BEDFORD HIGH SCHOOL PROGRAM OF STUDIES 2015-2016



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 Study | 4 |
|---|-------|
| Academic/Social/Civic Expectations | 4 |
| Graduation Requirements | 5-6 |
| Course Offerings/Level Descriptions | 7 |
| Guidance and Counseling Program and Services | 8-11 |
| Air Force Junior ROTC | 12-13 |
| Art Department | 14-18 |
| English Department | 19-25 |
| Foreign Language Department | 26-34 |
| Mathematics Department/Computer Science Courses | 35-43 |
| Music and Theater Arts Department | 44-47 |
| Occupational Education Courses | 48-53 |
| Physical Education and Health Department | 54-55 |
| English as a Second Language Courses | 56 |
| Reading Courses | 57-58 |
| Science Department | 59-63 |
| Academic Support Center | 64 |
| Social Studies Department | 65-69 |
| Special Education Department | 70 |
| Additional Course Offerings | 70-71 |

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 guidance counselor about your plans for your schedule and ask your 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 problem 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

SUBJECTS REQUIRED FOR GRADUATION

| 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 | Foundations of America, Modern World History, and Modern America required. | | |
| * Foreign Language | 2 Years | 10 Credits | Two years of the same language required. | | |
| Art | | 2.5 Credits | Humanities may be taken fulfill Art Requirement | | |
| Music and Theater Arts | | 2.5 Credits | Humanities may be taken fulfill Music and Theater Arts Requirement | | |
| Occ. Ed. | | 2.5 Credits | Computer science courses meet Occ. Ed. Graduation requirement | | |
| Physical Ed. | 4 Years | 10.0 Credits | Must include 2 years of Health and Fitness Concepts | | |
| A total number of 124 credits needed for graduation | | | | | |

 Many private and public four-year colleges and universities typically require four years of these subjects (Social Studies, Science and Foreign Language)

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)
 - o Regular participation in athletics ninth through eleventh grades
 - o Completion of a junior year elective other than "Sports Activities"
 - o Completion of the health education requirement

STUDENTS ARE RESPONSIBLE FOR KNOWING THE NUMBER OF CREDITS THEY HAVE EARNED

NUMBER OF CREDITS NEEDED TO MOVE TO THE NEXT GRADE

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

GRADE SCALE

Un-weighted Grade Point Average:

| A+ | 97-100 | 4.4-4.7 |
|----|--------|---------|
| Α | 93-96 | 4.0-4.3 |
| A- | 90-92 | 3.7-3.9 |
| B+ | 87-89 | 3.4-3.6 |
| В | 83-86 | 3.0-3.3 |
| B- | 80-82 | 2.7-2.9 |
| C+ | 77-79 | 2.4-2.6 |
| С | 73-76 | 2.0-2.3 |
| C- | 70-72 | 1.7-1.9 |
| D+ | 67-69 | 1.4-1.6 |
| D | 63-66 | 1.0-1.3 |
| D- | 60-62 | 0.7-0.9 |
| | | |

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.

SIXTH MAJOR

Students who want to take a sixth major must meet with their guidance counselor to discuss the decision and must receive written permission.

COURSE OFFERINGS

The course offerings described in this Program of Studies specify the course number, the number of credits to be earned and the level of the course. There is also a brief description of the course content and expectations.

COURSE LEVELS

Introductory (I)

These are skill builder courses designed to support students in developing skills needed to succeed in school. These courses are smaller and feature structured instruction to develop organizational skills, comprehension skills, and analytical skills. Courses are often team taught and supported by learning center or special education teachers.

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/Advanced Placement (HH/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 are so designated in their titles and approved by the College Board. Teacher recommendations and/or departmental approval may be required prior to enrollment.

GUIDANCE AND COUNSELING PROGRAM AND SERVICES

The goal of the Guidance Department is to support all students' academic success and socio-emotional development throughout all four years of high school.

| • | 9 th Grade Freshman | Orientation/Transition |
|---|--------------------------------|-----------------------------------|
| | September | Orientation Groups with Counselor |

November Introduction to Naviance

March Course Selection Group Meeting

• 10th Grade Sophomores

omores Career Guidance and Self Awareness per Individual Meetings with counselors

September Individual Meetings with counseld

o October PSAT Testing

FebruaryMarchHealthy Relationships in Health ClassCourse Selection Group Meeting

April Career Search

• 11th Grade Juniors

Post-secondary Planning

o Sept-Dec College Representatives Visit BHS during Lunch and X-Blocks

October
 PSAT Testing

January
 College and Career Planning Evening Program
 January
 College Planning Details and SAT/ACT Registration #

o March Course Selection Group Meeting and Recommendation

Selections #2

o Marcho AprilBHS College Fair Evening Programc College and Career Planning #3

• 12th Grade Seniors

Transitions and Decision Making

o September Post-Secondary Planning for Parents and Students

Sept-Dec
 College Representatives Visit BHS during Lunch and X-Blocks

September Post-Secondary Small Group Meetings

November Financial Aid Evening Program

o March CSF Scholarship Application Information Session

April Review of Graduation Expectations

COMMUNICATION FROM GUIDANCE

- Email through Aspen Account
- BHS Announcements
- Monthly Guidance Bulletin
- Remind-text and email for specific grade
- Goal for 2015 to reduce mailings home

