks and modified to individual student level with a strong emphasis on application to everyday life.	

**ADAPTIVE LIFE SKILLS**

(692) 5 credits (full year)

Focus on ADL and Life Skill Acquisition

**ADAPTIVE MATH FOR LIFE SKILLS**

(697) 5 credits (full year)

Focus on developing math/computation skills aligned with curriculum frameworks and modified to individual student level with a strong emphasis on application to everyday life.

**ADAPTIVE PRE-VOCATIONAL WORK READINESS**

(699) 5 credits (full year)

Focus on developing pre-vocational skills aligned with curriculum frameworks and modified to individual student level with a strong emphasis on application to everyday life.

**ADAPTIVE SOCIAL SCIENCE AND COMMUNITY APPLICATION**

(691) 5 credits (full year)

Focus on science/social science/community skills aligned with curriculum frameworks and modified to individual student level with a strong emphasis on application to everyday life.

**FOUNDATIONS OF PHYSICAL EDUCATION**

SP (693) Grades 9, 10, 11, 12 2.5 credits (semester)

Foundations of Physical Education is offered to those students who have been determined by their IEP Team to require specially designed instruction in Physical Education.

**ART 1**

SP (805) Grades 9, 10, 11, 12 2.5 credits (semester)

Refer to course descriptor under Art section.

**MUSIC 1**

SP (855) Grades 9, 10, 11, 12 2.5 credits (semester)

Refer to course descriptor under Music section.

**TRANSITION PREP****(TWP)**

Transition Prep will provide specially designed instruction in order for students not in Life Skills or SHIP programs to develop functional skills needed to transition to post-school activities in order to achieve their post-secondary vision. Students will develop a functional understanding of mathematics such as budgeting, taxes, and money management. Students will develop functional reading/writing such as developing the ability to read maps, news sources, understand job descriptions, apply for jobs, and develop a resume. Students will develop soft skills such as interviewing skills, timeliness and on the job interpersonal skills. Enrollment in the course is an IEP team decision.

**TRANSITION SPECIALIZED PROGRAM**

The Transition Program teaches skills to promote independence in the home, community, and work place. It services students who have completed grades 9-12. Instruction and skill application may take place in the classroom, community and at various work sites. Students can receive individualized instruction and job support, as needed. This program services students ages 18-22 with a range of disabilities including intellectual and autism. These courses have been designed to align with students individual IEP and targeted instruction, application and person centered planning with a focus on post-secondary goals, programs and services.

**(TWS)** Instruction and skill application may take place in the classroom, community and at various work sites. Students can receive individualized instruction and job support, as needed.

**WORK INTERNSHIP**

SP (TWA) Grades 10, 11, 12 5 credits (full year)

This course is for students who have been determined by their IEP Team to require specially designed instruction in vocational education. Students have the opportunity to develop job search skills including resume development, interviewing, and job related behavior. Students will be offered the opportunity to work both inside and outside of the school building. The goal for each student will be to find competitive employment or pursue post-secondary education upon graduation

# WORLD LANGUAGES

Welcome to the World Language Department where we proudly offer courses in French, French Heritage, Italian, Portuguese, Portuguese Heritage, Spanish and Spanish Heritage. Instruction is sequential, emphasizing the development of language proficiency in the areas of: speaking, listening, reading, and writing. The curriculum is aligned with both the National World Language Standards and the Massachusetts World Language Curriculum Frameworks implementing the “Five C’s”: Culture, Communication, Connections (to other disciplines), Comparisons (from English to the target language) and Communities (using the target language outside of the classroom setting). Language competence enables our students to communicate with people from other cultures and to more actively participate in the global community. Our language program also introduces students to the lives, literature, contributions and cultures of other peoples. The interdisciplinary efforts of the curriculum integrate historical and geographical topics of cultural significance. The study of word origins, derivatives, cognates and grammatical structures also serve to facilitate the development of English vocabulary and grammar.



