

# **BEDFORD HIGH SCHOOL PROGRAM OF STUDIES 2020-2021**

f

# BEDFORD HIGH SCHOOL

## Mission Statement

The mission of Bedford High School is to educate all students in a nurturing, democratic, challenging, and inclusive environment. Bedford High School, in partnership with parents and the community, helps students attain the knowledge and develop the skills and intellectual curiosity to become independent and self-sufficient adults who will contribute responsibly in a global community. By providing opportunities for students to create meaning and to develop understanding in a variety of contexts, Bedford High School prepares students to grow and to act in a well-informed, creative, ethical, and compassionate manner.



# TABLE OF CONTENTS

How to Use the Program of Studies	4
Academic/Social/Civic Expectations	4
Graduation Requirements	5-7
Course Level Descriptions	7
Guidance and Counseling Program and Services	9-14
Air Force Junior ROTC	14-15
Art Department	16-20
English Department	21-27
World Language Department	27-34
Mathematics Department	35-41
Performing Arts Department	42-46
Occupational Education Courses	46-51
Wellness Department	52-53
Science Department	54-59
Computer Science Courses	60
Social Studies Department	61-65
Academic Achievement Center	66-67
English as a Second Language Courses	68
Reading Courses	68-69
Special Education Department	69
Additional Course Offerings	69-70

# HOW TO USE THE PROGRAM OF STUDIES

High school is your last chance to take advantage of a free, public education. Make the most of your years here! Take as many challenging courses as possible and explore new areas of interest. As you select your courses for next year:

1. Review the Table of Contents of the Program of Studies so that you know what kinds of information it contains.
2. Select courses to fill every block, typically five 5-credit courses and four 2.5-credit courses, while remaining aware of our graduation requirements.
3. Talk with your school counselor about your plans for your schedule and ask your school counselor any questions you may have.

Think of the Bedford High School graduation requirements as a starting point. Note, for example, that the minimum admissions requirements for Massachusetts state colleges and universities include **two** years in a single foreign language. If you are able, however, to take more years of a foreign language, we urge you to do so.

## ACADEMIC, SOCIAL AND CIVIC EXPECTATIONS

### **Active Learners** – *engaged in the quest for knowledge and understanding*

Students will . . .

- understand and use what they learn
- read actively and purposefully
- engage in inquiry and self-directed learning
- use feedback and reflection to extend learning

### **Resourceful Thinkers** – *engaged in solving problems and making meaning*

Students will . . .

- employ creative thinking skills
- employ critical thinking skills
- evaluate frames of reference
- make meaningful connections
- conduct analytical research

### **Effective Communicators** – *engaged in sharing information, insights, and ideas*

Students will . . .

- present in oral and written form with clarity, purpose, and understanding
- express knowledge and skill creatively using a variety of media, technology and the arts
- engage effectively in discussion

### **Social and Civic Expectations**

Students will...

- act with integrity, respect, and responsibility towards themselves, others, and the environment
- value cultural diversity and recognize global interdependence
- practice the democratic principles of tolerance, activism, responsibility for and service to one's community
- think independently and work cooperatively to achieve goals and resolve issues

# ~~BHS GRADUATION REQUIREMENTS~~

## Graduation Requirements

To earn a BHS diploma students must earn 124 total credits and fulfill minimum course distribution requirements (detailed below) and pass the MCAS exams.

Students are responsible for knowing the number of credits they have earned. Below is a guideline for the number of credits necessary to promote to the next grade:

**STUDENTS ARE RESPONSIBLE FOR KNOWING THE NUMBER OF CREDITS THEY HAVE EARNED.  
BELOW IS A GUIDELINE FOR THE NUMBER OF CREDITS NEEDED NECESSARY TO PROMOTE TO THE NEXT GRADE:**

✓ Grade 9	31 Credits
✓ Grade 10	62 Credits
✓ Grade 11	93 Credits
✓ Grade 12	124 Credits

### Course Distribution Requirements

Department	Years Required	Credit Equivalent	Comments
English	4 Years	20 Credits	
Mathematics	4 Years	20 Credits	Algebra I, Geometry and Algebra II (recommended)
*Science	3 Years	15 Credits	Physics, Chemistry and Biology (recommended)
* Social Studies	3 Years	15 Credits	US History I, Modern World History, and US History II required.
*-World Language	2 Years	10 Credits	Two years of the same language required.
Art		2.5 Credits	Creativity and Culture may be taken to fulfill Art Requirement
Performing Arts		2.5 Credits	Creativity & Culture may be taken to fulfill Performing Arts Requirement
Occ. Ed.		2.5 Credits	Computer science courses meet Occ. Ed. Graduation requirement
<del>Physical Ed.</del> Wellness	4 Years	10.0 Credits	Must include 2 years of Health and Fitness Concepts Must have Fitness and Health (9 & 10)
<b>A total number of 124 credits needed for graduation</b>			

*\* Many private and public four-year colleges and universities may require more credits in particular content areas beyond our graduation requirements*

~~—Senior athletes who are participating in at least two athletic seasons in senior year and have taken three years of physical education, may apply for a waiver of the senior physical~~

**education requirement. To be eligible for the waiver students must meet the following criteria:**

- Successful completion of the waiver application (see the Physical Education Program Director for materials)
- Regular participation in athletics ninth through eleventh grades
- Completion of a junior year elective other than "Sports Activities"
- Completion of the health education requirement

### **GRADE ~~ING~~ SCALE (with Letter Grades)**

Score	Grade	Un-weighted, College Prep/Intro.	Honors	High Honors/AP
93-100	A	4.0	4.5	5.0
90-92	A-	3.7	4.2	4.7
87-89	B+	3.3	3.8	4.3
83-86	B	3.0	3.5	4.0
80-82	B-	2.7	3.2	3.7
77-79	C+	2.3	2.8	3.3
73-76	C	2.0	2.5	3.0
70-72	C-	1.7	2.2	2.7
67-69	D+	1.3	1.8	2.3
63-66	D	1.0	1.5	2.0
60-62	D-	0.7	1.2	1.7
0-59	F	0	0	0

#### **Grading Scale for Graduating Class of ~~2019 and beyond~~**

A	<del>93-100</del>
A-	<del>90-92</del>
B+	<del>87-89</del>
B	<del>83-86</del>
B-	<del>80-82</del>
C+	<del>77-79</del>
C	<del>73-76</del>
C-	<del>70-72</del>
D+	<del>67-69</del>
D	<del>63-66</del>
D-	<del>60-62</del>
F	<del>0-59</del>

## **GPA**

~~Weighted and unweighted GPA will be reported on the student's college transcript with final grades. (Senior year grades will be reported by quarters). The different levels for minors will continue to be recorded on the report card and transcript as descriptors of the varying levels of difficulty and student work.~~

## **Grade Point Averages**

Bedford High School official transcripts show two GPAs: Unweighted and Weighted.

### **Unweighted**

- Unweighted is a 4.0 scale
- All academic majors and all elective courses are used to calculate unweighted GPA scale.
- ~~Pass/Fail classes are not included in the unweighted GPA calculation~~

### **Weighted GPA Scale**

- Only courses considered as majors (5 credit courses) are used to calculate weighted GPA. Heterogeneous Courses and courses taken for Pass/Fail are **not** used to calculate weighted GPA.

Class Rank: Bedford High School does not report class rank.

## **GPA**

Weighted and unweighted GPA will be reported on the student's college transcript with final grades at the end of junior year (senior year grades will be reported to colleges by quarters). The different levels for courses will continue to be recorded on the report card and transcript as descriptors of the varying levels of difficulty and student work. Grade 9 is included in the GPA calculation.

## **PASS-FAIL (P-F)**

Juniors and seniors may take one non-required course on a pass/fail basis. These grades will not be considered in computing a student's grade point average. See Parent/Student Handbook for more information.

## **COURSE LEVELS**

**Introductory (I) ~~Standard (S)~~:** ~~These are Skill builder courses designed to support students in developing skills needed to succeed in school necessary for school success. These Courses are have smaller class sizes and feature structured instruction to develop organizational skills, comprehension skills, and analytical skills. Courses They are often team co-taught and supported by learning center or special education teachers.~~

Foundational (F): Foundational classes are substantially modified from regular course content and assessments. These courses are most often offered concurrently with Introductory College Prep and/or College Prep classes (i.e., in the same classroom, at the same time) as appropriate based on the needs of the student, and as such, students are fully incorporated into the classroom structure with individualized modifications as deemed appropriate. Enrollment in these courses requires permission from an administrator or as dictated by an individualized plan.

Introductory College Prep (ICP): Introductory college prep classes are more highly individualized than college preparatory classes and include more explicit skills instruction in addition to content instruction. Content is modified for a slower pace and reduced overall workload with focus being on essential concepts. Most often Introductory classes are offered concurrently with College Prep (i.e., in the same classroom, at the same time) as appropriate based on the needs of the student(s), and as such, students are fully incorporated into the classroom structure. Enrollment in these courses requires permission of an administrator or as dictated by an individualized plan.

**College Preparatory (CP)** - These are college preparatory courses in which students will work with increasing independence on inquiry, problem solving, critical thinking, and reading and writing within each content area. The courses are often smaller, feature more structured instruction, and in some cases offer co-teaching to allow for more individualized attention.

**Honors (H)** - These are more rigorous college preparatory course in which materials taught are at an accelerated pace. Students are expected to work more independently on inquiry, problem solving, critical thinking, and reading and writing within each content area. These courses provide a strong foundation for future studies in each field.

**High Honors (HH)** - These Courses are conducted at a standard which is comparable to college work, depending on the year of study. Courses are rigorous and materials taught are at an accelerated pace with greater depth. Students work independently on inquiry, problem solving, critical thinking, and reading and writing within each content area. Students work independently on inquiry, problem solving, critical thinking, and reading and writing within each content area. Teacher recommendations and/or departmental approval may be required prior to enrollment.

**Advanced Placement (AP)** - These Courses are conducted at a standard which is comparable to college work, depending on the year of study. Courses are rigorous and materials taught are at an accelerated pace and greater depth. Students work independently on inquiry, problem solving, critical thinking, and reading and writing within each content area. Courses that specifically follow the AP curriculum courses are so designated in their titles and approved by the College Board. Teacher recommendations and/or departmental approval may be required prior to enrollment.

## UNLEVELED COURSES

**Heterogenous:** These courses allow students to pursue subjects of interest without experiencing the added pressure of an articulated level. *Most of the senior English courses are unleveled.*

**Major:** These courses are 5 credits, and meet 4 times in a 6 day cycle.

**Minor:** These courses are 2.5 credits, and meet 2 times in a 6 day cycle.



## **Credit**

Credit allocations are listed in the course title description. Credit is allocated based on how many times a class meets in a block cycle and whether the class meets for a semester or full year.

# GUIDANCE AND COUNSELING PROGRAM AND SERVICES

The mission of the K-12 Counseling Department is to promote developmentally-appropriate social, emotional, academic, and career growth for all students. We help students build upon their strengths to develop self-efficacy and resilience, make healthy decisions, and acquire a sense of personal and civic responsibility. Through collaboration within our diverse community, we support access and equity for all learners.

Alicia Linsey	Director of Counseling K-12	(781) 275-1700 ext. 4408
Charles Alperin	School Adjustment Counselor	ext. 4414
Brian DeChellis	School Counselor	ext. 4411
Karen Ford	School Counselor	ext. 4521
Janel Halupowski	School Counselor	ext. 4413
Alison Lohrum	School Counselor	ext. 4415
Kristen Milano	School Counselor	ext. 4412
Kristin Ferrari	Administrative Assistant	ext. 4409
Amanda Mulcahy	Administrative Assistant	ext. 4410

## **Course Recommendation/Request Process & Academic Advising**

Appropriate level placements are made in the spring for the following year by current teacher(s) based on the student's performance and demonstrated abilities. These recommendations and assessments are intended to place students in courses where the pace, expectations and standards are appropriate to their needs and abilities. Teachers' recommendations are made holistically. BHS aims to reduce student stress and empower students to make healthy academic choices. The course recommendation/request process and academic advising provides students the opportunity to consider overall academic rigor. Students are encouraged to take a challenging program, but also to be realistic about their commitments in and out of school. As students formulate their course requests, attention to the Program of Studies is essential as it contains information regarding prerequisites, course recommendations, and course expectations.

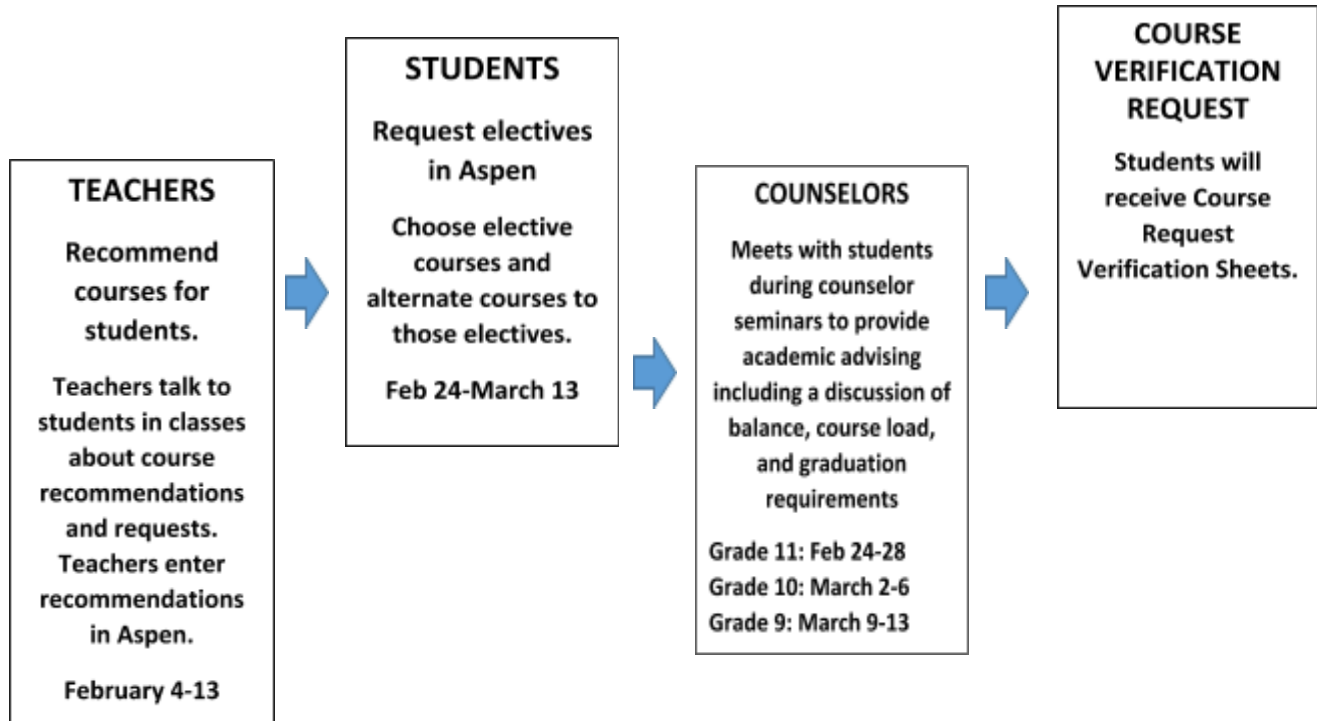
As a part of the BHS comprehensive school counseling curriculum, each 9th, 10th and 11th grade student will have the opportunity to meet with their school counselor for a 10-15 minute Academic Advising appointment.

### **The Goals of Academic Advising include:**

- Reviewing graduation requirements
- Discussing student's courses recommendations/requests
- Considering course recommendations/requests and their connection to future planning

- Reflecting on the student's academic placements in relation to balance and wellness.

### **Overview of Course Recommendation, Course Request, and Academic Advising Process**



### **Student Responsibilities**

- ☐ **Log on to the Aspen student portal** with your own student account.
- ☐ **Review the Program of Studies** available on the BHS website.
- ☐ **Discuss your course recommendations** for next year with your teachers.
- ☐ **Talk with your teachers and parents/guardians** about your course recommendations and course requests for next year.
- ☐ **Request elective courses online through Aspen.** Teacher recommendations will also be viewable in the Aspen student portal when you enter your elective requests.
- ☐ **Meet with your school counselor for Academic Advising**
- ☐ **Verify all of your course recommendations and course requests.**

### **COURSE REQUEST PROCESS**

The course request process is designed to provide all Bedford High School students with a program of studies that will interest them and challenge them to the best of their abilities. The course request process is as follows:

- In February, the new Program of Studies is published electronically on the BHS web page. Teachers talk with their students individually about the teacher's recommendation for next year.
- Also in February, Bedford High School sponsors 8th Grade Parents' Night to welcome parents and their 8th grade children to Bedford High in order to learn more about our courses of study.

- In March, School Counselors meet with students in small groups to inform students about available courses and to guide students in the course request process. Students enter their choices in Aspen/X2 and then have time at home to review their course choices with their parents for their approval.
- In May, students receive the list of the courses they were recommended for and requested.
- Final schedules for the coming school year are posted in Aspen/X2 during the summer.

### **LEVEL CHANGE REQUEST PROCESS**

Teachers make course placement recommendations based upon their knowledge of the student's achievement, academic strength, and motivation. When aspirations of students and parents conflict with the professional recommendations of the teachers, there is a process for appealing the teacher's recommendation.

The steps for students and/or parents/guardians to request a level change are as follows:

1. Obtain a "Level Change Request Form" from either the middle or high school counseling office or print from the BHS Guidance and Counseling web page: <https://www.bedfordps.org/high-school/guidance/pages/guidance-information-and-forms>. The form asks for both student and parent/guardian to state reasons for requesting the change.
2. Complete and submit the form to the BHS office for the appropriate Program Administrator by April 1, 2019.
3. The appropriate Program Administrator will review the request and will contact the parent/guardian by phone or e-mail regarding the decision. Requests submitted after April 5th will be considered on a space available basis in addition to the standard review process.

### **ARENA DAY**

To help facilitate the schedule change process for students at Bedford High School, the BHS Guidance and Counseling Department hosts Arena Day at the end of August prior to the start of school. All School Counselors, Program Administrators, and Program Directors are present to assist students. This process enables students to begin school with a schedule they are comfortable with to fulfill graduation requirements. While students may submit Level Change Request Forms at Arena Day, Program Administrators/Directors will begin reviewing these forms the following day. These requests will be considered on a space available basis in addition to the standard review process.

### **COURSE CHANGE PROCEDURE AND DEADLINE**

Bedford High School is proud to offer a diverse array of course offerings from which students can choose. In order to ensure that the school's master schedule is built in a way to accommodate the preferences of as many students as possible, it is imperative that students take time and care in making their initial course requests. It is in the best interest of all students that each student's schedule be finalized as early in the school year as possible.

**Student-initiated requests to add or drop classes may be done so with their School Counselor until the 18th school day.** These requests for schedule changes will be considered based on the individual student's needs and the space available in the schedule. If a student withdraws from a course prior to the deadline, the course does not appear on the student's transcript.

Requests for schedule changes after the deadline due to extenuating circumstances will be considered on a case-by-case basis by the teacher, Program Administrator, and Director of Guidance and Counseling. If a student withdraws from a course and/or changes a level after the above deadline, a W (Withdrawal) will appear on the student's transcript.

### **ADVANCED PLACEMENT**

Beginning in fall of 2019, the Advanced Placement Program will require students to register and pay for AP Exams by early November.

### **DUAL ENROLLMENT**

Dual enrollment is a partnership between Middlesex Community College and Bedford High School, providing students the opportunity to take college level courses while also completing their requirements for high school graduation. These college courses are not extra classes taken before or after school. They are part of the daily class schedule and are taught at the college level by Bedford High School teachers who meet or exceed the hiring qualifications to teach at the college level. Currently, high school students with junior or senior status are eligible to participate in the Dual Enrollment Program. The tuition is \$87 a credit, \$261 per course, which is paid directly to the college at the beginning of the course. Scholarships may be available for students with financial need.

The benefit of taking college credits earned through the Dual Enrollment program is a high school junior or senior is able to gain experience in college-level work while receiving college credit at a fraction of the cost of college tuition. Additionally, these college credits may be transferred to many other two-year and four-year colleges across the country. The colleges within the Community College System of MA (CCSMA) are accredited by the New England Association of Schools & Colleges, Commission on Institutions of Higher Education. Although transferability policies vary from college to college, credit transfer is dependent on many variables including your grade in the course, academic major and your willingness to produce proper documentation such as the course syllabus or a course portfolio. Course offerings may vary from year to year and not all sections of classes will be designated as a Dual Enrollment course. Please talk to your high school counselor to learn what courses are offered.

#### **Requirements to take Dual Enrollment Classes:**

- Grade Point Average of 2.0, and
- PSAT or SAT English score of 480, and
- Meet multiple measures criteria, and
- 10<sup>th</sup> grade reading level and able to complete a 5 paragraph essay

#### **Students must also:**

- Complete and submit Dual Enrollment application
- Complete Middlesex Community College registration form
- Request a transcript from Middlesex Community College upon completion of the Dual Enrollment course

### **SCHOOL-TO-CAREER    WORK EXPERIENCE PROGRAM    Unleveled**

**Course #6013**

~~Prerequisite: Grade 12 students only, by counselor recommendation. Approval of the K-12 Director of Guidance and Counseling Required.~~

~~School-to-Career is designed to support both seniors who are planning to go directly to work after high school and seniors who want to use a part-time job during senior year as a way to explore future~~

possible careers. Typically, Students are responsible to find a place of employment. Students can earn up to 2.5 credits per year, are graded pass/fail, and should see their counselor to enroll in this program. Students who desire to develop their personal, social, and job skills through work, and are working at least 10 hours per week during the school year, are eligible for participation in this program. Academic credit is awarded on the basis of quarterly supervisory evaluations. Interested students should see their counselor for details.