| Amie Capodanno, | Director of Guidance 781-275-1700, | ext. 1135 |
|-------------------|------------------------------------|-----------|
| Charles Alperin, | School Adjustment Counselor | ext. 1137 |
| Brian DeChellis, | Counselor | ext. 1132 |
| Karen Ford, | Counselor | ext. 1133 |
| Janel Halupowski, | Counselor | ext. 1134 |
| Alison Lohrum, | Counselor | ext. 1136 |
| Kristen Milano, | Counselor | ext. 1139 |
| Marge Harris, | Secretary | ext. 1131 |
| Kristin Ferrari, | Secretary | ext. 1130 |

COURSE SELECTION PROCESS

The course selection 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 selection 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.
- In March, Guidance counselors meet with students in small groups to inform students about available courses and to guide students in the course selection process. Students input their choices and then have time at home to review their course choices with their parents.
- In February, Bedford High School also sponsors 8th Grade Parents' Night to welcome parents and their sons or daughters to Bedford High and to learn more about our courses of study.

COURSE APPEAL PROCESS

Teachers make course placement recommendations based upon their knowledge of the student's achievement, academic strength, and motivation. Our experience demonstrates that a high percentage of overrides later result in course or level change reversals, which are often quite disruptive to the student's schedule. The override process should therefore be considered seriously. There is, however, a process for resolution in the infrequent cases when aspirations of students and parents conflict with the professional recommendations of the counselors and teachers. To request an override, the parent must adhere to the following procedure:

- 1. Obtain a "Level Change Request Form" from either the middle or high school counseling office or print from the BHS Guidance web page. The form asks for both student and parent to state reasons for the change.
- 2. Complete and submit the form to the mailbox of the appropriate program administrator in the high school student office no later than the April 13 deadline.

3. The appropriate Program Administrator will act upon the request and will contact the parent by phone or e-mail regarding the decision. If the placement appeal is granted, no change will be allowed out of the new class prior to the end of quarter one. If the student moves to the class originally recommended, the student's quarter one grade will be carried without adjustment to that course.

COURSE CHANGE PROCEDURE

Once school has begun, students may change 2.5 credit courses or 5 credit courses to a different course, if there is room, the course makes sense and the change does not disrupt the larger schedule, up to one week after the posting of First Quarter Interim grades. This time frame enables students, teachers and parents to make informed course and placement decisions. After this time, moves may only be made through the discretion of the Principal, Program Administrator, and Guidance Director. Through the end of second quarter, students, if a class is either too difficult or too easy, with agreement of the sending teacher and PA, may move to a lower or higher level of the same course if the class has room and if it works in the student's schedule.

ARENA DAY

To help facilitate the schedule change process for students at Bedford High School, the BHS guidance department holds Arena Day at the end of August prior to the start of school. All guidance counselors, program administrators and directors are present to assist students and sign off on any changes. This process will better enable students to begin school with a schedule they are comfortable with to fulfill graduation requirements. Priority will be given to students who require major changes to their schedules.

DUAL ENROLLMENT

Dual enrollment is a partnership between the Middlesex Community College and Bedford High School, providing students the opportunity to take college 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 guidance counselor to learn what courses are offered.

Requirements to take Dual Enrollment Classes:

- Grade Point Average of 2.0
- 10th grade reading level and able to complete a 5 paragraph essay
- Take the Accuplacer, a placement exam. Exam will take place at BHS
- Complete Dual Enrollment application
- Complete Middlesex Community College registration form

GPA AND CLASS RANK

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.

CLASS RANK

Bedford High School only reports class rank upon student request.

AIRFORCE JUNIOR ROTC PROGRAM

JROTC Instructors:

CMSgt Christopher Edris, USAF (Ret)

Room E-206 Phone: (781) 275-1700 ext. 5206

| Course Title | Level | Course Number | Grade Level | Semester | # of Periods | Credits |
|-----------------------|--------------|------------------|-------------|----------|--------------|---------|
| Aerospace Science I | College Prep | 8913 | 9-12 | All | 4 | 5 |
| Aerospace Science II | College Prep | 8923 | 9-12 | All | 4 | 5 |
| Aerospace Science III | College Prep | 8933 | 9-12 | All | 4 | 5 |
| Aerospace Science IV | College Prep | 8943 | 9-12 | 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 progressive 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. These courses are designed to 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, marksmanship training, Drill Team, and Color Guard. The course is open to all male and female students. Uniforms and books are supplied to each student without charge. All cadets are eligible to 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 to enrollment and students may join the program during any year.