## THE SEAL OF BILITERACY

The Seal of Biliteracy is an award given by a school in recognition of students who demonstrate high level of proficiency in English and a second language by graduation. See under Special Programs for more details.

## COURSES

- AP French Language and Culture
- French 1, 2, 3, Honors
- French 1CP, 2CP, 3CP
- French Heritage Honors
- AP Italian Language and Culture
- Italian 1, 2, 3 Honors
- Italian 1CP, 2CP, 3CP
- Portuguese 1, 2, 3, 4 Honors
- Portuguese 1CP, 2CP, 3CP
- Portuguese Heritage Honors
- AP Spanish Language and Culture
- Spanish 1, 2, 3, 4, 5 Honors
- Spanish 1CP, 2CP, 3CP, 4CP, 5CP
- Spanish Heritage Honors
- Culture of European Countries: Italy, France, Portugal and Spain
- Culture of Latin American Countries
- Portuguese For Spanish-speakers
- Spanish Literacy For Spanish speakers



## WORLD LANGUAGE 1

French 1: H (412); CP (413)

Italian 1: H (416); CP (417)

Portuguese 1: H (418); CP (419)

Spanish 1: H (414); CP (415)

Grades 9, 10, 11, 12

5 credits (full year)

Students are introduced to vocabulary, language patterns, and common idiomatic expressions through a very active oral approach in order to provide a basis for on-going development of competency in the four language skills: listening, speaking, reading, and writing. Reading and writing activities are designed to reinforce the oral and listening experiences of the language classroom. Through the use of technology, including a new state-of-the-art World Language Lab, students are actively involved in language learning. The cultural content of the course introduces the countries and people of the target language through the study of geography, history, customs, contributions, and daily routines while developing an appreciation of social and cultural similarities and differences.

## **PORTUGUESE HERITAGE HONORS**

H (418H)

Grades 9, 10, 11, 12

5 credits (full year)

This course provides opportunities to students who possess a Portuguese language background. This course seeks to provide language learning opportunities for heritage Portuguese speakers that would not be readily available to them in other Portuguese classes which are currently being offered. This course is designed with the intent of developing a high level of language proficiency in Portuguese. The course teaches grammatical structures, spelling, accentuation and punctuation, the correct use of rich and precise vocabulary, along with enhancing reading and writing skills which culminate in cognitive academic language proficiencies. The course emphasizes the six World Language themes: World Events, Science and Technology, Beauty and Aesthetics, Contemporary Life, Families and Communities, and Public and Private Identities.

## **PORTUGUESE FOR SPANISH SPEAKERS**

H (418S)

Grades 9, 10, 11, 12

5 credits (full year)

This proficiency based course focuses on the strengths and needs of Spanish-speaking students. This course is intended for students who can understand and speak Spanish fluently but do not read or write at an advanced level. Because Spanish and Portuguese are similar, students progress at a faster pace and can learn more about their own language. The course will focus on listening, speaking, reading and writing in Portuguese. Students would take a placement test at the end of the course to determine the next course in the sequence to complete the two-year graduation requirement

## **SPANISH LITERACY FOR SPANISH SPEAKERS**

H (414L)

Grades 9, 10, 11, 12

5 credits (full year)

This proficiency based course focuses on the strengths and needs of Spanish-speaking students who speak and understand Spanish. It is designed to build skills in Reading and Writing. It is intended to prepare students for Heritage Spanish. A placement test will determine placement in this course. The course will focus on advanced academic reading and writing in Spanish. Students will take another placement test at the end of the course to determine the next course in the sequence to complete the two-year graduation requirement.

## **SPANISH HERITAGE HONORS**

H (414H)

Grades 9, 10, 11, 12

5 credits (full year)

This course provides opportunities to students who possess a Spanish language background. This course seeks to provide language learning opportunities for Spanish speakers that would not be readily available to them in other Spanish classes which are currently being offered. It also provides an opportunity to those students who are entering SHS after successfully completing the UNIDOS Program. This course is designed with the intent of developing a high level of language proficiency in Spanish. The course emphasizes the six World Language themes: World Events, Science and Technology, Beauty and Aesthetics, Contemporary Life, Families and Communities, and Public and Private Identities. This course builds the foundation for and serves as the Pre-AP Spanish Language and Culture course.