### **Guidance & Counseling Curriculum Overview and Timeline**

<b>● 9<sup>th</sup> Grade Freshman</b> ○ September ○ Ongoing all year ○ December ○ March	<b>Orientation/Transition</b> Orientation Groups with Counselor & Introduction to Naviance Individual Meetings Screening, Brief Intervention & Referral to Treatment (SBIRT) Course Selection/Academic Advising Group Meeting
<b>● 10<sup>th</sup> Grade Sophomores</b> ○ October ○ February  ○ March ○ April ○ June	<b>Career Exploration and Self Awareness</b> PSAT Testing, if applicable Healthy Relationships in Health Class & Signs of Suicide (SOS) Curriculum Course Selection/Academic Advising Group Meeting Personality/Interest Inventory & Career Exploration Introduction to Post-Secondary Planning
<b>● 11<sup>th</sup> Grade Juniors</b> ○ Sept-Dec ○ October ○ January  ○ January ○ March ○ April ○ April	<b>Post-secondary Planning</b> College Representatives Visit BHS during Lunch and FLEX Blocks PSAT Testing College and Career Post-Secondary Planning for Parents and Students Evening Program Post-Secondary Planning Groups Course Selection/Academic Advising Group Meeting BHS College Fair Evening Program College & Career Planning Groups, Requesting Teacher Recommendations
<b>● 12<sup>th</sup> Grade Seniors</b> ○ September ○ Sept-Dec ○ September ○ October ○ March ○ April	<b>Transitions and Decision Making</b> Post-Secondary Planning for Parents and Students Evening College Representatives Visit BHS during Lunch Post-Secondary Group Meetings Financial Aid Evening Program CSF Scholarship Application Information Session Review of Graduation Expectations

**The following seminars are not available for request. Counselors will schedule this time with students during English and/or Social Studies class time.**

#### **FRESHMEN COUNSELING SEMINAR**

#### **Unleveled**

The primary focus of the program is the orientation of freshmen to Bedford High School. Students meet

during the first semester to become familiar with their new school, get to know each other, and build a relationship with their counselor. Counselors review supports and resources, getting involved at BHS, goal-setting, and decision-making. Students learn about study skills, time management and other topics of importance to ninth graders. Freshmen create a Naviance account; a software program that will be used throughout high school as a tool to help them plan for life after high school. Students are also led through interactive activities designed to foster empathy and resilience, and an affirmative school community and climate.

#### **SOPHOMORE COUNSELING SEMINAR                      Unleveled**

This second semester program focuses on self-discovery, decision-making skills and self-assessment. Students use the “Do What You Are” (a career interest inventory in Naviance based on the Myers Briggs Type Indicator) to explore personality types, research career clusters and review college majors that pertain to the careers revealed from the assessment. Students are encouraged to assess their strengths and weaknesses by developing personal and academic goals. Counselors work with sophomores to formulate a plan to reach these goals.

#### **JUNIOR COUNSELOR SEMINAR                      Unleveled**

This second semester program focuses on post-secondary planning with particular emphasis on the college search process. Through a systematic approach, students come to understand the post-secondary search process (college, gap year, technical/certificate programs, employment, apprenticeships, military, etc.), factors in admissions decisions (what colleges are looking for), developing a college list (what students are looking for), request teacher recommendations and create a balanced college list. Techniques for investigation, tours, interviews and narrowing down one’s list of post-secondary options are discussed so that students are prepared to make the best use of the summer for continuing their research. Students meet with their counselors in Jan/Feb at the beginning of the process and again in April mid-way through the planning process.

#### **SENIOR COUNSELOR SEMINAR                      Unleveled**

In the first term of the year, students planning to attend college after high school review and revise their previous choices and finalize their plans. Counselors walk students through the post-secondary planning process (including the college application process) from start to finish. The program provides students with the information and skills necessary to make appropriate decisions based on their unique goals, expectations, and needs. Students who wish to pursue other options upon graduation will work with their counselor, either in groups or individually, to develop their post high school plans.

## **Admission Requirements For Massachusetts State Universities**

Admission to the University of Massachusetts and the Massachusetts state university system is determined in accordance with minimum standards established by the Massachusetts Department of Higher Education (DHE). However, meeting the DHE's standards does not guarantee admission, since the universities consider a wide range of factors when making admission decisions. The rigor of the curriculum is strongly considered. When assessing academic achievement, course grades as well as grade trends are important, including course selection and grades in relation to the desired major. A strong senior schedule helps show the applicant’s commitment to higher education.

**Minimum Course Requirements:** Students must have completed the [MassCore](#) program of study in high school, consisting of

- 4 course units of English
- 4 course units of Mathematics\* (including Algebra 1, Algebra 2, Geometry and Trigonometry or their integrated course equivalents, and including math in the senior year of high school)
- 3 course units of lab-based Science\*
- 3 course units of History, including 1 in U.S. History
- 2 course units of the same Foreign Language (American Sign Language is a foreign language)
- 1 course unit in the Arts
- 5 additional “core” course units including Career and Technical education or any of the above

**Minimum GPA Requirement:** A minimum grade point average (GPA) in college preparatory coursework at the end of the seventh semester is required for Freshman Applicants. The University of Massachusetts and other Massachusetts state universities require a 3.0 GPA for admission. For students whose GPA falls below the minimum, a provisional sliding scale will apply.

Students and families should reference individual universities for more detailed admissions requirements.

## **Admission Requirements For Massachusetts Community Colleges**

The Massachusetts Community Colleges are committed to an open admission policy. Residents who have earned a high school diploma, GED, associate degree or higher have the opportunity to enroll in a degree or certificate program. Please note that admission to some programs is competitive or may require the completion of prerequisite courses, and some programs have additional requirements including specific deadlines. For more information, contact the college’s admissions office.

(Sources: Massachusetts Department of Elementary and Secondary Education, Massachusetts Department of Higher Education)



# AIR FORCE JUNIOR ROTC PROGRAM

JROTC Instructors

Lt Col Kenneth Mierz, USAF (Ret) and MSgt Charlie Humphrey (Ret), USAF

Room D-106A

Phone: (781) 275-1700 ext. 4591/4518

Course Title	Level	Course Number	Grade Level	Semester	# of Periods	Credits
Aerospace Leadership	College Prep	8903	12	All	4	5
Aerospace Science A	College Prep	8913	9-12	All	4	5
Aerospace Science B	College Prep	8923	9-12	All	4	5
Aerospace Science C	College Prep	8933	9-12	All	4	5
Aerospace Science D	College Prep	8943	9-12	All	4	5
Aerospace Science A w/ HR	College Prep	8953	9-12	All	4	5
Aerospace Science B w/ HR	College Prep	8963	9-12	All	4	5
Aerospace Science C w/ HR	College Prep	8973	9-12	All	4	5
Aerospace Science D w/ HR	College Prep	8983	9-12	All	4	5
Aerospace Leadership w/ HR	College Prep	8993	12	All	4	5

*Students may fulfill 2.5 Physical Education Credits upon successful completion of an Aerospace Science course.*

Aerospace Science, or Air Force Junior ROTC (AFJROTC), is a four-year program, **which may be taken in place of Physical Education**. However, there is still the requirement for students to enroll in the Health curriculum in accordance with current school guidelines. The AFJROTC program's mission is improved citizenship and to provide community service. Additionally, these courses give the student knowledge of aviation, space, military customs and courtesies, training in leadership, and applied management. The AFJROTC Wellness Program, in which all students participate each year, stresses the importance of maintaining one's health through exercise, nutrition, and healthy choices. In addition to normal classroom activities, numerous extracurricular activities include community service, field trips, rocket and model airplane building and flying, Drill Team, and Color Guard. The course is open to all students. Uniforms and books are supplied to each student without charge. Cadets who are eligible can apply for an Air Force Senior ROTC College Scholarship. Those cadets who enlist in the Armed Forces after graduation may be eligible to enter the military at a pay-grade higher than other enlistees. **No military obligation is incurred by students enrolled in these courses. There are no prerequisites for enrollment and students may join the program during any year. Aerospace A-D courses are offered on a four-year rotating basis.**

## AEROSPACE SCIENCE A

College Prep

Course # 8913

### Prerequisite: None

Aerospace Science A covers the History, Principles, and Purpose of Flight. Students will develop an understanding of aviation evolution, the basic physics and principles of flight, and the purpose and use of the various types of

aircraft employed by the military and civil aviation. The students will also become familiar with basic theories of meteorology and the technology of rocketry and spaceflight. Leadership training emphasizes Life Skills: preparing budgets, performing basic banking transactions, understanding credit, and helping students identify their near term career goals as well as lifelong professional development.

#### **AEROSPACE SCIENCE B**

**College Prep**

**Course # 8923**

##### **Prerequisite: None**

Aerospace Science B will be spent researching and discussing Global and Cultural Studies. The course delves into history, geography, religions, languages, culture, political systems, economics, social issues, environmental concerns, and human rights. Leadership units cover Good Followership, Personal Development Skills, and Health Awareness. Skills will be honed through commanding flights via drill, teaching basic facing movements, and the development of orderliness and precision.

#### **AEROSPACE SCIENCE C**

**College Prep**

**Course # 8933**

##### **Prerequisite: None**

Aerospace Science C covers in-depth the Space Environment, Space Programs, and Manned Space flight. Leadership training covers Effective Communication, Understanding Individual and Group Behavior, and Leadership Skills. Students will exercise these skills by leading basic daily flight operations, such as teaching younger students how to lead flights in squadron drill. Leadership C cadets will also study Geography or Survival.

#### **AEROSPACE SCIENCE D**

**College Prep**

**Course # 8943**

##### **Prerequisite: None**

Aerospace Science D covers the Future of Space and focuses upon topics involving missions to Mars, Venus, and beyond, propulsion of space vehicles, maneuvering in space, robots in space, and private industry in space. Leadership courses cover Introduction to Management, Managing Things and Ideas, Citizenship, and Ethics.

#### **AEROSPACE SCIENCE L**

**College Prep**

**Course # 8903**

##### **Prerequisite: Recommendation of Senior Aerospace Science Instructor**

Aerospace Science L is designed for the cadets that have senior leadership positions with the Corp of Cadets. These students will run most of the day-to-day operations of the AFJROTC group. Examples include teaching younger cadets: how to drill, how to wear the USAF JROTC uniform correctly, and be examples to the younger students. This class is reserved for senior cadets in leadership positions and replaces the aerospace (AS) portion of the Aerospace A through D classes. These students will continue to join the AFJROTC group in the current year's leadership, drill, and wellness classes.

# ART DEPARTMENT

Mr. Sean Hagan, Art Program Director  
(781) 275-1700 ext. 4498

**Art Graduation Requirement: 2.5 Credits**

Course Title	Level	Course Number	Grade Level	Semester	# of Periods	Credits
<b>Art I (Minor)</b>	College Prep	7112	9-12	All	2	2.5
<b>Art I (Major)</b>	College Prep	7123	9-12	All	4	5
<b>Art II (Minor)</b>	College Prep	7212	10-12	All	2	2.5
<b>Art II (Major)</b>	College Prep	7223	10-12	All	4	5
<b>Art III (Minor)</b>	College Prep	7313	11-12	All	2	2.5
<b>Art III (Major)</b>	College Prep	7324	11-12	All	4	5
<b>Art IV (Minor)</b>	College Prep	7424	12	All	2	2.5
<b>Art IV (Major)</b>	Honors	7425	12	All	4	5
<b>Photography I (Minor)</b>	College Prep	7043	9-12	All	2	2.5
<b>Photography II (Minor)</b>	College Prep	7053	11-12	All	2	2.5
<b>Photography II (Major)</b>	College Prep	7054	11-12	All	4	5
<b>Photography III (Minor)</b>	College Prep	7063	12	All	2	2.5
<b>Photography III (Major)</b>	College Prep	7064	12	All	4	5
<b>Art Explorations (Minor)</b>	College Prep	7413	12	All	2	2.5
<b>Art Explorations (Major)</b>	Honors	7414	12	All	4	5
<b>Digital Art I (Minor)</b>	College Prep	7072	9-12	All	2	2.5
<b>Digital Art II (Minor)</b>	College Prep	7093	10-12	All	2	2.5
<b>Digital Art II (Major)</b>	College Prep	7094	10-12	All	4	5
<b>Digital Art III (Minor)</b>	College Prep	7463	11-12	All	2	2.5
<b>Digital Art III (Major)</b>	College Prep	7473	11-12	All	4	5
<b>Ceramics I (Minor)</b>	College Prep	7012	9-12	All	2	2.5
<b>Ceramics II (Minor)</b>	College Prep	7023	10-12	All	2	2.5
<b>Ceramics II (Major)</b>	College Prep	7024	10-12	All	4	5

<b>Ceramics III (Minor)</b>	College Prep	7033	11-12	All	2	2.5
<b>Ceramics III (Major)</b>	College Prep	7034	11-12	All	2	2.5
<b>Ceramics IV (Minor)</b>	College Prep	7083	12	All	2	2.5
<b>Ceramics IV (Major)</b>	Honors	7084	12	All	4	5
<b>Art, Ceramics, Photo Intern</b>	College Prep	7011	10-12	All	2	2.5
<b>Digital Photography</b>	College Prep	7483	9-12	All	2	2.5

**ART I (Minor)  
(Major)**

**College Prep**

**Course # 7112  
Course # 7123**

These introductory courses in visual problem-solving are recommended for freshmen and/or students who wish to follow a sequential development of art courses, as well as participate in department electives. These courses are organized around a variety of concepts and media selected to help students express ideas and feelings through the use of design elements (line, shape, texture, color, space, mass, and form), and design principles (contrast, balance, variation, unity, movement, and harmony). Students will be exposed to a variety of media techniques in the areas of drawing, painting, sculpture, printmaking and mixed media. The emphasis of these courses is on skill building and problem solving, while also developing an appreciation for art history and group critique.

**ART II (Minor)  
(Major)**

**College Prep**

**Course # 7212  
Course # 7223**

**Prerequisite: Art I Major or Minor**

These courses are intended to build on the visual skills and knowledge students gained in Art I. Students will utilize their understanding of design elements and principles, art mediums, and techniques in the exploration of art production as a creative process. These experiences will be centered on more advanced uses of art tools and techniques, complex compositional planning, open-ended responses to visual problems, and experimental approaches to two and three-dimensional design forms. Critical thinking skills will be discussed as an integral component of the creative process, and greater emphasis will be placed on individual and group critique as an evaluation tool.

**ART III (Minor)  
(Major)**

**College Prep**

**Course # 7313  
Course # 7324**

**Prerequisite: Two years of art, or approval of the Program Director.**

These courses require students to take an active role in determining creative outcomes to visual concepts. Through assignments stressing drawing and design, students will reflect on personal experiences and ideas as primary sources in the creation of original art forms. Students will be expected to demonstrate an understanding of two and three dimensional drawing concepts in the expression of forms in space, and apply their cumulative knowledge of design elements and principles to content based on observational drawing, imaginative thematic interpretations, sensory experience, metaphor and symbol, and multiple visual imagery. These courses will also provide students with the opportunity to begin the development of a portfolio of art work suitable for art school admissions.

**ART IV (Minor)  
(Major)**

**College Prep  
Honors**

**Course # 7424  
Course # 7425**

**Prerequisite: Three years of art, or approval of the Program Director.**

These courses promote extensive independent work based on individual abilities, ideas, and interests for the completion of the Senior Portfolio and the production of an original Art Book. Students should be able to demonstrate the ability to apply critical thinking skills in developing clear intellectual and emotional ideas

regarding the form and content of their artworks for the expression of personal points of view. The portfolio and book projects are culminating activities designed for students to demonstrate the highest level of performance and creative effort in the coordination of drawing, composition, technique, and aesthetic decision-making. The expectation from these efforts is that each student will have a tangible body of meaningful work, which represents their creative potential for pursuing an art career or developing lifelong interests in the visual arts. Art IV students will also be expected to create an installation for the K-12 Art Show.

### **Photography I (Minor)**

**College Prep**

**Course # 7043**

#### **Prerequisite: None**

This course is designed to help you to become a more thoughtful, creative, and visually aware photographer, no matter what kind of camera you use at any given moment. The photographic processes of 35mm camera operation, black and white film development and printing, and compositional design are applied to creative projects in areas including: the development of semi-abstract images, descriptive and interpretive visual essays, environmental studies, and portraiture. Creative expression and exploration of personal interests through the medium of photography is stressed, but success in this course also requires the ability to develop disciplined work habits to master technical material. Students will engage in a variety of visual problem solving.

### **Photography II (Minor) (Major)**

**College Prep**

**Course # 7053**

**Course # 7054**

#### **Prerequisite: Completion of Photography I**

This advanced course challenges students to build upon the technical and expressive skills achieved in Photography I. Students will explore experimental and alternative approaches and materials, and will also expand their competence with traditional photographic processes. Topics and projects include, but are not limited to, high contrast photography, close-up photography, montage, and the analysis and exploration of photographic style.

Strong emphasis will be placed upon individually conceived projects, which define, refine, and extend the student's personal vision and style. In addition, students may be called upon to assist in activities of service to the school community, such as visual artwork for the yearbook, school newspaper, and special events.

### **Photography III (Minor) (Major)**

**College Prep**

**Course # 7063**

**Course # 7064**

#### **Prerequisite: Completion of Photo II**

This advanced course challenges students to build upon the technical and expressive skills achieved in Photography II. While the teacher will provide specific assignments, students will also be expected to take an active role in the shaping of their projects and explorations. The course will be structured to encourage students to discover connections between photography and other media and disciplines, the in depth exploration of a particular theme, and the use of photographic imagery in conjunction with other types of research. Topics will include the issues of reality vs. illusion, perspectival vs. atmospheric space, case studies of selected photographers, and the interrelationships of landscape photography to the disciplines of geography and history.

### **Digital Art I (Minor)**

**College Prep**

**Course # 7072**

#### **Prerequisite: None**

Through your active participation in this course, you'll gain a good introductory understanding of many fundamental aspects of digital art-making. Using a variety of tools, including computers, iPads, digital cameras, scanners, apps, and key programs from Adobe's "Creative Suite" (including Photoshop), you'll work on a wide variety of projects. These will include photo manipulation, collage, varieties of digital mark-making and drawing, and video and animation work. The aim throughout the course will be to help you gain skill and confidence with both the technical and the artistic skills involved in making digital art.

### **Digital Art II (Minor) (Major)**

**College Prep**

**Course # 7093**

**Course # 7094**

#### **Prerequisite: Completion of Digital Art I**

In this course, you'll build upon the foundations established in Digital Art I. We will continue to use many of the same tools, including programs such as Photoshop and various iPad apps. However, you will use such tools with increased sophistication, judgment, and skill, learning to use more of the powerful options these tools provide. Project work will support and encourage your exploration of key artistic, expressive, and technical interests with concentration and depth. We will continue to work with collage, image manipulation, and digital drawing, as well as with animation and video; you'll be combining these different kinds of art-making with each other in interesting and exciting ways. For some projects, you will be considering the potential practical uses of the pieces you make -- as with poster or product design -- and will be integrating words and images to communicate with your intended audience.

<b>Digital Art III</b>	<b>(Minor)</b>	<b>College Prep</b>	<b>Course # 7463</b>
	<b>(Major)</b>		<b>Course # 7473</b>

**Prerequisite: Completion of Digital Art II**

Digital Art III students, building upon a variety of skills they've already developed, will have some freedom to choose to concentrate on particular kinds of digital art-making. Possible areas of concentration: drawing and illustration; collage; animation/video or other time-based work; combining imagery and text; conveying "messages" (either informational or persuasive, or both); typographic design; interface design and/or web page/web site design. To help students better understand these possible areas for concentration, an introductory project in the fall will involve several of these areas (e.g., illustration, collage, and the combining of imagery and text).

<b>Ceramics I</b>	<b>(Minor)</b>	<b>College Prep</b>	<b>Course # 7012</b>
-------------------	----------------	---------------------	----------------------

**Prerequisite: None**

This course introduces students to basic hand-building and wheel-throwing techniques through a variety of concepts and experiences. Students will be expected to apply design elements and principles as they create functional and sculptural forms in clay. In addition, students should be willing to take creative risks in striving to develop personal ideas and interests in an original style. Individual expression is encouraged along with the appreciation for disciplined work habits in art.

<b>Ceramics II</b>	<b>(Minor)</b>	<b>College Prep</b>	<b>Course # 7023</b>
	<b>(Major)</b>		<b>Course # 7024</b>

**Prerequisite: Ceramics I (Minor)**

These advanced courses are for students who have successfully experienced basic ceramic techniques (such as pinch, coil, and slab construction, throwing on the potter's wheel, and glaze application), and wish to develop a greater sense of mastery in the medium. Students will have the opportunity to work in a larger format and size, experiment with glazes, and manipulate more complex forms on the potter's wheel. Students will be expected to work at a more intensive individual level while creating more imaginative forms in a more challenging environment.

<b>Ceramics III</b>	<b>(Minor)</b>	<b>College Prep</b>	<b>Course # 7033</b>
	<b>(Major)</b>		<b>Course # 7034</b>

**Prerequisite: Ceramics II**

These courses build on the independent working styles fostered in Ceramics II. There will be student-directed projects as well as teacher-directed projects, but students will above all else be encouraged to develop a personal expressive style through the medium of clay. Students should expect to work on a larger scale, in greater depth, and pay more attention to detail. Students will be expected to maximize opportunities to combine slab, pinch, coil, and wheel-throwing methods to produce traditional and non-traditional ceramic forms. A greater degree of risk-taking and personal challenge will be expected from Ceramics III students.

<b>Ceramics IV</b>	<b>(Minor)</b>	<b>College Prep</b>	<b>Course # 7083</b>
	<b>(Major)</b>	<b>Honors</b>	<b>Course # 7084</b>

**Prerequisite: Ceramics III**

These courses are for students who are interested in continuing to express their creative ideas through the medium of clay. Ceramic IV students should be prepared to work on a theme or a series of ceramic works of their choosing. Students are expected to be adept at the construction mode they choose (pinch, slab, coil or wheel-throwing). The Ceramic's IV Majors will be required to keep a sketchbook of research and ideas, and to create an Installation for the K-12 Art Show.

**Art, Ceramics, Photo Intern****College Prep****Course # 7011****Pass/Fail****Prerequisite: Art I, Ceramics I or Photography I or Program Director's Approval**

The Art, Ceramics or Photography Intern will assist the classroom teacher by keeping supplies and equipment ready and updated for classes. Art Interns will be responsible for the ongoing organization, cleaning and inventory of art supplies. Ceramic Interns will be responsible for recycling clay, organizing glazes and cleaning tools. Photography Interns will be responsible for mixing chemicals, cleaning and organizing at enlarger stations, making dodging and burning tools, doing simple cameras tests, and testing darkroom techniques and/or materials.

**Digital Photography****College Prep****Course #7483****Prerequisite: None**

In Digital Photography, you will use a variety of image capturing devices, ranging from iPads to DSLR cameras (digital single lens reflex cameras), for artistic purposes. Through hands-on work across a range of genres, such as portraiture, still life, and landscape, you will begin to develop your own unique visual style. At the same time, we will also explore important technical aspects of both digital cameras and digital "processing," or refinement, of images through Photoshop. You will gain a good working understanding of basic principles underlying all photography, including manual vs. auto camera controls, exposure and image quality, as well as using different kinds of lighting, using simple tools and methods. Finally, we will explore various methods of reviewing, editing, and presenting/sharing photographs in meaningful, thoughtful, and expressive ways.