## **FRENCH HERITAGE HONORS**

H (412H)

Grades 9, 10, 11, 12

5 credits (full year)

This course provides opportunities to students who possess a French language background. This course seeks to provide language learning opportunities for French speakers that would not be readily available to them in other French classes which are currently being offered. This course is designed with the intent of developing a high level of language proficiency in French. The course teaches grammatical structures, spelling, accentuation and punctuation, the correct use of rich and precise vocabulary, along with enhancing reading and writing skills which culminate in cognitive academic language proficiencies. In addition, the course emphasizes the six World Language themes: World Events, Science and Technology, Beauty and Aesthetics, Contemporary Life, Families and Communities, and Public and Private Identities. This course builds the foundation for and serves as the Pre-AP French Language and Culture course.

## **WORLD LANGUAGE 2**

French 2: H (422); CP (423)

Italian 2: H (426); CP (427)

Portuguese 2: H (428); CP (429)

Spanish 2: H (424); CP (425)

Prerequisites: Successful completion of the World Language 1 course or Supervisor approval

Grades 10, 11, 12

5 credits (full year)

Students continue to study patterns of the target language as they expand their vocabulary and learn various verb tenses. Students will improve oral proficiency, develop accuracy in reading comprehension and learn to write and use idiomatic expressions in the target language. The use of audio and video programs in the World Language lab enhances speaking and listening comprehension while simultaneously integrating cultural topics.

## **WORLD LANGUAGE 3**

French 3: H (432); CP (433)

Italian 3: H (436); CP (437)

Portuguese 3: H (438); CP (439)

Spanish 3: H (434); CP (435)

Prerequisites: Successful completion of the World Language 2 course or Supervisor approval

Grades 11, 12

5 credits (full year)

Students expand their knowledge of grammatical structures and vocabulary based in part on topics and on selected readings. These topics and readings provide opportunities for students to increase their communication skills. Students acquire a more in-depth knowledge of the target language and culture through audio and video programs in the World Language Lab. Readings serve to highlight geography, history, and national identity of numerous countries. Interactive activities provide opportunities for students to increase their level of language proficiency. Writing activities are designed to develop students' ability to express themselves using the target language.

## **WORLD LANGUAGE 4**

Portuguese 4: H (448)

Spanish 4: H (444); CP (445)

Prerequisites: Successful completion of the World Language 3 course or Supervisor approval

Grades 11, 12

5 credits (full year)

This advanced level of language study is designed to solidify oral proficiency in the target language through conversations and presentations based on specific topics as well as cultural and literary themes. Literary selections are read and discussed in the target language such as "Le Petit Prince" in French, "Una Carta a Dios" and "Lazarillo de Tormes" in Spanish, "Pinocchio" in Italian and "O Fado" in Portuguese. Many advanced technological tools reinforce students' language learning. In addition, the course addresses the six World Language themes: World Events, Science and Technology, Beauty and Aesthetics, Contemporary Life, Families and Communities, and Public and Private Identities.

## **WORLD LANGUAGE 5**

Spanish 5: H (454)

*Prerequisites: Successful completion of the World Language 4 course or Supervisor approval*

Grades 11, 12

5 credits (full year)

This advanced level of language study is designed to solidify oral proficiency in the target language through conversations and presentations based on specific topics as well as cultural and literary themes. The instructional focus will be on grammatical structures including all moods and tenses, reading, writing, and vocabulary. This course moves the learner beyond language development and broadens their command of Spanish. The course focuses on writing well-developed synthesis and persuasive essays using correct citation; the correct use of grammar, spelling, punctuation and capitalization; and integrates multiple listening and reading activities. Students' oral and listening skills will be enhanced by using the interactive World Language lab. In addition, the course emphasizes the six World Language themes: World Events, Science and Technology, Beauty and Aesthetics, Contemporary Life, Families and Communities, and Public and Private Identities. This course builds the foundation for and serves as the Pre-AP Spanish Language and Culture course.



## **WORLD LANGUAGE 5**

Spanish 5 CP (455)

*Prerequisites: Successful completion of the World Language 4 course or Supervisor approval*

Grades 11, 12

5 credits (full year)

This advanced level of language study is designed to solidify oral proficiency in the target language through conversations and presentations based on specific topics as well as cultural and literary themes. The instructional focus will be on grammatical structures including all moods and tenses, reading, writing, and vocabulary. This course moves the learner beyond language development and broadens their command of Spanish. The course focuses on the correct use of grammar, spelling, punctuation, capitalization, and integrates multiple listening and reading activities. Students' oral and listen skills will also be enhanced by using the new interactive World Language lab.

## **AP SPANISH LANGUAGE AND CULTURE (Restricted to seniors only)**

(464)

*Prerequisites: Spanish Heritage or Spanish 5 Honors or Supervisor approval (Grade of B+ or better in Spanish Heritage or Spanish 5 Honors recommended)*

Grades 10, 11, 12

5 credits (full year)

The AP Spanish Language and Culture course is based on the six themes established by the AP College Board: personal and public identities, global challenges, science and technology, families and communities, contemporary life, and beauty and aesthetics. This class emphasizes the interrelatedness of the themes and their relevance to global, local, and individual culture and identity. Each context unit is developed to focus discussion and encourage students to examine each sub-context from varied angles and viewpoints. The course focuses on the three modes of communication (interpretive, interpersonal, and presentational) that students have been building since they began their study of French. While this course will prepare students to take the AP exam, it is more importantly a broad look at the Spanish language and Spanish-Speaking cultures and their relationship to our global society. This course is taught exclusively in Spanish. All students are expected to take the AP Spanish Language and Culture Exam in May.

## **AP FRENCH LANGUAGE AND CULTURE**

(462)

*Prerequisite: French Honors 3 or French for Speakers of French Honors or Supervisor approval (Grade of B+ or better in French Honors 3 or French for Speakers of French Honors recommended)*

Grades 10, 11, 12

5 credits (full year)

The AP French Language and Culture course is based on the six themes established by the AP College Board: personal and public identities, global challenges, science and technology, families and communities, contemporary life, and beauty and aesthetics. This class emphasizes the interrelatedness of the themes and their relevance to global, local, and individual culture and identity. Each context unit is developed to focus discussion and encourage students to examine each sub-context from varied angles and viewpoints. The course focuses on the three modes of communication (interpretive, interpersonal, and presentational) that students have been building since they began their study of French. While this course will prepare students to take the AP exam, it is more importantly a broad look at the French language and francophone cultures and their relationship to our global society. This course is taught exclusively in French. All students are expected to take the AP French Language and Culture Exam in May.

## **AP ITALIAN LANGUAGE AND CULTURE**

(466)

*Prerequisite: Italian Honors 3 or Supervisor approval (Grade of B+ or better in Italian Honors 3 recommended)*

Grades 10, 11, 12

5 credits (full year)

The AP Italian Language and Culture course is based on the six themes established by the AP College Board: personal and public identities, global challenges, science and technology, families and communities, contemporary life, and beauty and aesthetics. This class emphasizes the interrelatedness of the themes and their relevance to global, local, and individual culture and identity. Each context unit is developed to focus discussion and encourage students to examine each sub-context from varied angles and viewpoints. The course focuses on the three modes of communication (interpretive, interpersonal, and presentational) that students have been building since they began their study of Italian. While this course will prepare students to take the AP exam, it is more importantly a broad look at Italian and Italian cultures and their relationship to our global society. This course is taught exclusively in Italian. All students are expected to take the AP Italian Language and Culture Exam in May.