**Digital Photography II****College Prep****Course #****Prerequisite: Completion of Digital Photography**

In this advanced class, students will take more ownership of their learning by focusing in depth on a different photographic technique each quarter. Students will conference with their teacher to determine a plan for the year and develop potential ideas for each quarter. Students will be responsible for uploading all of their finished work to a student-created website (using Weebly or a comparable service) that will also include written student observations and reflections on each project.

**Art Explorations****(Minor)****College Prep****Course # 7413****(Major)****Honors****Course # 7414**

**Prerequisite: *Students must be entering senior year, have three years of art, and approval of Mentoring Teacher and Art Program Director. Students must demonstrate proficiency in the medium that they choose to explore.***

At course selection time, interested students should submit their proposal to Mentoring Teacher and Art Program Director. The decision will be based on the strength of the proposal, the degree to which it's clear that the student's goals are reasonable and cannot be met within the normal curriculum (e.g., of Art IV or another advanced art class), and the student's term by term plan for independent work. Most Art Exploration students will be scheduled with the Art IV Minor and Major class.

In this course, students will look at and create art that informs, educates, persuades, and provides visual experiences to communicate messages that are vital to our daily lives. Students can expect to explore the following

(or similar) themes: typography as image, creative wordplay, visual advocacy (through posters), signage, graffiti, logo design, product design and sculpture. Art Explorations is offered to students who are highly motivated and highly skilled with an active interest in exploring alternative curriculum content in visual art, such as a particular emphasis in one or two mediums. Students will be required to keep a journal/sketchbook, maintain a portfolio of research and experimentation, and produce at least one major art work each marking period, culminating in an installation at the K-12 Art Show. After consultations with a Mentoring Teacher and the [Program Director](#), students will establish short and long -term goals. Students may enhance their experience by making interdisciplinary connections within the school, as well as participating in community-based job shadowing opportunities outside of school.

## ENGLISH DEPARTMENT

Mrs. Elizabeth Marcotte, English Program Administrator

(781) 275-1700 ext. 4557

**English Graduation Requirement: 4 Years / 20 Credits**

Course Title	Level	Course Number	Grade Level	Semester	# of Periods	Credits
English I	Introductory	0102/ 7802*	9	All	4	5
English I	College Prep	0103	9	All	4	5
English I	Honors	0104	9	All	4	5
English I	High Honors	0105	9	All	4	5
English II	Introductory	0202	10	All	4	5
English II	College Prep	0203	10	All	4	5
English II	Honors	0204	10	All	4	5
English II	High Honors	0205	10	All	4	5
English III: American Perspectives	Introductory	0302	11	All	4	5
English III: American Perspectives	College Prep	0303	11	All	4	5
English III: American Perspectives	Honors	0304	11	All	4	5
AP Literature and Composition	Advanced Placement	0305	11	All	4	5
English IV: Composition and Literature	College Prep	0463	12	All	4	5
English IV: British Literature	Heterogeneous	0400	12	All	4	5



English IV: Creativity and Culture	Heterogeneous	0410	12	All	4	5
English IV: Global Voices	Heterogeneous	0420	12	All	4	5
English IV: African American Literature	Heterogeneous	0430	12	All	4	5
English IV: Asian American Literature	Heterogeneous	0440	12	All	4	5
Creative Writing	Heterogeneous	0540	9-12	All	2	2.5
Film Analysis	Heterogeneous	0530	11-12	All	2	2.5
Digital Storytelling & Journalism	Heterogeneous	0620	9-12	All	2	2.5
World Mythology	Heterogeneous	0590	9-12	All	2	2.5
Writing <b>Lab Essentials I</b>	Heterogeneous	0630	9-10	All	2	2.5
Writing <b>Lab Essentials II</b>	Heterogeneous	0660	11-12 10	All	2	2.5

***\*Team recommendation required.***

### **Required Text:**

For information regarding required texts and additional literary selections for English classes, please consult the course syllabi on the [Bedford High School web page](#).

**Students must take at least five credits in English during each academic year. Course failure of English I, II, or III must be made up in summer school or repeated the following academic year. Doubling English graduation requirement courses is permitted in Grade 12 ONLY.**

## **ENGLISH I**

The English I course sets the foundation for reading, writing, and literary analysis at the high school level. Guided by such essential questions as “What shapes personal identity?” and “What role does empathy play in combating prejudice?” students investigate multiple genres, including epic poetry, memoir, drama, and the novel. The hero’s journey archetype, central to the course, is the first critical lens introduced in the four-year curriculum and is revisited in subsequent courses. Students write for a variety of purposes including literary analysis, creative expression, and argument. The course culminates with the student-driven I-Search project, which combines inquiry, research and reflection.

### **ENGLISH I**

### **High Honors**

### **Course # 0105**

This course requires intellectual initiative and independence in order to succeed and grow. Skills to be developed include practicing insightful self-reflection and effective peer response, applying strategies for revising written work, and reading closely, actively, and interpretively. Students will participate pro-actively in small group work and class discussions. Students recommended for this course should have exceptional skills in reading and writing.

**ENGLISH I****Honors****Course # 0104**

This course allows for individual growth within a structured learning environment with the aim of refining students' communication skills and developing greater independence. Skills to be developed include applying the writing process to encourage fuller development and deeper analysis of a given topic, reading interpretively and inferentially, and conducting a research project. Students will participate effectively in small group work and class discussions and will hone test-taking skills needed for the MCAS examination and other such assessments. Reading skills at or above grade level and the ability to independently draft a focused response supported by evidence are essential for student success in this course.

**ENGLISH I****College Prep****Course # 0103**

This course offers a highly structured approach to this thematic study of literature and moves at a pace that allows for student support. The course focuses on applying the writing process to improve organization, clarity, and mechanics. Skills to be developed include applying strategies to improve reading comprehension and interpretation, making inferences, writing three-part essays, practicing peer response, and conducting a research project. Students will participate effectively in small group work and class discussions and will hone test-taking skills needed for the MCAS examinations and other such assessments. Students taking this course should be reading at grade level.

**ENGLISH I****Introductory****Course # 0102**

This course offers a highly structured study designed to strengthen basic reading and writing skills. Lessons focus on essential elements of effective communication – reading comprehension, clarity in writing, active listening, and confidence when speaking. Particular attention is paid to vocabulary development, sentence construction, paragraph unity, organizational skills, information retrieval, and test-taking skills needed for the MCAS examination and/or other such assessments.

**ENGLISH I****Introductory****Course # 7802****Team recommendation needed.**

This course offers a structured thematic study of literature designed to strengthen basic reading and writing skills. Lessons are highly structured and focus on basic communication skills – reading comprehension, clarity in writing, active listening, and confidence when speaking. Particular attention is paid to vocabulary development, sentence construction, paragraph unity, organizational skills, information retrieval, and test-taking skills needed for the MCAS examination and/or other such assessments.

**ENGLISH II**

The English II course is designed to develop further the reading, writing, and analysis of grade 9 by exploring different critical approaches to literature. Texts are drawn from multiple genres, including drama, poetry, non-fiction, novels, and memoirs. Students develop inferential reading skills and compose essays of literary interpretation that assert and defend a position. The culminating project requires students to analyze a film and write a research paper about it.

**ENGLISH II****High Honors****Course # 0205**

Students enrolled in this course should have superior reading skills, excellent motivation and time management, strong language aptitudes, and the ability to write exceptional three-part essays [10] Skills developed include reading analytically and inferentially, writing essays of analysis and interpretation, sharpening peer editing skills and writing an extensive research paper. Students also review test-taking skills needed for the 10<sup>th</sup> grade MCAS examination and other such assessments.

**ENGLISH II****Honors****Course # 0204**

Students selecting this course should have average or above average grade level reading abilities and be able to write a strong three-part essay. Students develop inferential reading skills, write essays of literary interpretation,

and produce a formal research paper. Students also reinforce test-taking skills needed for the 10<sup>th</sup> grade MCAS examination and other such assessments.

**ENGLISH II** **College Prep** **Course # 0203**

This course continues to enhance communication skills including reading, writing, listening, and speaking. Basic writing skills – organization, clarity and mechanics – are strengthened. Reading skills should be average for this grade level. Skills developed include reading interpretively, writing expository essays and narrative papers, practicing peer review, writing a research paper, and practicing test-taking skills needed for the 10<sup>th</sup> grade MCAS examination and other such assessments.

**ENGLISH II** **Introductory** **Course # 0202**

This course provides the opportunity to improve reading, writing, and vocabulary skills. Emphasis will be placed on the student's demonstrating reading skills, writing cohesive three-part essays, learning assigned grammar and vocabulary units, and applying the basic techniques of writing a research paper. Students also practice test-taking skills needed for the 10<sup>th</sup> grade MCAS examination and other such assessments.

**ENGLISH III: AMERICAN PERSPECTIVES**

The American Perspectives course junior year considers the ways in which the diversity and multiplicity of American perspectives are reflected in its various literatures, including traditional core texts, works of ethnic groups such as Native American, Asian-American, and African American as well as regional pieces from the South, Northeast, West, and Midwest. Considerable attention is given to how these various perspectives enrich student understanding of the term "American culture." A student in this course should be prepared to approach literary analysis using different critical lenses, building on skills and understandings presented in English I and English II. Students will move toward greater independence as they develop their abilities to engage with works of literature and express their ideas clearly both orally and in writing. In their culminating assessment, students will examine the work of an American writer and explore various interpretations that illuminate the writer's style. With the insights they have developed, students will create a work in the style of the writer they have studied.

**AP LITERATURE AND COMPOSITION** **Advanced Placement** **Course # 0305**

A student in this course should be prepared to approach literary analysis as argument and to research independently the historical and cultural backgrounds necessary to understanding these various perspectives. A student enrolling in this course should show mastery over the three-part literary, expository and narrative essay. Additionally, students will be given the opportunity to practice AP Literature and Composition multiple choice and essays in preparation for the exam in the spring.

**ENGLISH III: AMERICAN PERSPECTIVES** **Honors** **Course # 0304**

Students selecting this course should have reading skills at or above grade level and be able to compose an effective three-part expository essay. Skills developed include reading inferentially, developing literary analysis through composition and discussion, producing a formal research paper, practicing test-taking skills for the PSAT and SAT exams, and relating course content to U.S. History II.

**ENGLISH III: AMERICAN PERSPECTIVES** **College Prep** **Course # 0303**

This course is structured and paced to allow for additional student support in comprehension, analysis and synthesis. Students selecting this course should have reading skills at grade level and be able to write a three-part expository essay. Skills developed include reading inferentially, writing essays of literary interpretation, practicing test-taking skills needed for the PSAT and SAT, and relating course content to U.S. History II.

**ENGLISH III: AMERICAN PERSPECTIVES** **Introductory** **Course # 0302**

Since this course is designed to remediate English skills, the student must demonstrate, either through standardized test scores or teacher recommendation, a need for placement at this level. Skills developed include

reading for comprehension, recognizing patterns of development in reading, distinguishing fact from opinion, and building vocabulary skills.

#### **ENGLISH IV: SENIOR ENGLISH MAJOR COURSES**

All six senior English courses incorporate literature from various perspectives and genres; students will explore what it means to be a human and how perspectives shape and alter truth. These courses help students develop independent, informed and creative thinking through student-led class discussions, expository, and creative writing opportunities, and rich independent reading. Grounded in close reading, each of the courses will help students examine multiple perspectives, leading to thoughtful judgments, conclusions, and evaluations. In the heterogeneous courses, all students will have access to academically challenging learning opportunities. Teachers will organize their classrooms in a way that supports and encourages all students to participate in intellectually rigorous activities. Various group work models, literature circles, and other thoughtfully designed classroom structures and scaffolds will ensure that all students have equal access to the material studied.

#### **ENGLISH IV: COMPOSITION AND LITERATURE College Prep**

**Course #0463**

This course is designed around an intensive review of reading comprehension of both nonfiction and fiction, analytical writing, and personal writing. The texts selected will focus on the connection between literature and the human condition, and students will work together to create a community of collaborative learning. The needs of the students help determine the focus of the class, and students will receive significant individualized attention around specific skill areas.

#### **ENGLISH IV: BRITISH LITERATURE**

**Heterogeneous**

**Course #0400**

British Literature is a literature based survey course that begins with Beowulf, the story of an Anglo-Saxon warrior-hero, and travels through time exploring historical contexts, philosophical perspectives, and archetypal or universal themes, such as the Hero, the Quest or Task, and the Fall. King Arthur, Hamlet, and Dr. Frankenstein all make an appearance. The curriculum will highlight the following topics: the power of storytelling; perseverance in the face of adversity; the impact of culture and history on narrative; the evolution of the hero; honor, revenge, and redemption; and the blending of myth and religion.

#### **ENGLISH IV: GLOBAL VOICES**

**Heterogeneous**

**Course #0420**

Global Voices focuses on increasing literacy in topics of worldwide import through reading and writing about award-winning literature from Asia, Africa, South America, and Europe. Readings are chosen from all genres: novel, poetry, drama, memoir, short story, essay, news media, and non-fiction. In addition to required texts, independent reading and remaining apprised of unfolding world events are required. The curriculum will highlight the following topics: empathy, cultural lenses, revolution and rebellion, immigration, social justice, and the power of storytelling.

#### **ENGLISH IV: CREATIVITY AND CULTURE**

**Heterogeneous**

**Course #0410**

This interdisciplinary team-taught course focuses on the creative endeavors of writers, artists, and composers in various time periods. We will explore how the human imagination has responded to the most enduring questions we encounter, such as “What does it mean to belong?” and “How does perspective shape and alter truth?” Study is hands on and inquiry-based and focuses on the ways in which the arts shape and reflect the cultures in which they are made. The course takes a broadly chronological approach, beginning with a brief look at the foundations of Western culture and the European Middle Ages and continuing up to the present; in later units, students consider the art of non-western cultures and the impact of new media, globalization, and commercialization upon the arts today. In addition to analyzing works of art, music, and literature, students will have multiple opportunities to do creative and expressive work, culminating in an end-of-year creative project.

#### **ENGLISH IV: AFRICAN-AMERICAN LITERATURE**

**Heterogeneous**

**Course #0430**

The focus of this course is on the development of black writing in America, from the colonial to the contemporary. The readings, both fiction and nonfiction, cover a panoply of experiences—from slavery to the riches of the Harlem Renaissance, and from the struggles against institutional racism, to the fight for civil rights. The course will close

with African-American contributions to contemporary life and literature. Sample texts and excerpts include *Narrative of the Life of Frederick Douglass*, *I Know Why the Caged Bird Sings*, and *Friday Night Lights*.

**ENGLISH IV: ASIAN-AMERICAN LITERATURE      Heterogeneous      Course #0440**

Drawing from works such as Bill Moyer's *Becoming American: The Chinese Experience*, Helen Zia's *Asian American Dreams*, the fiction and nonfiction collection *Growing Up Asian American*, and Gene Luen Yang's graphic novel *American Born Chinese* as well as an assortment of documentaries, feature films, and online resources, students will examine the Asian-American experience and investigate their impact on America and, conversely, the impact life in America has had on them. Students are encouraged to bring in their own families' immigration stories to compare with those explored in the class curriculum. Guest speakers and field trips will also be important aspects of the course. One of the goals of the class is to supplement the existing curriculum taught in American Perspectives and American History.

**ENGLISH ELECTIVE COURSES**

**English elective courses do not satisfy the English graduation requirement**

**CREATIVE WRITING      Heterogeneous      Course # 0540**

**Prerequisite: None**

Students who enroll in this course should have a strong interest in honing their fiction writing skills. The goal will be the completion of at least one publishable short story per quarter and the building of a portfolio of fiction over the course of the year. In preparation, students will complete various writing exercises with the aim of taking a more deliberate approach to the crafting of fiction. They will explore every aspect of composition--point of view, description, narrative techniques, dialogue, and characterization. Considerable class time will be spent critiquing each other's drafts in a writing workshop; therefore, students must be open to giving and receiving constructive feedback.

**FILM ANALYSIS      Heterogeneous      Course # 0530**

**Prerequisite: Students should complete English II, during which they will have completed the film unit and the related research paper.**

The course is designed to introduce students to the various elements of cinema and filmmaking. By learning about the conventions, the major genres (drama, science fiction/fantasy, war/anti-war, etc.), the processes of analysis, and cinematic techniques, students will gain a fuller understanding of filmmaking and criticism. Students will view both classic films and new releases. Projects may also include students shooting and editing their own film trailers.

**DIGITAL STORYTELLING AND JOURNALISM      Heterogeneous      Course #0620**

**Prerequisite: None**

How do we tell stories in the digital age? In the era of the 24-hour news cycle, how can we effectively use digital media to entertain, persuade, and inspire our audiences? This course will introduce students to a wide variety of multimedia tools and applications used to tell stories (both fiction and nonfiction), and will engage them in examination and critique of examples pulled from contemporary media. Students will learn how to write and organize digital content; how to shoot and edit digital photos; how to gather and edit audio; how to use technology to create engaging documentaries, short films, PSAs, news stories, etc.; and how to share their work to a wide audience.

**WORLD MYTHOLOGY, FOLKLORE, AND LEGEND      Heterogeneous      Course #0590**

**Prerequisite: None**

Students in this course will study mythology, folklore, and legends from a variety of world cultures and eras. Students will read, analyze, discuss, and write about mythology and its continued relevance to contemporary issues and texts, as well as investigate connections and similarities between cultures. Students should anticipate considerable reading in this course. Relevant films, vocabulary, and exhibits will be explored. Curiosity about and interest in comparative ancient belief systems are essential.

**WRITING LAB ESSENTIALS I****Heterogeneous****Course # 0630****Prerequisite:** Recommendation from English teacher or Guidance Department (Grades 9-10)

This course provides freshmen and sophomores with expository writing support in terms of organization and the writing process. Throughout the year when appropriate, students may bring writing assignments from other classes and/or receive instructional help from an English teacher. Since each class member will be working at his or her own writing level, this class is appropriate for students needing remedial work in specific, targeted areas. It is strongly recommended for students who seek additional help with the MCAS-Language Arts test required for high school graduation.

**WRITING LAB ESSENTIALS II****Heterogeneous****Course # 0660****Prerequisite:** Recommendation from English teacher or Guidance Department (Grade 10 11-12)

This course provides sophomores, or students in Grades 11 and 12 who have not passed the Grade 10 ELA MCAS exam, juniors and seniors with expository writing support in terms of organization and the writing process. Throughout the year when appropriate, students may bring writing assignments from other classes and/or receive instructional help from an English teacher. Since each class member will be working at his or her own writing level, this class is appropriate for students needing remedial work specific, targeted areas. It is strongly recommended for students who seek additional help with the MCAS-Language Arts test required for high school graduation.

# WORLD LANGUAGE DEPARTMENT

Mrs. Dana Curran, World Language Program Director

(781) 275-1700, ext. 4522

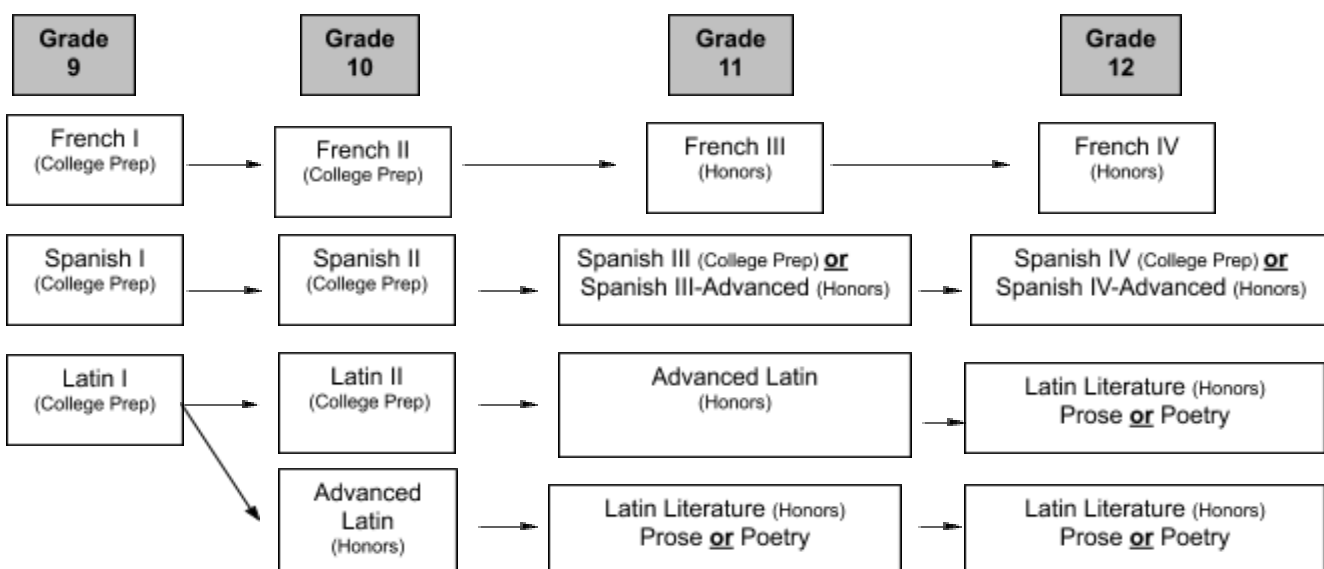
**World Language Graduation Requirement: 2 Years / 10 Credits**

Course Title	Level	Course Number	Grade Level	Semester	# of Periods	Credits
French I	College Prep	4113	9-12	All	4	5
French II	College Prep	4123	9-12	All	4	5
French III	Honors	4134	9-12	All	4	5
French IV	Honors	4144	10-12	All	4	5
French Cinema	Honors High Honors	4154 4155	11-12	All	4	5
Francophone Identity & Culture	Honors High Honors	4164 4165	11-12	All	4	5
A.P. French -Language	Advanced Placement	4175	11-12	All	4	5
Spanish I	College Prep	4313	9-12	All	4	5
Spanish II	College Prep	4323	9-12	All	4	5
Spanish III	College Prep	4333	9-12	All	4	5
Spanish III-Advanced	Honors	4334	9-12	All	4	5
Spanish IV	College Prep	4343	10-12	All	4	5
Spanish IV-Advanced	Honors	4344	10-12	All	4	5

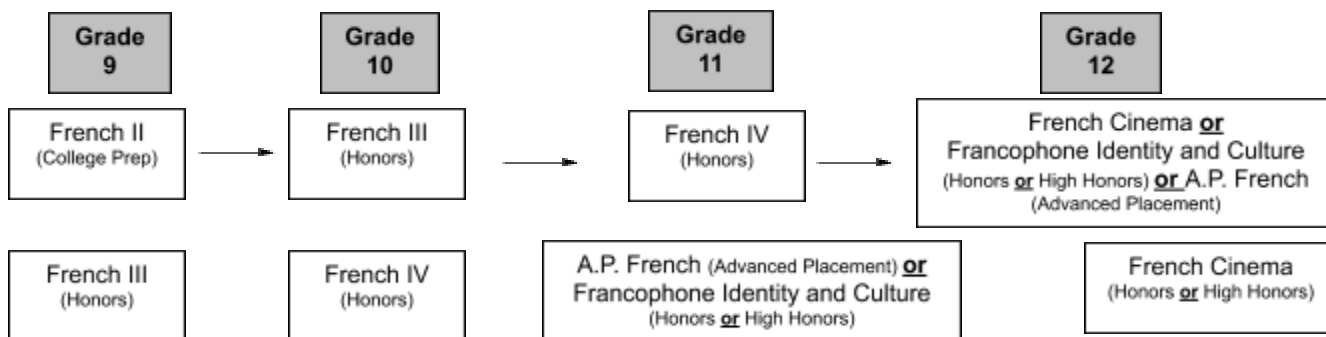
<b>Spanish Cinema</b>	Honors High Honors	4354 4355	11-12	All	4	5
<b>Spanish Stories &amp; Cultures</b>	Honors High Honors	4364 4365	11-12	All	4	5
<b>A.P. Spanish -Language</b>	Advanced Placement	4375	11-12	All	4	5
<b>Latin I</b>	College Prep	4213	9-12	All	4	5
<b>Latin II</b>	College Prep	4223	10-12	All	4	5
<b>Advanced Latin</b>	Honors	4234	10-12	All	4	5
<b>Latin Literature: Prose</b>	Honors	4254	11-12	All	4	5
<b>Latin Literature: Poetry</b>	Honors	4264	11-12	All	4	5

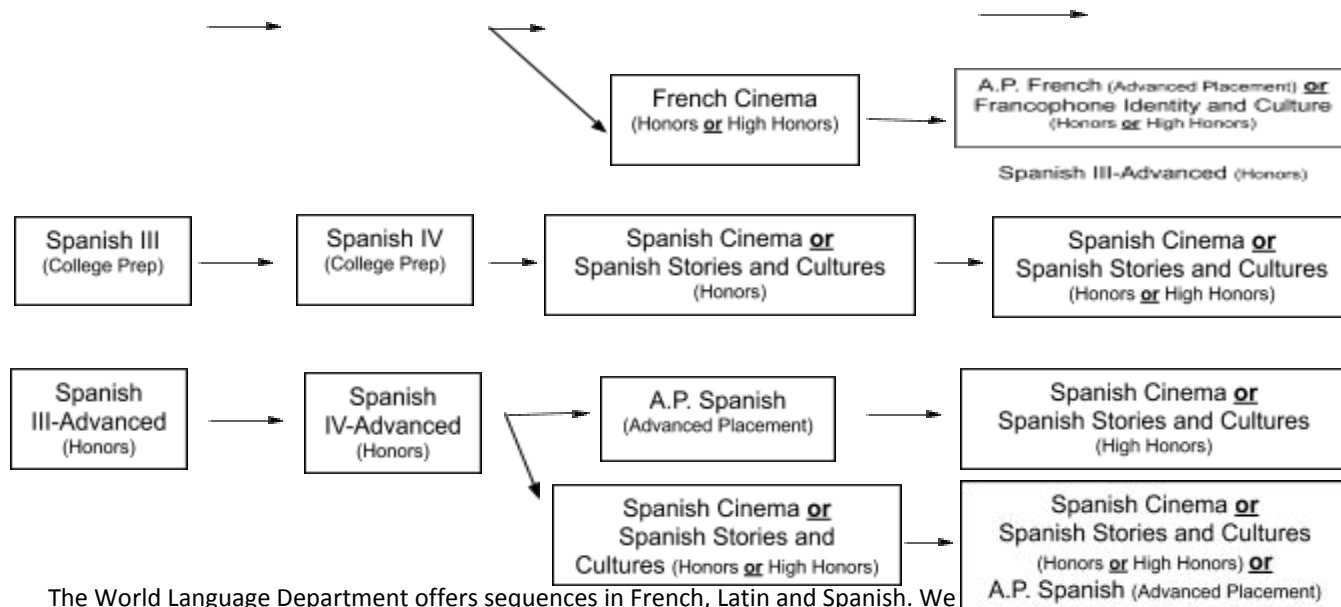
## WORLD LANGUAGE COURSE SEQUENCE CHARTS

### Students beginning a world language at the high school:



### Incoming freshmen with a minimum of three years of French or Spanish:





The World Language Department offers sequences in French, Latin and Spanish. We students consider their study of language at Bedford High School as a part of a long-term commitment to becoming proficient in at least one language other than English. We believe all students can learn another language and will need to participate in a global society. It is our mission to help them develop their communicative abilities and cultural awareness. In modern language courses, students engage in real-world communication tasks and explore commonalities and differences among global cultures. In classical language courses, students work toward analyzing authentic materials from the ancient world and exploring its impact on our language and world.

World Language courses are designed for students who take them as a second or third language. Native or heritage speakers of French and Spanish who wish to study their own language must submit writing and speaking samples to determine if they would benefit from a course in this language. Students should see the World Language Program Director to complete the writing and speaking tasks before the course registration deadline.

## FRENCH

### **FRENCH I**

**College Prep**

**Course # 4113**

#### **Prerequisite: None**

This course is designed for those students who have never studied French and who want to begin the study of a second language for the first time. Students will develop the fundamentals of the four linguistic skills of listening, speaking, reading, and writing. Students will also be introduced to various cultural aspects of the Francophone world. Through classroom and laboratory activities, students are exposed to the language and culture. Although no prerequisite skills are required, a willingness to imitate, to role-play, and to participate is essential to developing basic language skills.

### **FRENCH II**

**College Prep**

**Course # 4123**

#### **Prerequisite: French I; or incoming freshmen with an appropriate score on the diagnostic test, and teacher recommendation**

Conducted primarily in French, this course will develop the student's ability to communicate in French about everyday situations through classroom and laboratory activities. Students electing French II should have a background in basic listening, speaking, writing, and reading skills in French. These skills will be further developed and strengthened as the student increases his/her vocabulary and knowledge of the French language. Students will continue their study of various aspects of culture in the Francophone world.



**FRENCH III** **Honors** **Course # 4134**

**Prerequisite:** French III; or incoming freshmen with an appropriate score on the diagnostic test, and teacher recommendation

Conducted in an immersion style, the major goal of this course is to improve the student's ability to understand spoken French and to communicate in French with greater fluency. French III is designed for students who have who have mastered and internalized fundamental vocabulary and grammar. Students will continue to master more sophisticated vocabulary and grammatical concepts and will be assigned a substantial amount of written work. Students will improve oral, aural, writing, and reading proficiencies through language laboratory work, reading literary excerpts, classroom discussion, and compositions. Students will continue their study of various aspects of culture in the Francophone world.

**FRENCH IV** **Honors** **Course # 4144**

**Prerequisite:** French III and teacher recommendation

Conducted in an immersion style, this course increases the student's proficiency in French through a thorough review of verb tenses and grammatical structures. Students will also learn several new tenses and idiomatic expressions. French IV is a complete grammatical review coordinated with the development of listening, speaking, writing, and reading skills. Since emphasis is placed on oral communication, perfection of pronunciation, and greater facility in speaking, language use becomes more natural. Students are able to provide spontaneous answers to a variety of situations and sustain conversations in the target language. Literary selections, songs, audio selections, and film will be studied and used for discussions, writing, and cultural study of the Francophone world.

**FRENCH CINEMA** **Honors** **Course # 4154**  
**High Honors** **Course # 4155**

**Prerequisite:** French IV, Francophone Identity and Culture; or A.P. French, and teacher recommendation

- This course is only offered on school years ending with an odd number (2021, 2023...)
- This course includes some R-rated films. An example list is available in the school website, under the class Syllabi. Students wishing to enroll in this class must submit an *Intent to Enroll & Permission Form* to the program director before completing their class request form.

Conducted in an immersion style, students will learn about the history and culture of French-speaking countries through the medium of film. Students will watch films of the French-speaking world set in North America, Africa, Asia and France. Movies viewed in class will provide a context in history and culture as well as language. In preparation for watching the films, students will study the historical/cultural information that provides the backdrop of the settings of the films. Lessons will require higher-level thinking skills such as expressing opinion, analyzing, predicting, and comparing and contrasting in the target language. Students will continue to master more sophisticated vocabulary and grammatical concepts and will be assigned a substantial amount of written work. Students will improve oral, aural, written, and reading proficiencies.

**FRANCOPHONE IDENTITY AND CULTURE** **Honors** **Course # 4164**  
**High Honors** **Course # 4165**

**Prerequisite:** French IV or French Cinema, and teacher recommendation

- This course is only offered on school years ending with an even number (2020, 2022...)

This course is offered to students who have completed their study of the major grammatical concepts of the French language and are looking to improve their written and spoken expression of French without intensive grammar review. This course will examine identity development from the perspective of people from many different francophone backgrounds while comparing them to our own cultural and personal identity development. A variety of authentic French texts will be used in this course including short stories, film, poetry, blogs, books and music. Lessons require such higher level thinking skills as expressing opinion, analyzing, predicting, and comparing and contrasting in the target language. Individual and group project work and presentations are emphasized.

Language use becomes more natural because students are required to speak only in French and are asked to participate in a variety of oral exercises to increase fluency and spontaneous speech.

### **A.P. FRENCH – Language**

### **Advanced Placement**

**Course # 4175**

**Prerequisite: French IV or French Cinema, and teacher and Program Director recommendations**

- This course is only offered on school years ending with an even number (2020, 2022...)
- **THIS IS A COLLEGE LEVEL COURSE**

The AP French Language course is designed as an advanced third-year college level class. Therefore, students are instructed to speak, read, write, and listen to authentic sources in French only. Conducted only in French, this course develops greater fluency in the spoken language and reinforces vocabulary and idiomatic expression. Advanced Placement French prepares students for the A.P. French Language exam, by teaching them to use the three modes of Communication: Interpersonal, Interpretive and Presentational as defined in the Standards for World Languages, while exposing them to a variety of authentic language through French music, films, articles and literature hence emphasizing listening, speaking, reading, and writing skills. Students will read and discuss French literature as well as articles on contemporary issues enhancing the study of the Francophone world. Lessons require such higher level thinking skills as expressing opinion, analyzing, predicting, and comparing and contrasting in the target language. Students will be familiarized with the different cultures of the francophone world.

## **SPANISH**

### **SPANISH I**

### **College Prep**

**Course # 4313**

**Prerequisite: None**

This course is designed for those students who have never studied Spanish and who want to begin the study of a second language for the first time. Students will develop the fundamentals of the four linguistic skills of listening, speaking, reading, and writing. Students will also be introduced to various cultural aspects of the Spanish-speaking world. Through classroom and laboratory activities, students are exposed to language and culture. Although no prerequisite skills are required, a willingness to imitate, to role-play, and to participate is essential to developing basic language skills.

### **SPANISH II**

### **College Prep**

**Course # 4323**

**Prerequisite: Spanish I; or incoming freshmen with an appropriate score on the diagnostic test, and teacher recommendation**

Conducted primarily in Spanish, this course will develop the student's ability to communicate in Spanish about everyday situations through classroom and laboratory activities. Students electing Spanish II should have a background in basic listening, speaking, writing, and reading skills in Spanish. These skills will be further developed and strengthened as the student increases his/her vocabulary and knowledge of the Spanish language. Students will continue their study of various aspects of culture in the Spanish-speaking world.

### **SPANISH III**

### **College Prep**

**Course # 4333**

**Prerequisite: Spanish II; or incoming freshmen with an appropriate score on the diagnostic test, and teacher recommendation**

Conducted primarily in Spanish, Spanish III (College Preparatory) is designed for students who have completed two or more years of Spanish and need additional study to master the grammar and vocabulary taught in Spanish II and/or 8<sup>th</sup> grade Spanish. In this course, students will utilize basic oral and written language skills in an expanded context. Students will continue to improve their ability to comprehend and communicate in Spanish not only through class and laboratory work, but also by further studying grammar, verb structures, vocabulary, and idiomatic expressions. Students will begin to read a variety of literary selections with discussions in Spanish. Students will continue their study of various aspects of culture in the Spanish-speaking world.

### **SPANISH III-ADVANCED**

### **Honors**

**Course # 4334**

**Prerequisite: Spanish II or incoming freshmen with an appropriate score on the diagnostic test, and teacher recommendation**

Conducted in an immersion style, the major goal of this course is to improve the student's ability to understand spoken Spanish and to communicate in Spanish with greater fluency. Spanish III-Advanced is designed for students who have successfully completed three consecutive years of Spanish and who have mastered and internalized fundamental vocabulary and grammar. Students will continue to master more sophisticated vocabulary and grammatical concepts and will be assigned a substantial amount of written work. Students will improve oral, aural, writing, and reading proficiencies through language laboratory work, reading literary excerpts, classroom discussion, and compositions. Students will continue their study of various aspects of culture in the Spanish-speaking world.

#### **SPANISH IV**

**College Prep**

**Course # 4343**

**Prerequisite: Spanish III and teacher recommendation**

Conducted primarily in Spanish, Spanish IV (College Preparatory) sharpens students' previously learned skills through more complex communication in the language. In this course students will solidly review previously learned concepts, increase cultural understanding of the Spanish-speaking world, and learn more advanced structures and vocabulary. Students will read and discuss various literary selections in the target language. Writing and listening skills will receive close attention through classroom exchanges and laboratory work. Individual and group projects are emphasized.

#### **SPANISH IV-ADVANCED**

**Honors**

**Course # 4344**

**Prerequisite: Spanish III or Spanish III-Advanced, and teacher recommendation**

Conducted in an immersion style, this course increases the student's proficiency in Spanish through a thorough review of verb tenses and grammatical structures. Students will also learn several new tenses and idiomatic expressions. Spanish IV Advanced Honors is a complete grammatical review coordinated with the development of listening, speaking, writing, and reading skills. Since emphasis is placed on oral communication, perfection of pronunciation, and greater facility in speaking, language use becomes more natural. Students are able to provide spontaneous answers to a variety of situations and sustain conversations in the target language. Literary selections, songs, audio selections, and film will be studied and used for discussions, writing, and cultural study of the Spanish-speaking world.

#### **SPANISH CINEMA**

**Honors**

**Course # 4354**

**High Honors**

**Course # 4355**

**Prerequisite: Spanish IV, Spanish IV-Advanced, Spanish Stories and Cultures or A.P. Spanish, and teacher recommendation**

- This course is only offered on school years ending with an odd number (2021, 2023...)
- This course includes some R-rated films. An example list is available in the school website, under the class Syllabi. Students wishing to enroll in this class must submit an *Intent to Enroll & Permission Form* to the program director before completing their class request form.

Conducted in an immersion style, students will learn about the history and culture of Spanish-speaking countries through the medium of film. Students will watch films of the Spanish-speaking world set in North America, Latin America, and Spain. Movies viewed in class will provide a context in history and culture as well as language. In preparation for watching the films, students will study the historical/cultural information that provides the backdrop of the settings of the films. Lessons will require higher-level thinking skills such as expressing opinion, analyzing, predicting, and comparing and contrasting in the target language. Students will continue to master more sophisticated vocabulary and grammatical concepts and will be assigned a substantial amount of written work. Students will improve oral, aural, written, and reading proficiencies.

#### **SPANISH STORIES AND CULTURES**

**Honors**

**Course # 4364**

**High Honors**

**Course # 4365**

**Prerequisite: Spanish IV, Spanish IV-Advanced, Spanish Cinema, or A.P. Spanish, and teacher recommendation**

- This course is only offered on school years ending with an even number (2020, 2022...)

Conducted in an immersion style, students are exposed to a variety of topics related to the artistic and cultural realms (traditional and contemporary) of the Spanish-speaking world. Students will read a selection of short stories and analyze works of art that highlight historical and cultural events. Lessons will require higher-level thinking skills such as expressing opinion, analyzing, predicting, and comparing and contrasting in the target language. Students will continue to master more sophisticated vocabulary and grammatical concepts and will be assigned a substantial amount of written work. Students will improve oral, aural, written, and reading proficiencies.

### **A.P. SPANISH – Language**

### **Advanced Placement**

**Course # 4375**

**Prerequisite: Spanish IV-Advanced, Spanish Cinema, or Spanish Stories and Cultures, and teacher and Program Director recommendations**

- **THIS IS A COLLEGE LEVEL COURSE**

AP Spanish is intended to function as an equivalent of a third year college course. It encompasses advanced writing, conversation, listening, speaking, reading and grammar. While students who have completed four years of Spanish will be ready for this level, those who have taken 3 years will find the course challenging. Conducted only in Spanish, this course develops greater fluency in the spoken language and reinforces advanced grammatical concepts. Advanced Placement Spanish prepares students for the A.P. Spanish Language exam, by teaching them to use the three modes of Communication: Interpersonal, Interpretive and Presentational as defined in the Standards for World Languages, while exposing them to a variety of authentic language such as music, films, radio broadcasts, and more. Additionally, students will read and discuss excerpts of literature written in Spanish, as well as articles on contemporary issues enhancing the study of the Spanish-speaking world. Lessons require such higher level thinking skills as expressing opinion, analyzing, predicting, and comparing and contrasting in Spanish. Language becomes more natural because students are required to speak only in Spanish and are asked to participate in a variety of oral exercises to increase fluency and spontaneous speech.

## **LATIN**

### **LATIN I**

### **College Prep**

**Course # 4213**

**Prerequisite: None**

This course awakens an interest and an appreciation of Roman culture, and increases the student's verbal and grammatical skills through the study of the Latin language. Students will develop the ability to read, comprehend, and write basic Latin sentences. No prerequisite skills are required.

### **LATIN II**

### **College Prep**

**Course # 4223**

**Prerequisite: Latin I and teacher recommendation**

The second year of Latin reviews basic grammatical structures learned in Latin I, adds more complicated grammar and reading materials, and expands the students' knowledge of the history and culture of the ancient world. The students will reinforce and develop reading and writing skills as they increase their knowledge of vocabulary and Latin grammar.

### **ADVANCED LATIN**

### **Honors**

**Course # 4234**

**Prerequisite: Latin I or Latin II, and teacher recommendation**

This course explores the major advanced grammatical topics in the Latin language in depth, while exposing the students to more challenging reading materials and expanding their knowledge of the history and culture of the ancient world. The students will improve their reading and writing skills in order to transition by the end of the year from reading textbook selections to reading authentic Latin literature.

### **LATIN LITERATURE: PROSE**

### **Honors**

**Course # 4254**

**Prerequisite: Advanced Latin or Latin Literature: Poetry, and teacher recommendation**

- This course is only offered on school years ending with an odd number (2021, 2023...)

This course is designed to develop reading ability in the target language and increase understanding and appreciation of Classical literature, culture, and history, with an emphasis on the civil war period and the end of the Roman Republic. Students read and discuss selections from the works of Caesar, Sallust, and Cicero. Through these texts, selected grammar topics and vocabulary are also introduced and reinforced.

#### **LATIN LITERATURE: POETRY**

**Honors**

**Course # 4264**

**Prerequisite: Advanced Latin or Latin Literature: Prose, and teacher recommendation**

- This course is only offered on school years ending with an even number (2020, 2022...)

This course is designed to develop reading ability in the target language and to increase understanding and appreciation of Classical literature, history, and culture, with an emphasis on Roman epic and lyric poetry. Students read and discuss selections from the works of Catullus, Ovid, and Vergil. Through these texts, selected grammar topics and vocabulary are also introduced and reinforced.

### **OTHER**

#### **WORLD LANGUAGE INTERN**

**Course # 4401**

**Prerequisite: Grade 12 and Program Director Approval**

All interns must be approved by the World Language Program Director and will be assigned to a world language teacher based on need.

# Mathematics Department

Mr. Patrick Morrissey, Mathematics Program Administrator

(781) 275-1700 ext. 4507

Mathematics Graduation Requirement: 4 Years / 20 Credits

Course Title	Level	Course Number	Grade Level	Semester	# of Periods	Credits
<del>STEM Applications I</del>	<del>College Prep</del>	<del>2103</del>	<del>9</del>	<del>All</del>	<del>6</del>	<del>7.5</del>
Math Applications I	Introductory	2102	9	All	4	5
Mathematical Applications II	Introductory	2132	10	All	4	5
Fundamentals of Algebra I	College Prep		9	All	6	7.5
Algebra I	College Prep	2113	9-10	All	4	5
Algebra I	Honors	2114	9	All	4	5
Continuing Algebra I / Geometry	Honors	2124	9	All	4	5
Continuing Geometry / Algebra II	Honors	2224	10	All	4	5
Continuing Algebra II	Honors	2324	11	All	4	5
Geometry	College Prep	2203	10-11	All	4	5
Geometry	Honors	2204	9-10	All	4	5
Geometry	High Honors	2205	9	All	4	5
Math Lab	Heterogeneous	2063	9-12	All	2	2.5
Calculus Project	Heterogeneous	2073	9-10	All	2	2.5
Algebra II	College Prep	2303	11-12	All	4	5
Algebra II	Honors	2304	10-11	All	4	5
Algebra II	High Honors	2305	10	All	4	5
Statistics and Probability	Honors	2414	12	All	4	5
AP Statistics	Advanced Placement	2575	11-12	All	4	5
Pre-Calculus	College Prep	2403	12	All	4	5
Pre-Calculus	Honors	2404	11-12	All	4	5

<b>Pre-Calculus</b>	High Honors	2405	11	All	4	5
<b>Business Math</b>	Heterogeneous	2310	12	All	4	5
<b>Calculus</b>	Honors	2504	12	All	4	5
<b>AP Calculus AB</b>	Advanced Placement	2505	12	All	4	5
<b>AP Calculus BC</b>	Advanced Placement	2515	12	All	4	5

### 9th Grade Placement:

If you have questions, please contact your child's 8<sup>th</sup> grade teacher first, and then the Math Program Administrator. For students in Algebra I or Algebra IA teachers use the two-term course grade, the midterm exam, and their teacher discretion to make placement. For students in **Pre-Algebra 8th Grade Math**, teachers use their discretion, and the two-term midyear grade to make placement.