## **CULTURE OF EUROPEAN COUNTRIES: ITALY, FRANCE, PORTUGAL AND SPAIN *(Not being offered in SY21)***

(481)

Grades 10, 11 and 12

2.5 credits (semester)

Students will learn and analyze the different art movements such as Futurism (Italy), Impressionism (France), Cubism (France and Spain), Azulejo (Portugal) as well as contemporary Urban Art and architecture. Students will be introduced to the thoughts, works literature movements of classic and contemporary authors such as, for example, Dante, Boccaccio and Italo Calvino (Italy); Victor Hugo, Jean-Paul Sartre and Simone de Beauvoir (France); Federico Garcia Lorca, Javier Marias, and Miguel de Cervantes (Spain); and Eca de Queiros, Jose Saramago, and Luis de Camoes (Portugal). Students will be introduced to the different cinematic movements in Europe such as The French Impressionist Cinema, the Italian Neo-Realismo, French New Wave, Spaghetti Westerns, Portugal's Novo Cinema, and La Movida Madrilenia from Spain and the many directors associated with those movements. Students will be introduced to the different culinary schools of France (Lyonnaise Cuisine), Italy (la Cucina Toscana), Spain (El Celler de Can Roca and El Bulli), and Portuguese Cuisine. Students will be introduced to the different musical traditions from Italy (Opera and Neapolitan melody), Portugal (Fado), Spain (Flamenco) and France (Chanson and Cabaret style). Students will obtain knowledge on contemporary historical events that have influences or have been influenced by the arts above.

## **CULTURE OF LATIN AMERICAN COUNTRIES *(Not being offered in SY21)***

(483)

Grades 10, 11 and 12

2.5 credits (semester)

Students will learn and analyze the different art from the Mayan and Aztec civilizations, Diego Rivera and Frida Kahlo (Mexico), Fernando Botero (Colombia), Antonio Berni (Argentina), Roberto Matta (Chile), and Candido Portinari and Oscar Niemeyer (Brazil). Students will be introduced to the thoughts, works literature movements of classic and contemporary authors such as, for example, Gabriel Garcia Marquez (Colombia), Jorge Luis Borges (Argentina), Isabel Allende and Pablo Neruda (Chile), and Paulo Coelho (Brazil). Students will be introduced to the different cinematic movements in Latin America, for example, Cinema Novo (Brazil), New Latin American Cinema (Colombia), Argentinian's new post dictatorship cinema. And the various movies and director that have influenced today's cinema. Students will be introduced to the different culinary traditions of Latin American countries and regions. Students will be introduced to the different musical traditions such as Bossa Nova, Tropicalismo and Samba (Brazil), Tango and Milonga (Argentina), Andean Music (Chile, Ecuador and Peru), Bolero, Cha cha cha, Rumba, Salsa, Mambo, and Habanara (Cuba), Merengue and Bachata (Dominican), Mariachi (Mexico). Students will obtain knowledge on contemporary historical events that have influences or have been influenced by the arts above.

# **SPECIAL PROGRAMS**

In addition to conventional academic classes, Somerville High School offers several special programs to support and assist students in the following areas: improving their academic performance, recovering and obtaining credits under special circumstances, working independently, and serving as mentors and interns.

- Advisory
- Student Internship
- Student Mentorship
- Cope Program
- Redirect
- Beyond the Classroom Learning Support Class
- Seal of Biliteracy
- Academic Support Program
- Online Learning Option
- Dual Enrollment

## **ADVISORY**

(SPA)

Grades 9, 10, 11, 12

(1.25 Credits)

In Advisory, students meet with their Advisors to build community within the school and to prepare for post-secondary success. Advisory incorporates college and career readiness, team building, and community responsibility. Advisory prepares students to be successful at school and beyond.

## **STUDENT INTERNSHIP**

(SP3)

Grades 11, 12

2.5 credits (semester)

A limited number of juniors and seniors who have not failed any courses in the previous semester, and who maintain more credits than necessary toward graduation will be eligible for participation in ungraded student internships that provide an opportunity to assist administrators or staff in a variety of experiences. A student must be interviewed for the internship by the supervising staff person. Participation may not exceed two semesters. The Principal or his/her designee will have final approval for all internships.