### Typical Sequence of Mathematics Courses

Grade 9	Grade 10	Grade 11	Grade 12
<b>STEM Applications</b> Fundamentals of Algebra I	<b>Algebra I</b> Fundamentals of Geometry	<b>Geometry CP</b> Algebra II CP	<b>Algebra II CP</b> Business Math, Drafting II CP
Algebra I CP  Algebra I Honors	Geometry CP  Geometry Honors	Algebra II CP  Algebra II Honors	Business Math Pre-Calculus College Prep Pre-Calculus Honors Statistics Honors
Continuing Algebra/Geometry Honors	Continuing Geo/Algebra II Honors	Continuing Algebra II/Pre-Calculus Honors	Calculus Honors Business Math, Statistics Honors
Geometry Honors	Algebra II Honors	Cont. Algebra II/Pre-Calculus  or Pre-Calculus Honors	Business Math Statistics Honors AP Statistics Calculus Honors AP Calculus AB
Geometry High Honors	Algebra II High Honors	Pre-Calculus High Honors	Business Math Statistics Honors AP Statistics* Calculus Honors AP Calculus AB* AP Calculus BC*

\*Graphing Calculators are required for these courses. The Math Program Administrator has some to lend to students who need and request one.

### MATHEMATICAL APPLICATIONS I

### Introductory

### Course # 2102

#### Prerequisite: By recommendation only

This course is designed to help students develop a stronger number sense while exposing students to Massachusetts (Common Core) Mathematics Standards. Topics will include selected algebra and geometry

concepts such as manipulating irrational numbers, evaluating exponents, solving and graphing linear equations, geometric transformations, statistics and probability, and using the Pythagorean theorem. Students from this course may be recommended for Mathematical Applications II or Algebra I.

### **STEM Applications**

**College Prep**

**Course #2103**

**Credits: 7.5 (5 Math, 2.5 Science)**

**Prerequisites: Teacher Recommendation. Must be enrolled concurrently in the science section**

STEM Applications will develop the science and math skills to prepare students for studying math and science topics in the future. This course is designed to help students build a stronger number sense and cultivate the science and engineering practices that are part of the Massachusetts Common Core and Science and Engineering Standards. The course will include algebra and geometry concepts by applying them within the context of experimental design, data collection and analysis, math and science practices, science inquiry, and modeling. *Students taking this course in grade 9 will take the MCAS exam in grade 10.*

### **MATHEMATICAL APPLICATIONS II**

**Introductory**

**Course # 2132**

This course is a continuation of Mathematical Applications I and will further expose students to Massachusetts Common Core Standards. Topics will include line of best fit, manipulating irrational numbers, solving and graphing systems of linear equations, working with similar and congruent polygons, working with inequalities, the distance between two points, and volume of 3-dimensional shapes. Throughout the year student learning will be enhanced and reinforced through the use of calculators.

### **Fundamentals of Algebra I**

**College Prep**

**Course #????**

**Credits: 7.5**

**Placement by 8th Grade Teacher Recommendation only.**

This course is the first part of a two-year sequence focused on solidifying and extending 8th grade math standards, and focused on traditional Algebra I topics. In 10th grade students will take a similar course focused on Geometry and Statistics standards. The content of this course includes the study of real numbers, a major focus on linear equations and inequalities and their applications, arithmetic sequences, exponents properties, factoring techniques, systems of equations, absolute value equations, radical expressions and equations, relations and functions, and quadratic equations. Students will be introduced to essential Geometry content in preparation for 10th grade.

### **ALGEBRA I**

**College Prep**

**Course # 2113**

**Prerequisite: Teacher Recommendation**

The content of this course includes the study of integers, rational numbers, equations and inequalities, arithmetic sequences, exponents and polynomials, factoring, systems of equations, inequalities, and absolute values, rational expressions and equations, radical expressions and equations, and relations, functions and graphs. Students are introduced to problem solving strategies and applications of algebra to real-world problems.

### **ALGEBRA I**

**Honors**

**Course # 2114**

**Prerequisite: 8th grade Teacher Recommendation**

The content of this course includes the study of integers, rational numbers, equations and inequalities, arithmetic sequences, exponents and polynomials, factoring, systems of equations, inequalities and absolute values, rational expressions and equations, radical expressions and equations, relations and functions, and quadratic equations. Students are introduced to problem solving strategies and applications of algebra to real-world problems.

## **CONTINUING ALGEBRA I / GEOMETRY / ALGEBRA II SEQUENCE**

This three-year sequence of courses covers the second half of Algebra I, a full course in Geometry, and an enriched Algebra II course including Pre-Calculus [including trigonometry]. Students beginning this sequence are expected to



take it for three years, unless placement in another course becomes appropriate. By the end of the sequence, some students are prepared to take our Calculus Honors class.

### **CONTINUING ALGEBRA I/GEOMETRY**

#### **GEOMETRY**

**Honors**

**Course # 2124**

#### **Prerequisite: Teacher Recommendation**

This two-semester course covers the second semester of Algebra I and the first semester of Geometry. The course begins with a review of concepts covered in the grade 8 Algebra curriculum, including: number properties, ratios and proportions, solving, graphing, and writing linear equations and linear inequalities, and solving systems of linear equations. Following this review, students will be introduced to powers and exponents, quadratic equations, polynomials and factoring, proportions, functions and radicals. The second semester of this course covers the first half of a full year Geometry course, including: the introduction of key concepts using points, lines and planes, deductive reasoning and proofs, congruent triangles and properties of triangles and polygons.

### **CONTINUING GEOMETRY/**

#### **ALGEBRA II**

**Honors**

**Course # 2224**

#### **Prerequisite: Teacher recommendation**

The first semester of this two semester course begins with a review of concepts covered in the second semester of the Continuing Algebra/Introduction to Geometry course. Following this review, students will be introduced to ratio and proportions, similar polygons, properties of right triangles, circles, area of plane figures, and areas and volumes of solids. The second semester of this course resumes the study of Algebra, beginning with a review and enrichment of algebraic concepts covered in the Continuing Algebra/Introduction to Geometry course, including: linear equations, systems of linear equations and inequalities, and quadratic equations. The remainder of the semester will focus on: linear programming, solving systems of linear equations in three variables, quadratic equations and parabolas, and relations and functions. If time allows, matrices and determinants will be introduced.

### **CONTINUING ALGEBRA II/**

#### **PRE-CALCULUS**

**Honors**

**Course # 2324**

#### **Prerequisite: Teacher recommendation**

This course is the third course in the Continuing sequence. It begins with a review of topics covered in the Introduction to Algebra II portion of the previous course, including quadratic equations, relations, and functions.

Following the review, students explore powers, roots, and radicals, exponential and logarithmic functions, polynomials and polynomial functions, rational functions, conic sections, sequences and series. Students will conclude the year with a study of trigonometry including right triangle trigonometry, inverse trig functions, Law of Sines and Cosines, graphing and identities.

### **GEOMETRY**

**High Honors**

**Course # 2205**

#### **Prerequisites: Teacher Recommendation**

Aligned to the Common Core State Standards, our Geometry course covers the fundamentals of Geometry, constructions, transformations, congruence, similarity, right triangle trigonometry, circles, geometric measurement and dimension, and coordinate Geometry. Proofs of theorems is embedded in each unit.

### **GEOMETRY**

**Honors**

**Course # 2204**

#### **High School Prerequisites: Teacher Recommendation**

Aligned to the Common Core State Standards, our Geometry course covers the fundamentals of Geometry, constructions, transformations, congruence, similarity, right triangle trigonometry, circles, geometric measurement and dimension, and coordinate Geometry. Proofs of theorems is embedded in each unit.

### **GEOMETRY**

**College Prep**

**Course # 2203**

**Prerequisite: Teacher recommendation**

Aligned to the Common Core State Standards, our Geometry course covers the fundamentals of Geometry, constructions, transformations, congruence, similarity, right triangle trigonometry, circles, geometric measurement and dimension, and coordinate Geometry. Proofs of theorems is embedded in each unit. Greater emphasis is placed on applications of properties than on proofs; however, students are expected to develop a basic understanding of the deductive reasoning that supports a given conjecture.

**ALGEBRA II****High Honors****Course # 2305****Prerequisite: Teacher recommendation**

Functions are the lens through which all work in Algebra II is done. The course begins with a review of linear functions and systems of equations and continues with in-depth work with polynomial functions, especially quadratics, rational functions, radical functions, and logarithmic and exponential functions. Statistics and probability is reviewed from past courses. Conic sections and/or sequences and series are also covered if time allows. Algebra II is aligned to the Common Core State Standards.

**ALGEBRA II****Honors****Course # 2304****Prerequisite: Teacher recommendation**

Functions are the lens through which all work in Algebra II is done. The course begins with a review of linear functions and systems of equations and continues with in-depth work with polynomial functions, especially quadratics, rational functions, radical functions, and logarithmic and exponential functions. Statistics and probability is reviewed from past courses. Algebra II is aligned to the Common Core State Standards.

**ALGEBRA II****College Prep****Course # 2303****Prerequisite: Teacher recommendation**

Functions are the lens through which all work in Algebra II is done. The course begins with a review of linear functions and systems of equations and continues with in-depth work with polynomial functions, especially quadratics, rational functions, radical functions, and logarithmic and exponential functions. Statistics and probability is reviewed from past courses. Algebra II is aligned to the Common Core State Standards.

**MATH LAB****Heterogeneous****Course # 2063****Prerequisite: Teacher recommendation only.**

This course provides students with math support, especially those with gaps in their prior math knowledge and in need of remediation. This minor course is intended for 9th and 10th grade students in Algebra I, Geometry, and Algebra II, and is by teacher recommendation only. When appropriate, students partially or not meeting expectations on 8th grade math MCAS may be placed in math lab in their 9th and/or 10th grade year. Progress monitoring will be ongoing and students may place out of Math Lab if the support is no longer necessary. Grades are on a pass/fail basis.

**CALCULUS PROJECT****Heterogeneous****Course # 2073****Prerequisite: Teacher recommendation only.**

This course provides math enrichment support to students in our Calculus Project, similar to the Calculus Project course at JGMS. This course is primarily focused on the transitional year from 8th grade to 9th grade. Calculus Project would complement the math curriculum for students in Geometry Honors or High Honors. Grades are on a pass/fail basis.

**PRE-CALCULUS****College Prep****Course # 2403****Prerequisite: Teacher recommendation**

This course provides an introduction to Pre-Calculus topics. The course will cover quadratic functions, polynomial functions, exponents and logarithms, circles, trigonometric functions, trigonometric equations and applications,

and triangle trigonometry. Students in this course should have demonstrated mastery at the CP level in Geometry and Algebra 2. This course is for seniors.

### **PRE-CALCULUS**

**Honors**

**Course # 2404**

#### **Prerequisite: Teacher recommendation**

This course begins with a study of functions, exponentials and logarithms, and conic sections. The second part of the year is focused on trigonometry. Topics include linear and quadratic functions, polynomial functions, inequalities, exponents and logarithms, and analytic geometry, trigonometric functions, trigonometric equations and applications, triangle trigonometry, trigonometric addition formulas, and sequences and series.

### **PRE-CALCULUS**

**High Honors**

**Course # 2405**

#### **Prerequisite: Teacher recommendation**

This course begins with a brief review and enrichment of previously learned concepts involving functions, graphs, and applications, followed by a study of trigonometric concepts. Topics include linear and quadratic functions, polynomial functions, inequalities, exponents and logarithms, and analytic geometry, trigonometric functions, trigonometric equations and applications, triangle trigonometry, trigonometric addition formulas, polar coordinates and complex numbers, sequences and series, limits, properties of limits, techniques for evaluating limits, infinite limits, and continuity. The course also introduces student to the concept of a derivative, a derivative at a point, first and second derivatives of functions, applications, and computations of derivatives. Students are expected to complete a major research project.

### **STATISTICS AND PROBABILITY**

**Honors**

**Course # 2414**

#### **Prerequisite: Teacher recommendation**

This course will provide students with a student-centered resource of to investigate statistical concepts. Emphasis is on active learning, conceptual understanding, use of genuine real-world data, and technology integration including the TI-84 graphing calculator and spreadsheets. Topics of study will include: data analysis and pattern study, measures of central tendency, variation, confidence intervals and significance tests, the normal distribution, planning and conducting a survey, hypothesis testing, accessing the validity and margin of error of polls, and probability. Students will regularly engage in collaborative projects exploring essential class content.

Beginning in 2019-2020, we plan to offer Statistics for Dual Enrollment credit through Middlesex Community College [is available](#). See the [Guidance and Counselling](#) section above for more information.

### **AP STATISTICS**

**Advanced Placement**

**Course #2575**

#### **Prerequisite: Teacher Recommendation**

This course covers the AP Statistics syllabus of the College Board and students will be prepared to take the AP exam in May. Four conceptual themes of the course include: exploratory analysis, planning and conducting a study, probability, and statistics inference. A minimum of Algebra II honors is strongly suggested for a prerequisite. Graphing calculators will be required for this course.

### **CALCULUS**

**Honors**

**Course # 2504**

#### **Prerequisite: Teacher recommendation**

This course will prepare students for a first semester college Calculus course. The course begins with a thorough review of families of functions and trigonometry. Following the review, students investigate limits and continuity, and then begin a comprehensive study of the concept of a derivative, a derivative at a point, first and second derivatives of functions, applications, and computations of derivatives. Time permitting, students will then explore concepts involving integrals.

This course will not prepare students for AP Calculus exam.

### **A.P. CALCULUS AB**

**Advanced Placement**

**Course # 2505**

#### **Prerequisite: Teacher recommendation**

This course covers the AB syllabus of the Advanced Placement curriculum, beginning with a brief review of families of functions, graphs, and limits. Following this review, students are introduced to the concept of a derivative, a derivative at a point, first and second derivatives of functions, applications, and computations of derivatives. Following the study of derivatives, students explore concepts involving integrals, including Riemann sums, interpretation of properties of definite integrals, elementary and advanced applications of integrals, the Fundamental Theorems of Calculus techniques of anti-differentiation, applications of anti-differentiation, and numerical approximations of definite integrals. Graphing calculators will be required for this course.

#### **A.P. CALCULUS BC**

**Advanced Placement**

**Course # 2515**

##### **Prerequisite: Teacher recommendation**

This course covers the BC syllabus of the Advanced Placement curriculum, beginning with a brief review of families of functions, graphs, and limits. Following this review, students are introduced to the concept of a derivative, a derivative at a point, first and second derivatives of functions, applications, and computations of derivatives. Following the study of derivatives, students explore concepts involving integrals, including Reimann sums, interpretation of properties of definite integrals, elementary and advanced applications of integrals, the Fundamental Theorems of Calculus techniques of anti-differentiation, applications of anti-differentiation, and numerical approximations of definite integrals. The remainder of the course covers advanced topics involving integration techniques, L'Hopital's Rule, improper integrals, sequences and series, including Taylor polynomials, Taylor series, geometric series, parametric and polar forms and vector valued functions. Graphing calculators will be required for this course.

#### **BUSINESS MATH**

**Heterogeneous**

**Course # 2310**

Through a series of simulations, projects, and teamwork activities, students will prepare for their personal lives while becoming economically responsible. Areas of study will include: fundamental economics concepts, personal financial planning; financial pitfalls, budgeting, income, and money management (checking, savings, money market accounts, etc); spending, mortgages, student loans, credit and debt management; asset/insurance protection; financial statements; payroll; retirement planning; taxation; consumer practices and purchases: rights, responsibilities, and decision making processes. In each unit of the course, math skills will be emphasized and students will learn the value of applied mathematics. Course is open to 12<sup>th</sup> Graders, with priority given to those who are taking Business Math as their only math course. Course is only open to eleventh graders who are taking **Business Math** concurrently with another mathematics course.

# Performing Arts Department

Mrs. Nicole O'Toole, Performing Arts Program Director

(781) 275-1700 ext. 4488

**Performing Arts Graduation Requirement: 2.5 Credits**

Course Title	Level	Course Number	Grade Level	Semester	# of Periods	Credits
<b>Music Performance Major</b>	Honors	8604	9-12	All	4	5.0
<b>Band</b>	Honors	8104	9-12	All	2	2.5
<b>Orchestra</b>	Honors	8114	9-12	All	2	2.5
<b>Concert Choir</b>	College Prep	8203	9-12	All	2	2.5
<b>Honors Choir</b>	Honors	8224	10-12	All	2	2.5
<b>Basic Music Theory</b>	College Prep	8413	9-12	All	2	2.5
<b>Advanced Music Theory &amp; Composition</b>	Honors	8424	9-12	All	2	2.5
<b>Class Piano</b>	College Prep	8513	9-12	All	2	2.5
<b>Multimedia Music Production</b>	College Prep	8433	9-12	All	2	2.5
<b>Class Guitar</b>	College Prep	8663	9-12	All	2	2.5
<b>World Drumming</b>	College Prep	8613	9-12	All	2	2.5
<b>Theater Production</b>	College Prep	8763	9-12	All	2	2.5
<b>Honors Theater Production</b>	Honors	8774	9-12	All	2	2.5
<b>Drama</b>	College Prep	8713	9-12	All	2	2.5
<b>Honors Drama</b>	Honors	8724	9-12	All	2	2.5
<b>Beginning Band</b>	College Prep	8103	9-12	All	2	2.5
<b>Ballet I</b>	College Prep	8673	9-12	All	2	2.5

## MUSIC PERFORMANCE MAJOR

### Honors

Students enrolled in either two sections of curricular ensembles OR one section of a curricular ensemble & music theory can earn 5.0 credits for a Music Performance Major. In addition to the successful completion of each course students will be expected to:

- develop leadership skills as directed by their teachers.
- take the mid-year exam.
- participate in an evening of chamber music serving as the final exam for the course. This culminating event will involve the students choosing, presenting, and performing their selected repertoire.

**To enroll in the Music Performance Major:**

1. Register for two qualifying courses.
2. Be sure that these courses are listed on your final schedule.
3. At the start of the school year, the performing arts and **guidance counseling** departments will overlay the major selection on your schedule.

**BAND**

**Honors**

**Course # 8104**

**Prerequisite: Approval of Instructor to determine appropriate level**

Band is a performance group open to all students who play band instruments. ~~Three sections of the course will be offered, and students will be allowed to enroll in 1, 2 or 3 sections.~~ Up to three sections of band will be offered--students may opt to enroll in multiple sections. Skills necessary for ensemble performance will be stressed, which include the development of technical ability, tone production and sight reading. Members of Band are strongly encouraged to participate in Marching Band. At home practice is expected. Concert participation is mandatory. Prior to each concert there will be a mandatory, evening rehearsal. Grades will be based upon rehearsal participation and behavior, concert and dress rehearsal attendance, and recording assignments.

**ORCHESTRA**

**Honors**

**Course # 8114**

**Prerequisite: Approval of Instructor to determine appropriate level**

The orchestra is an advanced performance-based ensemble that performs music from a wide variety of musical styles and time periods. This course is open to any students who play an orchestral string instrument (violin, viola, cello, bass, harp, or piano). Two sections of the course will be offered and students will be allowed to enroll in 1 or 2 sections. Skills necessary for ensemble performance will be stressed, which include the development of technical ability, tone production and sight-reading. At home practice is expected. It is strongly recommended that students in this ensemble take private lessons. Participation in all concerts or performances is mandatory. ~~Concert participation is mandatory.~~ Prior to each concert there will be a mandatory, evening rehearsal. Grades will be based upon rehearsal participation and behavior, concert and dress rehearsal attendance, and recording assignments. No more than two pianists per section will be accepted. If needed, auditions will be held to fill the accompanist slots.

**CONCERT CHOIR**

**College Prep**

**Course # 8203**

**Prerequisite: Approval of the Instructor to determine appropriate level**

Concert Choir is a general level choral performance group, exploring literature from a wide range of styles and time periods. Vocal health and skills are emphasized including appropriate breathing, posture, tone production, sight reading and part singing skills. No previous vocal experience is required. At home practice is expected. Concert participation is mandatory. Prior to each concert there will be a mandatory, evening rehearsal. Grades will be based upon rehearsal participation and behavior, concert and dress rehearsal attendance, and recording assignments. Student pianists are welcome to take this course as approved by the teacher.

**HONORS CHOIR**

**Honors**

**Course # 8224**

**Prerequisite: By audition only. To audition one must be a current member of Concert Choir Band, or Orchestra. Exceptions will be considered through recommendation of a music teacher.**

Honors Choir rehearses and performs a sizeable repertoire of high-caliber choral literature from a wide variety of musical genres and periods. Singers will be chosen based upon assessments of vocal independence, harmonization abilities, and sight-singing skills. Evidence of maturity and cooperative learning abilities as demonstrated in participation in other BHS performance ensembles is also necessary. Instruction and practice in healthy vocal technique and advanced sight-singing will be given. Singers should be able to learn and memorize music quickly through a required home practice regimen. BHS Honors Choir performs both in the high school concerts as well as several other venues outside of school throughout the year. Students should be committed to these occasional outside performances. Concert participation is mandatory. Grades will be based upon rehearsal behavior, concert and dress rehearsal attendance, and recording assignments.

**BASIC MUSIC THEORY****College Prep****Course # 8413****Prerequisite: None**

This course covers basic music theory concepts including note reading and writing, rhythms, scales, triads, four-part harmony, transposition, and basic composition. Emphasis is placed on ear-training through listening and the dictation of rhythms and melodies. Notation and symbols as formalized by J.S. Bach as well as contemporary notation will be utilized. The year culminates with a composition project. No technical knowledge of music is necessary, however a working knowledge of musical notation is highly recommended

**ADVANCED MUSIC THEORY & COMPOSITION Honors****Course # 8424****Prerequisite: Basic Music Theory or Teacher's approval.**

In this course the student will learn to realize a figured bass and part-write with proper voice leading as formalized by J. S. Bach. The students will also discover the function of harmony, learn to write chord progressions, and how to harmonize their melodies. In addition, contemporary musical styles will also be explored. Emphasis is placed on the creative process of composition while learning advanced concepts of music theory. Students will compose, arrange, and analyze music throughout the year learning about phrasing and different musical forms. The course is highly creative and will include the performance of classmates' compositions.

**CLASS PIANO****College Prep****Course # 8513****Prerequisite: None**

This beginner course teaches basic piano skills to all students. It is expected that students will have little or no experience playing the piano. Proper playing technique is covered as well as note reading in both clefs. Musical skills such as rhythm, harmony, and melody are also covered. Students are not required to have any previous piano skills. Priority will be given to those students with no previous experience.

**LIMITED NUMBER OF SPACES AVAILABLE.****MULTIMEDIA MUSIC PRODUCTION****College Prep****Course # 8433**

In this course, students will learn techniques used in modern music production, multi-media productions, live sound and event production, and create original projects with digital media. Various types of software will be explored to gain an understanding of how to manipulate musical and everyday/found sounds and apply them to real life situations and audio/visual careers. In addition, students will learn about MIDI (Musical Instrument Digital Interface) applications and learn how to operate a soundboard. Although not required, students in the course have opportunities to apply these new skills by working with the BHS technical crew for school performances. The class will learn about careers in the music business and how to explore opportunities beyond the classroom. Experience in music is not necessary, only a willingness to explore new ideas and learn about the exciting world of music and live performance technology. **LIMITED NUMBER OF SPACES AVAILABLE.**

**CLASS GUITAR****College Prep****Course # 8663****Prerequisite: None**

This course teaches basic guitar skills to all students. Students in this course do not need to have prior guitar experience. Those who do will be required to learn more advanced concepts in conjunction with the basic skills learned by all. Proper playing technique is covered including note reading and chords. Musical skills such as rhythm, harmony, and melody are also covered. A guitar for class will be provided. **LIMITED NUMBER OF SPACES AVAILABLE.**

**WORLD DRUMMING****College Prep****Course #8613****Prerequisite: None**

World drumming is the exploration of percussion instruments and traditions from a variety of cultures from around the world. This is a course where students use hands-on participation to communicate through percussion instruments, perform in "drum circles," create their own non-traditional instruments and provide accompaniment for other performance arts. A majority of activities will focus on the African Djembe drum and its various applications, but the course will also cover hand percussion, barred instruments such as the xylophone and marimba, concert percussion, and drum set. No drumming experience is necessary to take the course, only a

willingness to experience new things. Grading will be based on class performance, playing evaluations and written tests. **LIMITED NUMBER OF SPACES AVAILABLE.**

### **THEATER PRODUCTION I**

**College Prep**

**Course # 8763**

**Prerequisite: None**

**All students taking this course must participate in either stage crew or cast for the winter musical and/or the fall play.** This hands-on course is designed to give students an introduction into the technical side of theater.

Throughout the year students will learn the ins and outs of what goes into producing a show from the perspective of the technical crew, the designers, and the director. To achieve this, students will work on hands-on projects where they design sets, build props and costumes for our play and musical productions, and learn about different careers in theater. Come explore your creativity and expand your theatrical horizons!

### **HONORS THEATER PRODUCTION**

**College Prep**

**Course # 8773**

**Prerequisite: Theater Production or teacher approval.**

**All students taking this course must participate in either stage crew or cast for the winter musical and/or the fall play.** This hands-on course is designed as the next level of Theater Production. This course will be combined with Theater Production I. Students in Theater Production II will work with students in Theater Production I by taking leadership roles. The work students do in this class will be showcased in our fall play and winter musical. Gain a deeper ownership of the theater while developing your own theatrical design skills!

### **DRAMA**

**College Prep**

**Course # 8713**

**Prerequisite: None**

Drama serves as an introduction to acting. Students will learn about a variety of acting techniques, including pantomime, improvisation, and character development. Our work will culminate in a short play that is performed by the class at an Acting Showcase in May. Students in this class must be comfortable acting in front of their peers, receiving constructive criticism, and performing in a public showcase.

### **HONORS DRAMA**

**Honors**

**Course # 8724**

**Prerequisite: Drama or teacher approval.**

This course is designed for the student who has taken Drama or has had some experience acting in productions. Honors Drama students must take on additional responsibilities and assume a leadership role within the class. This class will meet concurrently with Drama. Our work will culminate in a short play that is performed by the class at an Acting Showcase in April. Students in this class must be comfortable acting in front of their peers, receiving constructive criticism, and performing in a public showcase.

### **BEGINNING BAND**

**College Prep**

**Course # 8103**

**Prerequisite: None**

This course will be for students who do NOT already play a concert band instrument and would like to start at the high school level. It is also available to students who play an instrument but would like to explore a different band instrument. Students will learn from a method/lesson book in a mixed ensemble setting to build skills and have performance opportunities throughout the school year. Grading will be based on completion of lesson book units and classwork. Students may use an instrument that they already own, or choose to rent a brand-new instrument. In some cases, the school may own an instrument that a student may borrow while enrolled in the course. Students who advance quickly in their studies may be invited to perform with the BHS Concert Band or Marching Band.

### **BALLET I**

**College Prep**

**Course # 8673**

This beginning ballet course is open to all students including experienced dancers interested in refining their skills. Students interested in pursuing acting, musical theater, or dance must have experience in ballet as it is the foundation on which musical theater and other dance forms are based. In this class you will learn classical ballet technique, the history of ballet, and the language of ballet. Students will dance every class to develop the muscles, skills, and artistry needed for dancing ballet. Students will need appropriate ballet shoes and comfortable clothing



for class. Information, including shoe scholarships, will be given during the first week of school. Our work will culminate in a showcase that will be performed at the end of the year. Credit for this course may not be applied to physical education credit.

# Occupational Education Courses

Occupational Education Graduation Requirement: 2.5 Credits

## Business Education Courses

Course Title	Level	Course Number	Grade Level	Semester	# of Periods	Credits
<b>Introduction to Business</b>	College Prep	5003	9-12	All	4	5
<b>Hospitality &amp; Tourism</b>	College Prep	6023	9-12	All	4	5
<b>Intro to Marketing</b>	College Prep	5043	9-12	All	4	5
<b>Accounting I</b>	College Prep	5053	10-12	All	2	2.5
<b>Accounting II</b>	College Prep	5063	11-12	All	2	2.5
<b>Business Math</b>	Heterogeneous	2313	11-12	All	4	5

### INTRODUCTION TO BUSINESS

College Prep

Course # 5003

**Prerequisite: None**

This is a great starting point for any student who may think they have any interest in learning about business. The course introduces students to the role that businesses play in their lives. The course curriculum provides the student with basic knowledge of the business, economic, and consumer concepts needed as a foundation for other business subjects. Exploration topics include basic economics, international business/relations, social responsibility, ethics, how to organize and start a business, entrepreneurship, management operations, banking operations, stock markets, insurance, marketing. The course is a great introduction for students who may be interested in joining DECA. This is a DECA approved course.

### HOSPITALITY & TOURISM

College Prep

Course # 6023

**Prerequisite: None**

Course Description: An introductory course providing an overview and scope of the travel/tourism and hospitality industries. With greater disposable income and more opportunities for business travel, people are traveling the globe in growing numbers. As a result, the hospitality and tourism industry is one of the fastest growing industries in the world. Student learn about key hospitality issues, the development and management of tourist locations, event planning, marketing, and environmental issues related to leisure and travel. Students learn about the four main sectors: Lodging, Food and Beverage, Transportation, Recreation/Entertainment. The course also examines some current and future trends in the field. Students are introduced to career opportunities and the employability skills needed to succeed in specific hospitality fields. No pre-requisite required. Open to all levels and grades. This course will run every other year beginning in 2019-2020.

### INTRO TO MARKETING

College Prep

Course # 5043

**Prerequisite: None**

Introduce yourself to the exciting world of marketing! Students will learn the process how businesses create new products and bring them into our lives. Students will explore how to understand consumers, create and develop

new products, advertise, distribute, price and sell products. Students in this course will contribute to the operation of the school store. This is another great starting point for any student interested in joining DECA. This is a DECA approved course.

### **ACCOUNTING I (Minor)**

**College Prep**

**Course #5053**

This beginner accounting course will allow the learner to be introduced to the language of business. Through the use of a computerized program students will be introduced to the theory of debits and credits through typical business transactions in a double-entry accounting system. Students will learn to “keep the books” for a business typical single owner service business as well as merchandising partnership in the private enterprise system. The course will provide students with a strong foundation in accounting principles and is an excellent preparatory class for post-secondary accounting courses. This is a DECA approved course.

### **ACCOUNTING II (Minor)**

**College Prep**

**Course # 5063**

#### **Prerequisite: Accounting I**

This course allows the learner to continue exploring advanced accounting concepts found in first year college courses. The course curriculum will focus on accounting procedures for a merchandising business organized as a corporation. Students selecting this course should have passed Accounting I and enjoy the challenge of a more advanced course. At the completion of this course, students should have a firm foundation for college accounting courses or for employment in the accounting field as a bookkeeper or accounting clerk. This is a DECA approved course.

### **BUSINESS MATHEMATICS**

**Heterogeneous**

**Course # 2313**

Through a series of simulations, projects, and teamwork activities, students will prepare for their personal lives while becoming economically responsible. Areas of study will include: fundamental economics concepts, personal financial planning; financial pitfalls, budgeting, income, and money management (checking, savings, money market accounts, etc); spending, mortgages, student loans, credit and debt management; asset/insurance protection; financial statements; payroll; retirement planning; taxation; consumer practices and purchases: rights, responsibilities, and decision making processes. In each unit of the course, math skills will be emphasized and students will learn the value of applied mathematics. Course is open to 12<sup>th</sup> Graders, with priority given to those who are taking Business Math as their only math course. Course is only open to eleventh graders who are taking Business Math concurrently with another mathematics course. **Business Math is offered by the Math Department. The course is cross-listed in Occupational Education. Business Math counts toward the Mathematics Graduation Requirement of 4 Years / 20 Credits.**

## **Family and Consumer Science Courses**

<b>Course Title</b>	<b>Course Number</b>	<b>Grade Level</b>	<b>Semester</b>	<b># of Periods</b>	<b>Credits</b>
<b>Foods and Nutrition I</b>	6602	9-12	All	2	2.5
<b>Foods and Nutrition II</b>	6613	10-12	All	2	2.5
<b>Clothing</b>	6702	9-12	All	2	2.5
<b>Early Childhood Education</b>	6833	9-12	All	2	2.5
<b>CASE Internship</b>	6832	10-12	All	2	2.5
<b>LABBB Intern</b>	6901	10-12	All	2	2.5

<b>Pre-School Internship</b>	6843	10-12	All	2	2.5
<b>Davis Internship</b>	6823	11-12	All	2	2.5
<b>Lane Internship</b>	6853	11-12	All	2	2.5
<b>JGMS Internship</b>	6863	11-12	All	2	2.5

## **FOODS & NUTRITION I**

**Course #6602**

**Prerequisite:** None

This course introduces students to basic principles of food selection and preparation with an emphasis on nutrition and food science. Using a combination of lab experiences, written assignments, and term projects, students learn to prepare recipes, plan nutritious meals and snacks, and work cooperatively in teams. Students are introduced to American regional and international cuisine, and learn about careers in the Food Industry.

## **FOODS & NUTRITION II**

**Course #6613**

**Prerequisite:** Foods & Nutrition I (#6602)

This course builds on the basic principles learned in Foods & Nutrition I. Students gain a deeper understanding of food systems, nutrition, and international cuisines and customs. By preparing more challenging recipes, students practice more advanced techniques of food preparation and meal planning and management. Through assigned projects, students explore topics involving consumer issues related to foods and nutrition, computer research studies and careers in the foodservice industry.

## **CLOTHING**

**Course #6702**

**Prerequisite:** None

In this course, students are introduced to basic techniques of clothing construction. Additional related topics will include: principles of textiles and caring for clothing. During the year, students will complete three to four projects. Materials needed for the sewing projects will be the responsibility of the student.

## **EARLY CHILDHOOD EDUCATION**

**Course**

**#6833**

**Prerequisite:** None

This course explores the period of child development from the age of 3 up to 6 years. For students interested in early childhood and elementary education, this course represents the second in a sequence of three courses that focuses on early childhood. This course emphasizes methods used in creating learning materials and guiding preschool-aged children's learning in a variety of areas including art, language and literacy, mathematics, science and physical activity. Through working in the on-site Integrated Preschool, observing children, and planning and conducting activities, students gain an appreciation for the period of early childhood and the role of the adult in guiding children's learning.

## **CASE INTERNSHIP**

**Course # 6832**

**Prerequisite:** Director Approval and Early Childhood Education

Through working in the CASE classroom, students observe children, plan activities, and learn the principles of child growth and development. Offered as a Pass/Fail Class

## **PRESCHOOL INTERNSHIP**

**Course # 6843**

**Prerequisite:** Director Approval and Early Childhood Education

Through working in the Integrated Pre-School, students observe children, plan activities, and learn the principles of child growth and development. Offered as a Pass/Fail Class

## **DAVIS INTERNSHIP**

**Course # 6823**

**Prerequisite: Director Approval and Early Childhood Education**

For students interested in careers in education, social work, pediatrics, or family policy, this course would provide valuable experience in working with children and families. Students enrolled in the Practicum are assigned an outside field placement at the Davis Elementary School or alternate site when available. Students work in a classroom under the guidance of the site teacher. **Each student must be able to provide his or her own transportation to the field site.** Offered as a Pass/Fail Class.

**LANE INTERNSHIP****Course # 6853****Prerequisite: Director Approval and Early Childhood Education**

For students interested in careers in education, social work, pediatrics, or family policy, this course would provide valuable experience in working with children and families. Students enrolled in the Practicum are assigned an outside field placement at the Lane Elementary School or alternate site when available. Students work in a classroom under the guidance of the site teacher. **Each student must be able to provide his or her own transportation to the field site.** Offered as a Pass/Fail Class

**JGMS INTERNSHIP****Course # 6863****Prerequisite: Director Approval and Early Childhood Education**

For students interested in careers in education, social work, pediatrics, or family policy, this course would provide valuable experience in working with children and families. Students enrolled in the Practicum are assigned an outside field placement at JGMS. Students work in a classroom under the guidance of the site teacher. **Students will walk down the path to JGMS from BHS.** Offered as a Pass/Fail Class

**LABBB INTERN****Course # 6901****Prerequisite: Director Approval and LABBB Program Approval**

LABBB interns work closely with LABBB staff in the LABBB program. Offered as a Pass/Fail Class

## Technology Education Courses

**Mr. Michael Griffin, Science and Technology Department Program Administrator  
(781) 275-1700 ext. 4508**

Course Title	Level	Course Number	Grade Level	Semester	# of Periods	Credits
Drafting Technology I	Heterogeneous	6110	9-12	All	2	2.5
Drafting Technology II	Heterogeneous	6120	10-12	All	2	2.5
Drafting Technology III	Heterogeneous	6130	11-12	All	2	2.5
Introductory Manufacturing & Production Technology I	Heterogeneous	6400	9-12	All	2	2.5
Continuing Manufacturing & Production Technology II	Heterogeneous	6440	10-12	All	2	2.5
Advancing Manufacturing & Production Technology III	Heterogeneous	6450	11-12	All	2	2.5
Engineering and 3D Modeling	Honors	6214	10-12	All	4	5

<b>Robotics and Engine. I</b>	Heterogeneous	6303	9-12	All	2	2.5
<b>Robotics and Engine. II</b>	Honors	6324	9-12	All	4	5
<b>Robotics and Engine III</b>	Honors	6334	9-12	All	4	5
<b>Robotics and Engine IV</b>	Honors	6344	11-12	All	4	5

### **DRAFTING TECHNOLOGY I**

**Heterogeneous**

**Course # 6110**

This course introduces the student to the methods used by industry to communicate technical ideas. The student will develop skills in visualization, multi view drawings, pictorial drawings, auxiliary and sectional views, measurement and dimensioning, and the proper use of drafting tools and equipment. At this level, drawing will be done using drafting machines, CAD drawings and design. The acquisition of these skills will enable the student to interpret industrial drawings and reinforce concepts learned in mathematics. This course provides an excellent background for any student interested in the fields of engineering, manufacturing, or construction.

### **DRAFTING TECHNOLOGY II**

**Heterogeneous**

**Course #6120**

**Prerequisite: Drafting Technology I**

Students will use research and development procedures to solve problems related to the fields of engineering and architecture. Skills will be expanded to include computer applications - CAD/CAM/CNC- and practice in recording ideas, visualizing probable form, evaluating data, making decisions, and the presentation of workable solutions. The first half of this course will focus on drawing and practices while the second half will focus on an introduction to Solid Modeling and Computer Aided Design. After learning basic CAD techniques, students will design and develop part and assembly models and drawings common to the field in order to build actual working assemblies.

### **DRAFTING TECHNOLOGY III**

**Heterogeneous**

**Course #6130**

**Prerequisite: Drafting Technology I and II**

In this course, students will learn advanced Solid Modeling Techniques common to Mechanical Engineering, beyond those developed in Drafting I and II. Students will design models, drawings, and pictorial/renderings commonly used in Mechanical Engineering. Students will also have the opportunity to perform Structural and Motion Analyses and Design Studies in order to optimize their designs. Finally, they may have an opportunity to engineer and build solutions for problems or opportunities as presented by members of the Bedford School community using equipment both internal and external to the school. By providing solutions to these customers, they will experience opportunities similar to those faced by engineers in various fields.

### **MANUFACTURING & PRODUCTION TECHNOLOGY I**

**Heterogeneous**

**Course #6400**

This course will emphasize the Engineering and Design strands and standards that fall under the Massachusetts Science and Technology Curriculum Frameworks. Students will be exposed to a broad background in the use of tools and machines, the design and engineering process and become familiar with modern manufacturing and production technologies. A major focus will be placed on the safe and proper use of many common machines (table saws, jointers, power miter saws, planers, lathes, and a wide assortment of portable power tools). The students will design, plan and manufacture products through a variety of manufacturing processes. Products will be designed and built as custom items, be mass-produced, and possibly constructed on an assembly line to simulate various production techniques used in industry today. In this course students will have the opportunity to design and build a product(s) of their own selection (furniture, baseball bats, etc.). Attention will also be paid to the study of a variety of materials used in the manufacture of commonly owned and used products.

<b>MANUFACTURING &amp; PRODUCTION TECHNOLOGY II</b>	<b>Heterogeneous</b>	<b>Course # 6440</b>
<b>MANUFACTURING &amp; PRODUCTION TECHNOLOGY III</b>	<b>Heterogeneous</b>	<b>Course # 6450</b>

**Prerequisite: Manufacturing & Production Technology I (#6402)**

Students will develop the knowledge and skills needed to transform wood, metal, plastic and other materials into finished products such as furniture, cabinets, sports equipment and other common products. At this level, students will build on prior knowledge and experience in the use of tools and machines to develop plans and designs for products they will build and manufacture. The size and complexity of these products may be substantial over what was done in Tech I and will depend on the individual student's project preference(s). Consumer and career awareness will be developed in addition to reinforcing concepts learned in science and mathematics as students learn to design projects, select materials, and develop the skills needed to build a finished product using the correct tools, equipment and procedures. Hands-on skills in the application of design principles, and use of tools and machines will continue to be developed at these levels, giving students a solid foundation in the skill-areas of many careers currently experiencing a "critical need" of employees.

<b>ENGINEERING AND 3D MODELING</b>	<b>Honors</b>	<b>Course# 6214</b>
<b>Credits: 5</b>		

Today's engineering is evolving and the skills needed from conception to implementation are requiring students to develop skills that allow them to learn and practice the process. There are radical changes in the way things are designed, made, analyzed, and communicated. This course is designed for students wishing to pursue an understanding of the engineering process from analyzing and interpreting engineering design challenges to designing and creating working models that meet specific requirements and parameters. Students will develop CAD, 3D Modeling, Simple and Complex Design, and Computer Numeric Design skills. The goal is to provide students with a big picture of the Engineering process through development and implementation of skills. Students are expected to have a base knowledge of Geometry.

<b>ROBOTICS AND ENGINEERING I (Minor)</b>	<b>Heterogeneous</b>	<b>Course #6303</b>
---	----------------------	---------------------

Robotics is a hands-on building and demonstration course. Students design, build and program robots to perform specific tasks. The tasks start simple and progressively get more complicated throughout the course. Some of the topics that will be covered are: Simple machines, Gear and Pulley Systems, Transmission Systems, and Computer Programming. Students will use NXT-G programming software initially and build up to utilizing ROBOT-C. The students will develop the knowledge and skills needed to understand and apply the concepts, the safe and appropriate use of common tools and equipment, troubleshooting and problem solving procedures, safety, consumer and career awareness.

<b>ROBOTICS AND ENGINEERING II</b>	<b>Honors</b>	<b>Course #6324</b>
<b>ROBOTICS AND ENGINEERING III &amp; IV</b>	<b>Honors</b>	<b>Course #6334</b>
		<b>Course #6344</b>

**Prerequisite- Students must have successfully passed Robotics I and II and have teacher recommendations.**

Robotics II is a continuation of Robotics I. The projects will get more complicated with the addition of new challenges, new sensors, more advanced Tetrix Building kits, and additional advanced programming techniques.

**III and IV** courses will teach the students a strong understanding of industrial robotic automation. The students will learn mechanical design, electrical circuit fabrication, electronic control systems, motor control systems and programming in ROBOT-C. They will be able to design, build, program, and troubleshoot custom made robotic systems. Course requirements include participation in one robotic competition of a student's choosing. Some of the current offerings at Bedford are the Tetrix Competition and Science Olympiad, or the annual B.U. robotics competition.

# Wellness Department

Mr. Keith Mangan, Program Director

(781) 275-1700 ext. 4443

Physical Education Graduation Requirement: 3 Years / 7.5 Credits\*

Health Education Graduation Requirement: 2 Semesters / 2.5 Credits

Course Title	Course Number	Grade Level	Semester	# of Periods	Credits
Sports and Fitness	9050	9	All	2	2.5
Health and Fitness	9150	10	All	2	2.5
Peer Leadership	9043	11-12	All	2	2.5
Lifetime Activities	9211	10-12	All	2	2.5
Sports Activities	9221	10-12	All	2	2.5
Cross Training	9251	10-12	All	2	2.5
Healthy Behaviors	9241	10-12	All	2	2.5
Dance	9272	10-12	All	2	2.5
Athletic Intern	9271	12	All	2	2.5

\*Two years of Health and Fitness, and two years of Physical Education

## **Note:**

- ~~Senior athletes, who are participating in at least two athletic seasons in senior year and have taken three years of physical education, may apply for a waiver of the senior physical education requirement. To be eligible for the waiver students must meet the following criteria:~~

- ~~Successful completion of the waiver application (see the Physical Education Program Director for materials)~~
- ~~Regular participation in athletics ninth through eleventh grades~~
- ~~Completion of a junior year elective other than "Sports Activities"~~
- ~~Completion of the health education requirement~~

## **SPORTS AND FITNESS**

## **Course # 9050**

Physical Education classes are designed to practice and develop skills in activities that will help students maintain fitness throughout their life. Early in the fall students fitness levels will be assessed in the following areas: cardiovascular endurance, flexibility, muscular strength and muscular endurance. From these assessments we will develop a baseline in which we will use to set personal fitness goals. We will explore fitness activities designed to improve all areas of fitness. Our goal is that by the end of the year students will improve their scores on their baseline fitness tests through regular cardiovascular endurance training, muscular endurance training, and activities designed to increase current levels of fitness. Students will be introduced to life-long activities designed to increase their likelihood of exercising in the future. Students will understand the benefits that regular exercise can provide for a person's mental, physical, and social health.