### **STUDENT MENTORSHIP**

(SP4)

Grades 11, 12

2.5 credits (semester)

A limited number of juniors and seniors who have not failed any courses in the previous semester, and who maintain more credits than necessary toward graduation will be eligible for participation in student mentorships that provide an opportunity to assist other students in a variety of experiences. A student must be interviewed for the mentorship by the supervising staff person. Participation may not exceed two semesters. The Principal or his/her designee will have final approval for all mentorships.

### **COPE PROGRAM**

(SP5)

Grades 9, 10, 11, 12

2.5 credits (semester)

This after-school program serves pregnant and parenting teens. COPE provides case management, education, guidance and support services to help students complete their education. COPE is under the auspices of the Family and Consumer Sciences/Health Department. It is suggested that COPE students enroll in Parenting and Child Study courses to enhance the knowledge and parenting skills provided by the COPE Program.

### **REDIRECT**

(SP6)

Grades 9, 10, 11, 12

2.5 credits (semester)

Redirect is a classroom based program that provides individualized support and monitoring to students who would benefit from additional support and structure. Students enrolled in Redirect, for a semester or year, have time in their schedules to complete school work. Students receive support in staying on top of academic work, completing outstanding assignments, communicating with their teachers and developing increased self-efficacy. Redirect is meant to be flexible to respond to the changing needs of students and help support them in a variety of academic, organizational, and social emotional ways. Grading is done on a pass/fail basis with a grade of NC (no credit) given in special circumstances. Acceptance into this program needs to be approved by Redirect counselor.

### **BEYOND THE CLASSROOM LEARNING SUPPORT CLASS**

This course will allow students to participate in pilot Beyond the Classroom Learning opportunities like dual enrollment courses, internships, and independent studies. When they are not attending their BCL experience, they will engage in workshops, reflections, and feedback regarding their experience. The instructor will serve as a coach who will provide support. Students need special approval to participate in this course. They should talk to their school counselor for more information.

### **THE SEAL OF BILITERACY**

The Seal of Biliteracy is an award given by a school in recognition of students who have studied and attained proficiency in English and a second language by graduation. This statement of nationally recognized Biliteracy can be useful for college admissions or to future employers. Students who attain this distinction will be recognized with a certificate, wear a medallion at graduation and have a seal on their diploma. Information about the Seal of Biliteracy Application Process is available by contacting the World Language Department.

### **ACADEMIC SUPPORT PROGRAM**

Grades 9, 10, 11, 12

2.5 credits, P/F (semester)

The Academic Support Program is part of the school's efforts to systematically provide tiered interventions to students based on identified need. Students who meet identified failure and attendance triggers may be offered this support option. In this program, the assigned teacher will collaborate with the student's other teachers to differentiate work, manage make-up work, coordinate tutors and mentors, and monitor academic progress. Please talk with your school counselor for more information.

## SHS ONLINE LEARNING OPTIONS

An online program (online “Edgenuity” course) offered to SHS students during the school year who qualify based on specific criteria. These are high school level courses of equivalent rigor to standard program courses, designed, updated, and approved by SHS Department Heads which can be used to satisfy SHS graduation requirements. These options include credit recovery courses as well as courses taken for original credit in specific circumstances. Students must see their school counselor to review the SHS Online Learning Guidelines.

## EARLY COLLEGE OPTIONS POLICY

When choosing courses at Somerville High School, graduation requirements must take priority over all other course selections. Courses can be taken outside of SHS to meet a graduation requirement if the student cannot meet the graduation requirement at SHS. A graduation plan must be written by the student’s counselor, approved by the Principal, and then signed by parent/guardian and student for all options bellow.

Courses may also be taken in order to advance in SHS course sequence.