**HEALTH AND FITNESS****Course #9150**

During this course, students will apply and build on the skills and concepts learned in Health I. The students will utilize communication, decision-making, goal setting and self-advocacy skills. The content through which the skills will be used include: healthy vs. unhealthy relationships, alcohol, drugs, distracted driving, growth and development, pregnancy, sexually transmitted infections, and contraception.

**PEER LEADERSHIP****Course # 9043**

**Prerequisites:** Completion of Health I and Health II as well as teacher approval;

This minor elective is designed to achieve two objectives: first, to acquaint students with information about current social issues. Second, to give students hands-on experience with multiple methods of relating to and presenting information to large and small audiences of various ages. This course may require some after school time.

**SPORTS ACTIVITIES****Course # 9221**

Students will apply knowledge of rules, team roles, officiating techniques, games history and strategy to Team Sports. Traditional team sports include: basketball, football, soccer, volleyball, ultimate Frisbee. The objectives are to enhance physical fitness, team cooperation, ethical competitive values and a lasting interest in lifetime physical activities.

**LIFETIME ACTIVITIES****Course # 9211**

Students will apply knowledge of rules, team and individual roles, officiating techniques, games history and strategy to lifelong physical activities. Unit include: climbing/challenge course, archery, disc golf, golf, badminton, tennis, pickleball and tchoukball.

**CROSS TRAINING****Course # 9251**

A 21st Century approach to fitness and performance training. The program includes development in speed, agility, strength, power, flexibility and balance. Utilization of current Strength and Conditioning principles will be stressed. Students will participate in a variety of recreational, individual/dual and team activities.

**HEALTHY BEHAVIORS****Course #9241**

This course will offer a unique approach to adopting and maintaining a healthy lifestyle. Students will engage in a variety of activities designed to increase awareness of stress management, character education, nutrition planning, and current fitness and health-related trends. This is an active class where students will be required to change for the majority of class meetings.

**DANCE****Course # 9272**

Students will learn dances from a variety of World Cultures. In addition, American popular dances such as the Charleston and Swing to Break Dance and Hip-Hop will be covered. Students will study how dances from around the world have shaped and influenced current dance trends. Students will perform at the end of the school year.

**ATHLETICS INTERN****Course # 9271**

**Prerequisite:** Program Director Approval and Grade 12

The athletics interns work with athletics staff to prepare facilities, clean and maintain equipment, help with inventory. All interns must be approved by the Athletic Director and will be assigned based on need.



# Science Department

Mr. Michael Griffin, Science and Technology Department Program Administrator

(781) 275-1700 ext. 4508

Science Graduation Requirement: 3 Years / 15 Credits

## Science Program

Traditional Science Course Progression by Year & Initial Course Enrollment

Grade Level	Science Course
Grade 9	Physics
Grade 10	Chemistry
Grade 11	Biology
Grade 12	Elective

## AP and Elective Offerings

First Year Eligible	Course	Course Prerequisite
Grade 9	Robotics	None
Grade 10	AP Physics 1-2	Physics
Grade 11	AP Chemistry	Chemistry
Grade 11	Anatomy and Physiology	Biology
Grade 11	Environmental Science - <a href="#">AP, Honors</a>	Biology
Grade 12	AP Physics C	Physics and Calculus
Grade 12	Marine Biology	Three years of Science
Grade 12	Astronomy	Three years of Science
Grade 12	Forensics	Three years of Science
Grade 12	AP Biology	Biology

Course Title	Level	Course Number	Grade Level	Semester	# of Periods	Credits
<b>STEM Applications</b>	<b>College Prep</b>	<b>3003</b>	<b>9</b>	<b>All</b>	<b>6</b>	<b>7.5</b>
<b>Science and Engineering Practices</b>	<b>College Prep</b>		<b>9</b>	<b>All</b>	<b>4</b>	<b>5</b>
Physics (Lab)	High Honors	3105	9	All	4	5
Physics (Lab)	Honors	3104	9	All	4	5
Physics (Lab)	College Prep	3103	9	All	4	5
Chemistry (Lab)	High Honors	3305	10	All	4	5
Chemistry (Lab)	Honors	3304	10	All	4	5
Chemistry (Lab)	College Prep	3303	10	All	4	5

Biology (Lab)	High Honors	3205	11	All	4	5
Biology (Lab)	Honors	3204	11	All	4	5
Biology (Lab)	College Prep	3203	11	All	4	5
Anatomy & Physiology (Lab)	College Prep	3503	11-12	All	4	5
Anatomy & Physiology (Lab)	High Honors	3505	11-12	All	4	5
Environmental Science	Honors		11-12	All	4	5
Forensic Science (Lab)	Honors	3604	12	All	4	5
Marine Science (Lab)	College Prep	3213	12	All	4	5
Marine Science (Lab)	Honors	3214	12	All	4	5
Astronomy and Space Explorations	Honors	3804	12	All	4	5
Astronomy and Space Explorations	College Prep	3803	12	All	4	5
AP Physics 1&2	Advanced Placement	3405	10-12	All	4	5
AP Chemistry	Advanced Placement	3355	11-12	All	4	5
AP Environmental Science	Advanced Placement	3605	11-12	All	4	5
A.P. Biology	Advanced Placement	3255	12	All	4	5
AP Physics (C)	Advanced Placement	3415	12	All	4	5
Robotics and Engine. I*	Heterogeneous	6303	9-12	All	2	2.5
Robotics and Engine. II*	College Prep	6323	9-12	All	4	5
Robotics and Engine. II*	Honors	6324	9-12	All	4	5
Robotics and Engine. III*	Honors	6334	9-12	All	4	5

### STEM Applications

### College Prep

### Course #3003

**Credits: 7.5 (5 Math, 2.5 Science)**

**Prerequisites: Teacher Recommendation. Must be enrolled concurrently in the math section**

STEM Applications will develop the science and math skills to prepare students for studying math and science topics in the future. This course is designed to help students build a stronger number sense and cultivate the science and engineering practices that are part of the Massachusetts Common Core and Science and Engineering Standards. The course will include algebra and geometry concepts by applying them within the context of experimental design, data collection and analysis, math and science practices, science inquiry, and modeling. ***Students taking this course in grade 9 will take the MCAS exam in grade 10.***

### Science and Engineering Practices

### College Prep

### Course #

**Credits: 5**

**Prerequisites: Teacher Recommendation**

This course is designed to develop the science and engineering practices through a lab based program. Students will develop and apply their knowledge through the eight science and engineering practices. (Asking Questions and Defining Problems. Developing and Using Models. Planning and Carrying Out Investigations. Analyzing and Interpreting Data. Using Mathematics and Computational Thinking. Constructing Explanations and Designing Solutions. Engaging in Argument from Evidence.) Students enrolled in this course will take the STE MCAS Exam in Grade 10.

## PHYSICS

This course is designed to present topics in mechanics, electricity, magnetism, waves, and heat. It will be taught using a concept-based approach while simultaneously integrating the students' mathematical background in order to develop a meaningful physics foundation. The program will be supported by an interactive laboratory environment where students will gain hands-on experience with the concepts being studied. This course is the first in the core science series.

### PHYSICS (Lab)

### High Honors

Course # 3105

**Prerequisite:** Must take concurrently with Geometry

This course will include an intensive and in-depth study of the topics listed above as well as other topics that are not specifically listed in the Massachusetts state standards. Students selecting this course should have reading skills at grade level and be able to solve multi-step problems by applying algebraic methods. It will serve as an important component of college preparatory study.

### PHYSICS (Lab)

### Honors

Course # 3104

**Prerequisite:** Teacher Recommendation

This course will include an in-depth study of the topics listed above. Students selecting this course should have reading and math skills at grade level. It will serve as an important component of college preparatory study.

### PHYSICS (Lab)

### College Prep

Course # 3103

**Prerequisite:** Teacher Recommendation

This course will concentrate on the State Physics Standards. The program assumes that students are developing basic algebraic skills. It will serve as an important component of college preparatory study.

## CHEMISTRY

Chemistry is a course where laboratory experiences are used to enhance topics such as gases, atomic theory, chemical bonding, solutions, electrolytes, bases and acids, chemical equilibrium, introductory electrochemistry, characteristics of chemical reactions, and periodicity of chemical and physical properties. Students selecting this course should have reading skills at grade level and be able to solve problems by applying algebraic methods. Skills that will be developed include chemistry laboratory procedures, writing of laboratory reports, solving chemical problems, and applying chemical principles to everyday living. This course is the second in the core science series.

### CHEMISTRY (Lab)

### High Honors

Course# 3305

**Prerequisite:** Physics and Teacher recommendation.

This course will include a more intensive and in-depth study of the topics listed above. This is a fast paced course where students should expect to learn new material every class. Students selecting this course should have reading skills at or above grade level and be able to solve problems by applying algebraic methods. For this reason, the instructor will assume that students will be able to solve quantitative problems independently. Students who work successfully in this course are encouraged to enroll in AP chemistry and to take the SAT II (Achievement) Test in Chemistry.

### CHEMISTRY (Lab)

### Honors

Course # 3304

**Prerequisites:** Physics and teacher recommendation.

This course and laboratory component is designed to provide a survey of chemical principles for students who are interested in the subject. Students selecting this course should have reading skills at grade level and be able to

solve problems by applying algebraic methods. For this reason, the instructor will assume that students will be able to solve problems independently.

### **CHEMISTRY (Lab)**

**College Prep**

**Course # 3303**

#### **Prerequisite: Physics**

This course and Laboratory component are designed for students who want a working knowledge of chemical principles. It will stress the basic concepts of chemistry on a conceptual level linking them with real world phenomena.

## **BIOLOGY**

The biology courses focus on the following concepts: chemical and cellular basis of life, energy transformations, genetics and biotechnology, evolution and biodiversity, and animal systems. Each topic will be supported by appropriate laboratory experiences. Skills that will be developed in biology include: note taking, collecting data, writing a lab report, reporting on outside reading or projects and test taking. This course is the third in the core science series.

### **BIOLOGY (Lab)**

**High Honors**

**Course # 3205**

#### **Prerequisite: Chemistry and teacher recommendation.**

Using an independent student centered approach of instruction; this course builds on students prior knowledge of basic biological concepts focusing on application and inquiry. Students selecting this course should have reading skills at or above grade level and be able to work independently. Students who work successfully in this course are encouraged to enroll in AP Biology and to take the SAT II (Achievement) Test in Biology.

### **BIOLOGY (Lab)**

**Honors**

**Course # 3204**

#### **Prerequisite: Chemistry and teacher recommendation.**

Using guided instruction this course reviews and deepens students' prior knowledge of basic biological concepts focusing on understanding with some application and inquiry.

### **BIOLOGY**

**College Prep**

**Course # 3203**

#### **Prerequisite: Chemistry**

Using an activity-oriented approach this course will cover the basic biological concepts outlined by the state frameworks. Students selecting this course should have standard reading and writing skills.

## **SCIENCE ELECTIVE COURSES**

### **ANATOMY & PHYSIOLOGY (Lab)**

**High Honors**

**Course # 3505**

**College Prep**

**Course # 3503**

#### **Prerequisite: Biology & Chemistry and teacher recommendation**

This course will concentrate on the anatomy, physiology, and histology of the human systems which include: the skeletal, muscular, integumental, nervous, respiratory, digestive, circulatory, excretory, reproductive systems, as well as endocrinology, and immunology. Students should have above average reading ability. Skills that will be developed in this course include: writing biological abstracts, doing independent research, making better observations, relating structure with function, improved techniques of dissection and microscopy. Students electing to take High Honors will explore the physiology of these body systems in depth and will be required to complete independent research topics for each unit of study. Students electing the High Honors have a summer assignment to review material that they are expected to know entering the course.

### **ENVIRONMENTAL SCIENCE**

**Honors**

**Course#**

Environmental Science is a year-long course designed to show thematic connections between a variety of science disciplines including biology, chemistry, and physics. It provides students with a coherent and realistic picture of

the applications of many scientific concepts as they interact with our planet and environment and help explain phenomena. This year long survey course will focus on climate change, population growth, natural resources, and ecosystem dynamics. The aim of this course is to provide the knowledge and skills to assist in helping students understand and evaluate the environmental challenges of today and the future.

### **MARINE SCIENCE (Lab)**

**Honors**

**Course # 3214**

### **MARINE SCIENCE (Lab)**

**College Prep**

**Course # 3213**

#### **Prerequisite: Grade 12 and Teacher Recommendation**

In marine science, students will learn about life in the ocean depths, at the polar extremes, in coral reefs, estuaries, and in the open sea. Marine organisms studied include poriferans, cnidarians, marine worms, mollusks, arthropods, echinoderms, marine fishes, and marine mammals. Through studying marine life, students will connect characteristics and behaviors that help them thrive in various marine biomes, and investigate threats that face these ecosystems. Additionally, students will study oceanography (waves, tide, properties of seawater, etc.) concepts to support their understanding of these complex marine ecosystems. Students should have reading skills at or above grade level. Skills that will be developed include: observation, dissection, interpretation and understanding of plant and animal behavior, critical analysis and synthesis of data, and seeking ways to solve problems relating to the marine environment.

### **FORENSIC SCIENCE (Lab)/FORENSICS IN MEDIA Honors**

**Course #3604**

#### **Prerequisite: Grade 12 and Teacher Recommendation**

Forensic science is a senior-level course rich in exploration and lab investigation which applies many disciplines of scientific study such as biology/anatomy, chemistry, and physics to solving crimes. The course examines the application of science to those criminal and civil laws that are enforced by police agencies in a criminal justice system. Major topics include processing a crime scene, collecting and preserving evidence, identifying types of physical evidence, organic and inorganic analysis of evidence, trace evidence, serology, DNA, fingerprints, firearms, anthropology, and document analysis. Students will analyze how forensics is presented various media outlets such as film and print, and explore how forensics science plays a role in our world.

### **ASTRONOMY AND SPACE EXPLORATION**

**Honors**

**Course# 3804**

### **ASTRONOMY AND SPACE EXPLORATIONS**

**College Prep**

**Course # 3803**

#### **Prerequisite: Grade 12 and Teacher Recommendation**

This first-year, introductory astronomy course will allow students to explore the cosmos beginning with their own naked-eye view of the night sky. Beginning with the Sun-Earth-Moon system that governs our daily, monthly and yearly patterns, students will then learn to recognize constellations and the path of the planets in the sky. After studying planetary science, the course will focus on the sun and other stars, including life cycles and classification of stars. From there the course will examine galaxies and cosmology. After examining this local-to-distant study of the universe, the focus will shift to a review of the history of space exploration, beginning with archaeoastronomy to the revolution of Copernicus and Galileo, the discovery of objects beyond the Milky Way by Edwin Hubble, up through the evidence for the expanding universe, dark matter and dark energy. The year will conclude with a study of the history of spaceflight, from the Mercury Astronauts to current space exploration and programs, culminating with an in-depth investigation into the future of spaceflight.

### **SCIENCE INTERN**

**Course: 3701**

#### **Prerequisite: Program Administrator Approval and Grade 12**

The science interns work with science staff to prepare labs, breakdown labs, clean equipment, help maintain tanks and the greenhouse, help with inventory, and assist with lab experiments when necessary. All interns must be approved by the Science Program Administrator and will be assigned to a science instructor based on need.

## **ADVANCED PLACEMENT ELECTIVES**

Students enrolling in AP must meet all prerequisites and be recommended by their teacher. All AP course syllabi have been approved by the College Board and are held to the standards and rigor set forth by the College Board. For specific content expectations please visit: [apcentral.collegeboard.com](http://apcentral.collegeboard.com) or contact Michael Griffin, Science

Program Administrator. ALL AP Science courses are equivalent to a College Level Course. Please note, all AP courses have summer assignments to review material that they are expected to know upon entering the course.

### **A.P. PHYSICS 1 & 2**

### **Advanced Placement**

**Course # 3405**

**Prerequisite:** Physics and teacher recommendation.

AP Physics 2 is an algebra-based, introductory college-level physics course. Students cultivate their understanding of physics through classroom study, in-class activity, and hands-on, inquiry-based laboratory work as they explore concepts like systems, fields, force interactions, change, conservation, waves, and probability. ~~This course provides a systemic introduction to the main principles of physics and emphasizes the development of problem-solving ability. Mechanics, electricity and magnetism, thermal physics, waves and optics, and atomic and nuclear physics are among the topics covered, including a laboratory component.~~ Completion of the course allows the student to take the Advanced Placement Physics 1 & 2 exams.

### **A.P. CHEMISTRY**

### **Advanced Placement**

**Course # 3355**

**Prerequisite:** Chemistry Honors/High Honors and Algebra II and teacher recommendation.

This course is designed to be a college level course. The course will cover the six big ideas prescribed by the College Board: structure of matter, bonding and intermolecular forces, chemical reactions, kinetics, thermodynamics, and chemical equilibrium. Meaningful laboratory work as prescribed by the College Board will help prepare a student for sophomore level chemistry courses in college. Completion of the course allows the student to take the Advanced Placement Chemistry exam.

### **A.P. ENVIRO. SCIENCE**

### **Advanced Placement**

**Course # 3605**

**Prerequisite:** Biology (May be taken simultaneously) & teacher recommendation

The goal of the Advanced/AP Environmental Science is to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, and to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving and/or preventing them. APES will be concurrently run with Environmental Science Honors. Students electing to take the AP portion of the class will have a high degree of independent work. Completion of the course allows the student to take the Advanced Placement Environmental Science exam.

### **A.P. BIOLOGY**

### **Advanced Placement**

**Course # 3255**

**Prerequisite:** Biology & teacher recommendation.

AP biology is an advanced course that explores basic biology concepts in greater depth. Designed to cover the required course work prescribed by the College Board, this course is fast paced and requires students to be independent learners. Topics include cell biology, molecular genetics, organismal biology and behavior, evolution, ecology, and structure and function of plants. Related laboratory exercises are an integral component and are integrated throughout the course work. Students enrolling in AP Biology must have completed a year of introductory biology during an academic year. Completion of the course allows the student to take the Advanced Placement Biology exam.

### **A.P. PHYSICS [C]**

### **Advanced Placement**

**Course # 3415**

**Prerequisite:** Physics and taking Calculus concurrently & teacher recommendation.

Physics C covers mechanics, classical electricity and magnetism. These topics are covered in great depth with analytical and mathematical sophistication, including calculus applications. Laboratory experience is an integral part of this course. This college level course is suitable for students planning to specialize in a physical science or in engineering. Completion of the course allows the student to take the Advanced Placement Physics C exam.

### **ROBOTICS AND ENGINEERING I (minor)**

### **Heterogeneous**

**Course # 6303**

### **ROBOTICS AND ENGINEERING II**

### **Honors**

**Course # 6324**

### **ROBOTICS AND ENGINEERING III**

### **Honors**

**Course # 6334**

**Prerequisite:** Robotics and Engineering I for Robotics II

*Course Descriptions for Robotics are on page 51 in Technology Education Courses.*

# Computer Science Courses

Mr. Michael Griffin, Science and Technology Department Program Administrator  
(781) 275-1700 ext. 4508

Course Title	Level	Course Number	Grade Level	Semester	# of Periods	Credits
Introduction to Computer Science	Heterogeneous	2620	9-12	All	2	2.5
Introduction to Programming	Heterogeneous	2610	9-12	All	2	2.5
AP Computer Science A	High Honors	2645	10-12	All	4	5.0
Advanced Topics in Programming	Heterogeneous	2630	11-12	All	2	2.5

## **INTRODUCTION TO COMPUTER SCIENCE                      Heterogeneous                      Course # 2620**

### **Prerequisites: None**

This course is an introduction to computer science. Students learn about computer hardware, network behaviors and components, and the Internet, using HTML and CSS to develop web pages. They are introduced to visual programming languages like Scratch to create animated simulations and design games. The course introduces students to topics such as variables, conditionals, loops, and arrays using text-based programming languages such as Python, while building internet and mobile applications. Programming . In addition, students are exposed to an overview of computing and its influence on modern society.

## **INTRODUCTION TO PROGRAMMING                      Heterogeneous                      Course # 2610**

### **Prerequisites: None**

This course is a general introduction to programming The course covers basic syntax for terminal I/O, conditionals, loops, arrays, searching and sorting using C. Students learn to write, compile, debug, and run C programs in a Windows PC environment. The course also introduces binary, octal and hexadecimal number systems.

## **AP Computer Science A                      High Honors                      Course #2645**

### **Prereq: Introduction to Computer Science, or Introduction to Programming, or equivalent course, & teacher approval**

AP Computer Science A is equivalent to a first-semester, college level course in computer science. The course introduces students to computer science with fundamental topics that include problem solving, design strategies and methodologies, organization of data (data structures), approaches to processing data (algorithms), analysis of potential solutions, and the ethical and social implications of computing. The course emphasizes both object-oriented and imperative problem solving and design using Java language. These techniques represent proven approaches for developing solutions that can scale up from small, simple problems to large, complex problems. The AP Computer Science A course curriculum is compatible with CS1 courses in colleges and universities.

## **Advanced Topics in Programming                      Heterogeneous                      Course #2630**

### **Prereq: AP Computer Science**

This course is designed for students who have completed the AP Computer Science A course or who demonstrate a firm knowledge in programming. Students will explore advanced topics on a UNIX platform. Areas of study will include Shell, Assembly Language, and Graphics programming, and, Data structures and Algorithms. Students will also explore topics in Discrete Math, such as Computer Number Systems, Recursive Functions, Graph Theory, Digital Logic, and Boolean Algebra.



# Social Studies Department

Mrs. Christine Butler, Social Studies Program Administrator

(781) 275-1700 ext. 4460

Social Studies Graduation Requirement: 3 Years / 15 Credits

Course Title	Level	Course Number	Grade Level	Semester	# of Periods	Credits
United States History I	High Honors	1105	9	All	4	5
United States History I	Honors	1104	9	All	4	5
United States History I	College Prep	1103	9	All	4	5
United States History I	Introductory	1102	9	All	4	5
Modern World History	High Honors	1205	10	All	4	5
Modern World History	Honors	1204	10	All	4	5
Modern World History	College Prep	1203	10	All	4	5
Modern World History	Introductory	1202	10	All	4	5
United States History II	High Honors	1305	11	All	4	5
United States History II	Honors	1304	11	All	4	5
United States History II	College Prep	1303	11	All	4	5
United States History II	Introductory	1302	11	All	4	5
Economics	Honors/High Honors	1554/1555	12	All	4	5
Gender Studies	Heterogeneous	1450	11/12	All	4	5
Government	Honors	1704	11/12	All	4	5
Law	Honors/High Honors	1604/1605	11/12	All	4	5
Psychology	Honors/ Advanced Placement	1534/1535	11/12	All	4	5
Real World Social Studies	Heterogeneous	1310	11/12	All	4	5
Sociology	Honors	1524	11/12	All	4	5

## UNITED STATES HISTORY I

This course is required for students in 9th grade. The overarching goal for United States History I is for students to understand that they are part of a democratic society in which the acts of individuals impact the course of history, and that they gain the skills to become responsible contributors to the wider community. The course content focuses primarily on the 1800s, including the early republic, antebellum America, the Civil War and Reconstruction, westward expansion, and industrialization. However, special emphasis is placed on connection to present day and current events. ~~The essential question for this course is “How can/do individuals and groups impact the course of history?”~~ To help develop the skills necessary to productive democratic participation, emphasis is placed on critical thinking skill development including:

- understanding and diagramming different types of historical reasoning,
- reading, interpreting, and critically examining primary and secondary sources to assess the effectiveness of the different methods for change
- using critical thinking and research skills to understand and interpret current events related to their study of history

Students ~~will conduct~~ **will complete** short as well as more sustained research projects. Students will write clear arguments that are well supported by evidence. **REQUIRED FOR GRADUATION.**

### UNITED STATES HISTORY I

#### High Honors

Course # 1105

Concepts are often developed in the most abstract and theoretical form. The sources are often of a professional academic nature and thus require reading comprehension above grade level. **Students are expected to complete readings and related work independently in preparation for class discussions and activities.**

### UNITED STATES HISTORY I

#### Honors

Course # 1104

Concepts are introduced using a balance of abstract & concrete approaches. The sources are typically at grade level and occasionally of a professional academic nature. **The course has challenging reading and writing assignments, and students are expected to be able to engage in both independent and collaborative work.**

### UNITED STATES HISTORY I

#### College Prep

Course # 1103

Concepts are introduced using a balance of abstract & concrete approaches with an emphasis on the concrete. The sources are typically at grade level. Teachers provide instruction **and scaffolding** regarding study skills, organizational skills and learning strategies to help students become independent learners.

### UNITED STATES HISTORY I

#### Introductory

Course# 1102

Concepts are introduced in the most concrete form along with carefully selected abstractions. The sources are typically at or below grade level. Teachers emphasize instruction **and scaffolding** regarding study skills, organizational skills and learning strategies to help students become independent learners.

## MODERN WORLD HISTORY

Modern World History is a survey course of world history from the French Revolution to the present day. Students will examine historical events and themes that have occurred in different areas of the world in the modern era, ~~and will be exposed to~~ **as well as** the historical events preceding and contributing to these events. Students will develop communication skills through writing, discussion, and presentations with an emphasis on developing analytical and persuasive writing skills. As students explore different cultures and different time periods, they will be asked to examine multiple perspectives and use creative approaches to analyze cause and effect relationships. They will be asked to think critically as they examine primary sources and engage in historical analysis. They will work collaboratively with their peers in short and long-term projects designed to help them understand the significance of key historical events in the development of the current world. **REQUIRED FOR GRADUATION.**

### MODERN WORLD HISTORY

#### High Honors

Course # 1205

**Prerequisites: Recommendation of United States History I Teacher**

The course moves through history at a rapid pace and has both demanding reading and writing assignments, and students are expected to do a large amount of independent work outside of class.

**MODERN WORLD HISTORY****Honors****Course # 1204****Prerequisite: United States History I**

The course homework and projects are designed to reinforce class material and further develop critical thinking skills. The course has challenging reading and writing assignments, and students are expected to be able to engage in both independent and collaborative work.

**MODERN WORLD HISTORY****College Prep****Course # 1203****Prerequisite: United States History I**

The course uses historical material as means for further developing reading, writing and critical thinking skills. This course places an emphasis on expressing structured arguments through writing, verbal responses and various projects.

**MODERN WORLD HISTORY****Introductory****Course # 1202****Prerequisite: United States History I**

The course uses historical material as means for further developing reading, writing and critical thinking skills. This course places an emphasis on expressing structured arguments through writing, verbal responses and various projects with additional teacher support.

**UNITED STATES HISTORY II**

This course is required for students in 11<sup>th</sup> grade. Students will continue to explore the social studies critical thinking skills system. Emphasis is placed on evaluation of arguments with additional emphasis placed on decision-making. Students will apply these skills to their study of diverse interpretations of core American values such as liberty, equality, and individualism. The course content spans the Progressive era up through the present, including foreign affairs topics such as imperialism, the World Wars, and the Cold War as well as issues of a domestic focus such as the Great Depression and the Civil Rights Movement. Students are expected to learn material by reading a variety of sources. Students will conduct short as well as more sustained independent research projects. Students will write clear arguments that are well supported by evidence and will use technology to demonstrate their learning. **REQUIRED FOR GRADUATION.**

**UNITED STATES HISTORY II****High Honors****Course # 1305****Prerequisites: Recommendation of Modern World History teacher**

Concepts are often developed in the most abstract and theoretical form. The sources are often of a professional academic nature and thus require reading comprehension above grade level. Students publish their research projects at the ~~Winter~~ History Fair in one of five different forms: documentary, exhibit, paper, performance or website. [Students are expected to complete readings and related work independently in preparation for class discussions and activities.](#)

**UNITED STATES HISTORY II****Honors****Course # 1304****Prerequisites: US History I and Modern World History**

Concepts are introduced using a balance of abstract & concrete approaches. The sources are typically at grade level and occasionally of a professional academic nature. [The course has challenging reading and writing assignments, and students are expected to be able to engage in both independent and collaborative work.](#)

**UNITED STATES HISTORY II****College Prep****Course # 1303****Prerequisites: US History I and Modern World History**

Concepts are introduced using a balance of abstract & concrete approaches with an emphasis on the concrete. The sources are typically at grade level. Teachers provide instruction [and scaffolding](#) regarding study skills, organizational skills and learning strategies to help students become independent learners.

**UNITED STATES HISTORY II****Introductory****Course # 1302****Prerequisites: US History I and Modern World History**

Concepts are introduced in the most concrete form along with carefully selected abstractions. The sources are typically at or below grade level. Teachers emphasize instruction and [scaffolding](#) regarding study skills, organizational skills and learning strategies to help students become independent learners.

**SOCIAL STUDIES JUNIOR/SENIOR ELECTIVES****ECONOMICS****Honors/High Honors****Course # 1554/1555**

Economics is the study of how individuals and societies make [the](#) decisions about how to transform their resources into the goods and services they want and need. This senior elective is divided into three parts. The first part deals with how and why markets work to create individual and social benefits, and what to do in cases of "market failure" or when markets fail to deliver benefits. The second part of the course focuses on microeconomic issues such as consumer choice, production decisions and how different types of markets operate. The third part will focus on macroeconomics issues related to the national or international economy such as how the financial markets work, the workings of the banking system, major national economic issues of unemployment and inflation, and the changes brought on by economic globalization. Students selecting this course should demonstrate pre-college level reading, writing, and math skills. This course will develop skills involving problem-solving, decision-making, and recognizing causal relationships. Both levels of this course are eligible for dual enrollment; see the [Guidance Counseling](#) section for additional information.

**GENDER STUDIES****Heterogeneous****Course # 1450**

This course examines gender in societies around the world, both past and present. Students will do this through [the](#) study of the historical and contemporary roles of women in relation to men, the cultural expectations of women and men in different societies, and gender as it relates to social class, diversity, and identity. The class will address the nature vs. nurture debate, biological foundations of gender, and masculinity in America today. This course emphasizes contemporary gender issues and students will evaluate events in American and world history using gender as a lens to analyze these issues. Students are expected to complete a significant amount of independent reading outside of class, including supplementary articles and books. The class is grounded in discussion, reflection, and analysis of many of the themes and ideas introduced in course readings. The course addresses challenging and sensitive issues throughout the year. Students will be expected to complete a midterm book study in which they will select a book that relates to the course, analyze it, write a paper, and deliver a presentation to the class.

**GOVERNMENT****Honors****Course # 1704**

Upon completion of this course, students will have achieved a thorough understanding of the purpose, process, and role of the American system of government. Studies will emphasize the ideas and government framework established by the U.S. Constitution as well as the political process within a representative democracy. Lessons will challenge and encourage students to become informed and active participants in society by developing an awareness of their rights and responsibilities as American citizens and to exercise these rights and responsibilities in local, state, and national government. Topics of study include [the US History in the history of American](#) political thought, the purpose and role of the executive, legislative, and judicial branches, as well as local, state, and national governments, political parties, interest groups, campaigns, and elections. Content will be presented through analysis of [past and present](#) written arguments, [analytical](#) discussion of current issues and events, first-hand experiences, case studies, research, critical thinking, and decision making activities. Students will demonstrate their mastery of content through a variety of written and performance-based products. This course is eligible for dual enrollment; see the [Guidance Counseling](#) section for additional information.

**LAW****Honors/High Honors****Course # 1604/1605**

What makes good law? Law explores the American legal system with an emphasis on constructing, analyzing and evaluating arguments. The course emphasizes arguing and deciding historical, contemporary and hypothetical

cases with a focus on Constitutional rights and the Criminal Law, and their relationship with foundational political values. Students will also learn about the legal system, dispute resolution, property law, and family law. The course requires analytical thinking and self-directed learning. Students enrolled in High Honors should be capable of analyzing and evaluating additional independent readings, should write at a college level, and be prepared for differentiated assessments. [Both levels of this course are eligible for dual enrollment; see the Counseling section for additional information.](#)

**A.P.-PSYCHOLOGY  
PSYCHOLOGY**

**Advanced Placement  
Honors**

**Course #1535  
Course #1534**

Psychology is the scientific study of what people do and why people do it. Students explore and respond to essential questions about human behavior and mental processes with an emphasis on the relationship between course content and students' own life experiences. Content areas include dreams and consciousness, perception, social psychology, human development, intelligence, emotion, personality and psychological disorders. [Modern Psychological perspectives](#) and the scientific method will give students tools for evaluating competing visions of the way that people work. The course requires initiative and independent reading and writing ability. Students enrolled in [High Honors the Advanced Placement level](#) should be capable of critically analyzing and evaluating additional independent readings and should write at an advanced level. Students enrolled in [High Honors the Advanced Placement level](#) have differentiated assessment on tests, quizzes and projects as well. Both levels of this course are eligible for dual enrollment; see the [Guidance Counseling](#) section for additional information.

**REAL WORLD SOCIAL STUDIES**

**Heterogeneous**

**Course #1310**

A primary objective of this course is to foster awareness and understanding of issues that will impact students' lives. The course often uses current events to inform the study of topics including but not limited to: college and career options, personal finance and responsible [spending budgeting](#), navigating the job and housing markets, psychology, sociology, economics, active citizenship within the local, state, and federal government, and national and world news and how events affect us. The diversity of topics and applications will also provide students the opportunity to discover possible interests as they think critically about their own lives and inform their post-graduate decisions and plans. Students will be guided and supported with varied resources and instructional strategies as they engage in inquiry and self-directed learning. Current events will also be examined as they arise in multiple contexts.

**SOCIOLOGY**

**Honors**

**Course # 1524**

Sociology is a study of the varied relationship between man and his society, and includes an analysis of current and changing social problems, exploration of similarities and differences between our own and other cultural groups, and development of awareness of the importance of human dynamics and interactions. Students selecting this course should have good reading comprehension skills. Sound verbal and written communication skills should also be present, as participation in class discussion and debate is an integral component of the class. Skills that will be developed in this course include analytical and critical thinking, inferential reading, sharpened inquiry techniques, and improved cooperative learning techniques through small group project experiences. This course is eligible for dual enrollment; see the [Guidance Counseling](#) section for additional information.

The Academic Achievement Center (AAC) offers a range of support services for regular education students. The support services provided are targeted to the students' individual needs, focusing on developing **foundational skills** and the learning and study strategies required for students to become efficient, effective, and independent learners. All students in the Academic Achievement Center will have their progress monitored and adjustments to their services will be made based on student's progress. Adjustments could include removal from the service, increasing the frequency of the service, or changing to another service.

Course Title	Course Number	Grade Level	Semester	# of Periods	Credits
Independent Directed Study	9991	9-12	All	2	1
<b>Academic Achievement Center AAC</b>	8801 (2.5) 8811(5)	9-12	All	2/4	2.5/5
<b>AAC Tutor AAC Scholar</b>	8841	9-12	ALL	2	2.5
<b>AAC Math Center</b>	<b>8831</b>	<b>9-10</b>	<b>All</b>	<b>2</b>	<b>2.5</b>

## ACADEMIC ACHIEVEMENT CENTER

Course #8801/#8811

**Prerequisite:** Approval must go through Director of Student Achievement.

AAC provides students with extra help on class work, support with organization and study skill development, reinforcement of course content, and additional MCAS support. Peer scholars work in the AAC to help students with material. Periodic consultations with classroom teachers and counselors comprise an important part of the program. ~~The Academic Achievement Center staff works with to develop the students the following skills:~~

- ~~Organization~~
  - ~~Organizing materials (class notes and handouts, homework assignments, project documents)~~
- ~~Recording~~
  - ~~Recording homework~~
  - ~~Note-taking in class.~~
  - ~~Deliberate scheduling of component tasks~~
- ~~Self-regulation~~
  - ~~Completion of homework~~
  - ~~Persistence through challenging tasks~~
  - ~~Completion of planned tasks~~
- ~~Success Strategies~~
  - ~~Submission of homework~~
  - ~~Engaged participation, identification of misunderstanding and misconceptions, asking questions~~
  - ~~Methods for successful work (active studying techniques, using graphic organizers and other tools, accessing support)~~

**AAC MATH CENTER****Course #8831****Prerequisite: Faculty recommendation required. Must be approved by Director of Student Achievement**

For students who are new to the district or students who have struggled on past standardized test will be AAC Math Center. AAC Math Center staff analyzes students' standardized assessment scores areas of weakness. Materials used by the student during this course will be focus to strengthen areas shown to be student weakest.

**AAC TUTOR****Course #8841****Prerequisite: Application and interview required.**

Peer Tutors are selected based on academic skill, demonstration of leadership, demonstration of character, and the ability to communicate well with others. Tutors are expected to have extensive knowledge of the subject they have signed up to tutor and the ability to communicate that knowledge to their peers.

-

Peer tutors are viewed as academic student leaders and are significant contributors to the Academic Achievement Center. We believe Peer Tutors provide wonderful motivation for learning and act as a role model to their fellow peers. Peer tutors will work on a 1:1 basis or in small group sessions to answer questions on course content and to provide study strategies to prepare for upcoming exams.

**AAC SCHOLAR****Course #8841****Prerequisite: Faculty or Peer recommendation. Must be approved by Director of Student Achievement**

New in 2018, this program provides an opportunity for students to take a peer leadership role in the Academic Achievement Center at the High School. High achieving students with strong student skills are invited to participate based on recommendations. Scholars are expected to actively impact the atmosphere of the AAC classroom through positive role-modeling, speaking and lifting up, and active leadership. Scholars work with AAC Teachers to identify, enact, and reflect upon their leadership.

**INDEPENDENT DIRECTED STUDY****Course #9991****Prerequisite: Faculty recommendation required. Must be approved by Director of Student Achievement**

Students who work independently on their organization and homework can use directed study as time in their day to complete these tasks. Student progress will be monitored to ensure students success. If students are not successful and able to work independently adjustments to their schedule will be made, to a more intensive academic intervention.

# English As A Second Language

Mrs. Carrie Powers, ELL Program Administrator  
(781) 275-7706 ext. 4862

Course Title	Level	Course Number	Grade Level	Semester	Credit
English as a Second Language	College Prep	7552	9-12	All	2.5

**ENGLISH AS A SECOND LANGUAGE****College Prep****Course #7552**

ESL is a skills-based course that provides English Language Learners with explicit instruction in the skills they need to become proficient in reading, writing, listening, and speaking the English language. A variety of materials are used to sharpen these skills such as short stories, novels, interactive websites, writing prompts, class discussions, and oral presentations. Students build their English vocabulary and understanding by being exposed to comprehensible English material that is appropriate to their English proficiency level.

# Reading

**Dr. Jennifer Rabold, Literacy Program Administrator**  
**(781) 275-7706 ext. 4539**

Course Title	Course Number	Grade Level	Semester	Credit
Reading Elective	0912/0913	9-12	All	2.5
Individualized Reading	0952	9-12	All	2.5
Word Study	0902	9-12	All	2.5
Reading for College	0943	9-12	All	2.5

**READING ELECTIVE****Course # 0902****Prerequisite: None**

This course is designed as an individualized program for students who want to improve their reading and study skills. A program is planned for each student based upon his/her expressed need, test results, and teacher diagnosis. Students are taught skills and strategies for fluency, word recognition, vocabulary, reading comprehension, and study skills. Content area coursework is used so that students get academic support while also acquiring reading skills and strategies. Students needing MCAS support will be given preparation for the MCAS. (Grades 9 – 10)\*

**READING STRATEGIES FOR COLLEGE****Course # 0943****Prerequisite: Appropriate screenings and reading assessments or Recommendation of Secondary Literacy Administrator**

The purpose of the Reading Strategies class is to provide direct instruction in reading strategies to students reading below grade level, with a focus on reading comprehension and vocabulary. Being an active reader, understanding the structure of fiction and nonfiction text, summarizing, determining importance, identifying main ideas and themes, making inferences and connections, understanding author's craft, and vocabulary development are the main components of this intervention. In addition, this course will infuse fluency work and advanced instruction in word attack skills as needed. During the year, students will practice monitoring their comprehension and selecting "just right" texts, increase their reading stamina, and practice applying reading skills and strategies during independent reading. In addition to whole class instruction, students will receive individual feedback and support with applying skills and strategies during student-teacher conferencing. This is a tier 2 intervention. This course is a popular course for 9th grade students designed to provide them with the study skills, reading skills and reading strategies that they will need in high school and college. The course is designed to improve comprehension and vocabulary skills while also offering, on an as-needed basis, classroom support for content area course work. Students are given life-long skills in studying and reading as well as time for independent reading. Reading



comprehension skills include strategies for understanding complex text as well as summarizing and interpreting; vocabulary skills include Greek and Latin derivatives.

### **INDIVIDUALIZED READING**

**Course # 0952**

**Prerequisite:** Appropriate screenings and reading assessments or Approval of Special Education Program Administrator

This course is offered to those students who need intensive specialized reading instruction and who lack one or more of the basic skills needed to be fluent readers and writers.

### **WORD STUDY**

**Course # 0902**

**Prerequisite:** Appropriate screenings and reading assessments or Recommendation of Guidance Director or Special Education Program Administrator

This course is for students who have difficulty decoding and spelling words at grade level and/or want to improve their reading fluency. The program is designed to teach students flexible strategies for decoding multi-syllabic words and to increase their oral and silent reading fluency. As a result of participation in this program, students will experience increased comprehension of content area reading assignments as their accuracy and fluency improve and will ultimately have more confidence in their reading ability.

## **Special Education Department**

**Ms. Michelle DellaValle, Special Education Program Administrator  
(781) 275-1700 ext. 4424**

Bedford High School offers an array of special education services to meet the individualized needs of diverse learners. [Services are determined through the special education process as dictated by state and federal regulations.](#) Please contact [Fay Backert](#), [Michelle DellaValle](#), Program Administrator, for specific questions about services. ~~Individual course descriptions are available in the special education office.~~ [A Continuum of Services is available for viewing on the district website or in paper copy in the central special education office.](#)

---

## **Additional Course Offerings**

### **LIBRARY INTERN**

**Pass / Fail 2.5 Credits**

**Course # 07501**

**Prerequisite:** Interview with librarian and approval

This course is a hands-on application of library and makerspace operations in a school setting. Students will complete and maintain ongoing projects related to the Fab Lab (makerspace), including 3D printer, vinyl cutter, and audio visual equipment. Interns in this program will support students and staff on using and troubleshooting makerspace technology. In addition to technology, Interns will support the librarian in promoting the library through social media and other outreach, encouraging student engagement in the library, and helping to maintain a creative and inspiring space. Application for this course *requires* an interview. Background in 3D printing, design software, and Google Drive applications is preferred.

**TECHNOLOGY INTERN****Pass / Fail 2.5 Credits****Course # 2901**

Prerequisite: Program Administrator's approval

This course trains students to work in the iPad Support Center. Technology Interns will provide iPad assistance to Bedford High School students, teachers and administrators. They will troubleshoot technical issues and provide training for effective use of the iPad, including iPad management and educational uses of specific apps.

Technology Interns will also assist with the creation of a digital library that will house a variety of technology resources.

**SCHOOL TO CAREER****Unleveled****Course #6003**

**Prerequisite: Grade 12 students only, by counselor recommendation. Approval of Guidance Director of Counseling Required**

School to Career is designed to support both seniors who are planning to go directly to work after high school and seniors who want to use a part-time job during senior year as a way to explore future possible careers. Typically, students find their own jobs. Schoolwork for the class will focus both on skills involved in searching for and keeping a job and on career exploration. This course is offered pass/fail.

## Senior Culminating Project

If you want to invent and construct your own musical instrument, write and produce a film or play, design and show your own line of clothing, study how sports mirror the broader society, or work on any sort of project that challenges you to apply what you already know even as you expand your knowledge and repertoire of skills, Senior Culminating Project may be for you. This course is designed for students who wish to define and explore a new area of interest, or extend another class or extracurricular project, and who have the maturity and motivation to handle college level independence.

During the first quarter of the year, students will complete various reading and writing assignments, as well as individually check in and work with the teacher to develop the essential questions that will guide their individual work. During this time, students will zero in on specific information they hope to learn and how to structure the year ahead. After the first quarter, students will take on increased responsibility for using their class time productively and more independently. Upon obtaining parent permission, students may use their Senior Project periods to work outside of school if the student and teacher deem this useful and appropriate. Students are required to contact professionals in their field of interest to broaden their understanding, and are strongly encouraged to use hands-on experiences and internships to support their learning.

Throughout the year, the class will communicate via online forums to share progress and ideas. In May, students will be expected to present their findings to an audience of their peers. Each 15-20 minute presentation will communicate a rationale for the student's topic, the process behind their work, what the student learned, and will also include some sort of tangible product.

Students interested in this course must schedule an advisory meeting with the Program Director in June prior to their senior year; students are expected to attend this meeting ready to discuss a tentative idea. Students may piece together this course as a minor or major during any blocks that are convenient to their schedule.

**(Offered for both 2.5 and 5 Credits)**

**Minor****College Prep****Course # 6033**

**Major**

**College Prep**

**Course # 6043**