### Option 1: Dual Enrollment Partnership between SHS and approved College Partners:

A dual enrollment program is a pre-approved partnership between SHS and specific colleges and universities. Dual Enrollment partnerships allow eligible SHS students to enroll in college courses at partner colleges free of charge. Students interested in participating in a dual enrollment program will need to speak to his/her counselor about the pre-approved partnerships that exist at SHS, complete necessary applications, and meet requirements for the specific dual enrollment program they are interested in. Upon submission of an official transcript from the university or college that reflects a grade and credit, these courses will be included on a student’s SHS transcript with a grade and credit and will be calculated into the GPA as a college level course (equivalent to AP course).

### Option 2: College/University Courses:

College/University courses can be taken for SHS grade and credit in certain circumstances.

#### **a) For SHS grade and credit:**

- These courses may be added to the student’s transcript for grade and credit if the following process is completed. Note: The grade is not calculated into the GPA in these circumstances.
- The student must meet with their counselor to discuss their plans
- The course must be approved **in advance** by SHS department head
- A graduation plan must be written by the student’s counselor, approved by the Principal, and then signed by parent/guardian and student.
- Student must submit an official college or university transcript to their counselor that reflects a grade and credit in order to have the grade and credit on the SHS transcript. During the senior year, upon proof of enrollment in a course, the course may be added to a transcript as a “course in progress” for college admissions purposes.
- Semester college courses will earn five SHS high school credits. All other course credit TBD.

#### **b) Not for SHS grade and credit (*enrichment only*):**

- Students may take college/university courses for enrichment in addition to taking a full course load at SHS. Courses that are taken for enrichment at a college/university are encouraged, however, students will not receive SHS grade or credit for these courses. Because of this, department head approval is not required. Students are encouraged to send an official transcript for the course to any college or university that they apply to for admission after high school.

**Courses taken as part of a pre-approved Dual Enrollment partnership with SHS will be factored into a student’s GPA. All other college/university courses, not in the dual enrollment program, are not factored into a student’s GPA.**

In special circumstances, modifications to this policy will need prior approval by Principal.

## Somerville High School – Scheduling and Add/Drop Protocol 2020-2021

*Individual circumstances may require modification in this process. Approvals from School Counseling Director and /or Principal are required.*

Action	Period Of Time	Process/Requirements	Important Notes
<b>OPEN ADD/DROP</b>	August-summer scheduling	<i>Add/Drop forms are not required.</i> Counselors will work to create and/or finalize student schedules.	*Based on completion of summer school courses *New student enrollments
<b>OPEN ADD/DROP PERIOD</b>	The first five days of the first semester	<i>Add/Drop forms are not required.</i> *Students must present solid rationale to the counselor for the course change.  *Counselor can make the change if warranted.  <i>EXCEPTION: An add/drop form will be generated by the counselor only if a student is changing a level (AP, Honors, CP). After the first five days of a year-long course, a form also must be generated.</i>	*Scheduling errors/conflicts *Final summer school adjustments *Misplaced levels (IE- a scheduling error) *Disability-based or health needs *Graduation requirement needed *Student has previously failed a course with the same teacher  *NOTE: Student and/or family cannot change a schedule with the purpose of requesting a specific teacher.
<b>ADDING AND DROPPING (after the first five days of a semester)</b>	Within 3 weeks for semester classes and  Deadline: (Date TBD)  AND  Within 5 weeks for full year classes  Deadline: (Date TBD)	<i>Add/Drop forms are required.</i> *Students must present solid rationale for the adding or dropping of a class at this point in the year.  *If student initiated, students should be encouraged discuss their reasons for wanting to drop/add or change levels with the teacher first.  *An add/drop form will be generated by the counselor and then students are responsible for getting all required signatures before schedule changes are made.  *Changes will be made to the schedule once the form is returned to the counselor with signatures and if there is room in the classes requested.  *Schedule changes are only official once the counselor makes the changes in X2.	*If student initiated, students should be encouraged discuss their reasons for wanting to drop/add or change levels with the teacher first.  *Parent/Guardian approval is required for course changes. If the P/G, student and teacher agree to the change, the student will ask for a Department Head or K-12 Supervisor's signature.  *If there is disagreement about a class change, a meeting should be scheduled with the P/G, student, teacher and counselor to discuss what is in the best interest of the student.  *Students may come to the teacher with the ivory add/drop form before talking with them. This is an opportunity for teachers to talk with the student about their reasons for the requested change.  *If a teacher initiates a level change, teacher will contact the student, family and counselor to discuss the possibility of a change.  *Students can be added into a class if there is room based on the max class size.  *If a schedule change is approved with all of the signatures, the receiving teacher will be notified via an email from counselor and/or the academic Department Head.  *Student will be responsible for making up any missed work once they've entered the class. Teachers will transfer and/or average grades from one section to another as needed.

## LIST OF MODIFIED COURSES OFFERINGS IN SY21

**COURSES NOT BEING OFFERED** *(These course are not running for various reasons including low enrollment or scheduling issues)*

(077) Journalism 1  
(078) Journalism 2  
(089) Sat Preparation: Critical Reading and Writing - Grade 11 - 2<sup>nd</sup> Semester  
(088) Sat Preparation: Critical Reading and Writing - Grade 12 - 1<sup>st</sup> Semester  
(091); (091E); (092); (092E) MCAS Prep ENG  
(137) Practical Law  
(138) Human Behavior  
(139) Psychology honors  
(143) Women's And Gender Studies  
(149) Economics  
(154) Govt. And Politics  
(156) Facing History  
(158) Somerville History  
(159) African-American History  
(191) Theater and Society  
(177) Environmental History  
(225); (225E) Math Concepts 2  
(248) Data Analysis 1  
(249) Data Analysis 2  
(254) Intro to Hardware Engineering  
(255) Exploring Comp Science 1  
(265) Exploring Comp Science 2  
(271) AP Calculus BC  
(292); (292E) MCAS Prep classes 1st semester  
(293); (293E) MCAS Prep classes 2nd semester  
(375); (375L) AP Environmental Science  
(359) Astronomy 2  
(392) MCAS Prep Biology 1st semester  
(481) European Culture  
(483) Latin American Culture

### COURSES RESTRICTED TO SENIORS

(382); (382L) AP Physics 2  
(361); (361L) AP Chemistry  
(388); (389) Engineering 1  
(390); (391) Engineering 2  
(377) Environmental History  
(358) Astronomy 1  
(339) Oceanography  
(464) AP Spanish

### COURSES RESTRICTED TO JUNIORS

(381); (381L) AP Physics 1  
(383); (383L) AP Physics C



## Somerville High School Daily Schedule

Block	Start	End	Monday	Tuesday	Wednesday	Thursday	Friday
1	7:55	9:02	Class 1	Class 1	Class 1	Class 1	Class 2
2	9:06	10:01	Class 2	Class 3	Class 2	Class 2	Class 3
3	10:05	11:00	Class 3	Rotating Extension Block	Class 4	Class 3	Class 4
4	11:04 11:34 12:04	11:34 12:04 12:34	Class 4	Class 4	Class 5	Class 5	Class 5
5	12:38	1:33	Class 5	Class 6	Class 6	Class 6	Class 6
6	1:37	2:32	Class 7	Class 7	Advisory/ Assembly	Class 7	Class 7

## Somerville High School Scholarship Foundation Engraved Brick Campaign

Bricks permanently engraved with the names of families, students, alumni, teachers, and friends will be installed in the walk way leading to the Atrium entrance to Somerville High School.

Order your tax-deductible personalized brick(s)... for yourself... for your family...for birthdays, anniversaries, graduations, holiday gift... for recognition and thanks...as a tribute... in memory of a loved one or special event. The proceeds will be utilized for scholarships to help Somerville High School graduates achieve their college and other post-secondary training goals.

These lasting memorials will be the pride of the Somerville High Community and will forever commemorate the community spirit and generosity of all those who support our students

Visit <https://www.shsscholarship.org/>