AEROSPACE SCIENCE I College Prep Course # 8913

Prerequisite: None

Aerospace Science I covers the Discovery, History and Development of Flight. Students will develop a basic understanding of the evolution of aviation and the development and use of the various type of aircraft employed by the military and civil aviation. Leadership units cover Introduction to AFJROTC, Good Followership, Personal Development Skills, and Health Awareness. Skills will be developed in elementary flight drill, and basic facing movements as well as development of habits of orderliness and precision.

AEROSPACE SCIENCE II College Prep Course # 8923

Prerequisite: Aerospace 1 and permission of Senior Instructor

Aerospace Science II 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 covers Effective Communication, Understanding Individual and Group Behavior, and Leadership Skills. Each student develops skills in elementary squadron drill. The students will also become familiar with basic theories of meteorology and the technology of rocketry and spaceflight.

AEROSPACE SCIENCE III College Prep Course # 8933

Prerequisite: Aerospace II and permission of Senior Instructor

Aerospace Science III covers in-depth the Space Environment, Space Programs, and Manned Space flight. Leadership training emphasizes Life Skills, preparing students for life after high school in the high-tech, globally oriented, and diverse workplace of the 21st century. Areas of study will include financial management, college selection and financing, job search and life-long professional development. The students are put into positions of increased responsibility and assist in the everyday operation of the cadet group. All Leadership 3 cadets will also study at least one of the following: Laboratory Manual, Geography, or Survival.

AEROSPACE SCIENCE IV College Prep Course # 8943

Prerequisite: Aerospace III and permission of Senior Instructor

Aerospace Science IV offers two options for the Aerospace Science Instructor to teach - Option 1 is Management of the Cadet Corps, Option 2 is Honors Program for Ground School. Leadership courses cover Introduction to Management, Managing Things and Ideas, Citizenship, and Ethics. Skills are also developed in complete drill of a squadron. Students will assume positions of leadership and be responsible for the daily operation of the cadet group.

ART DEPARTMENT

Mrs. Aleta Devaney

Art Program Director

275-1700 ext. 4195

Art Graduation Requirement: 2.5 Credits

| Course Title | Level | Course Number | Grade Level | Semester | # of Periods | Credits |
|--------------------------|--------------|------------------|-------------|----------|--------------|---------|
| Art I (Minor) | College Prep | 7112 | 9-12 | All | 2 | 2.5 |
| Art I (Major) | College Prep | 7123 | 9-12 | All | 4 | 5 |
| Art II (Minor) | College Prep | 7212 | 10-12 | All | 2 | 2.5 |
| Art II (Major) | College Prep | 7223 | 10-12 | All | 4 | 5 |
| Art III (Minor) | College Prep | 7313 | 11-12 | All | 2 | 2.5 |
| Art III (Major) | College Prep | 7324 | 11-12 | All | 4 | 5 |
| Art IV (Minor) | College Prep | 7424 | 12 | All | 2 | 2.5 |
| Art IV (Major) | Honors | 7425 | 12 | All | 4 | 5 |
| Photography I (Minor) | College Prep | 7043 | 9-12 | All | 2 | 2.5 |
| Photography II (Minor) | College Prep | 7053 | 11-12 | All | 2 | 2.5 |
| Photography II (Major) | College Prep | 7054 | 11-12 | All | 4 | 5 |
| Photography III (Minor) | College Prep | 7063 | 12 | All | 2 | 2.5 |
| Photography III (Major) | College Prep | 7064 | 12 | All | 4 | 5 |
| Art Explorations (Minor) | College Prep | 7413 | 12 | All | 2 | 2.5 |
| Art Explorations (Major) | Honors | 7414 | 12 | All | 4 | 5 |
| Digital Art I-(Minor) | College Prep | 7072 | 9-12 | All | 2 | 2.5 |
| Digital Art II (Minor) | College Prep | 7093 | 10-12 | All | 2 | 2.5 |
| Digital Art II (Major) | College Prep | 7094 | 10-12 | All | 4 | 5 |
| Digital Art III (Minor) | College Prep | 7463 | 11-12 | All | 2 | 2.5 |
| Digital Art III (Major) | College Prep | 7473 | 11-12 | All | 4 | 5 |
| Ceramics I (Minor) | College Prep | 7012 | 9-12 | All | 2 | 2.5 |
| Ceramics II (Minor) | College Prep | 7023 | 10-12 | All | 2 | 2.5 |
| Ceramics II (Major) | College Prep | 7024 | 10-12 | All | 4 | 5 |
| Ceramics III (Minor) | College Prep | 7033 | 11-12 | All | 2 | 2.5 |

| Ceramics III (Major) | College Prep | 7034 | 11-12 | All | 2 | 2.5 |
|--------------------------------|--------------|------|-------|-----|---|-----|
| Ceramics IV (Minor) | College Prep | 7083 | 12 | All | 2 | 2.5 |
| Ceramics IV (Major) | Honors | 7084 | 12 | All | 4 | 5 |
| Art, Ceramics, Photo Intern | College Prep | 7011 | 10-12 | All | 2 | 2.5 |

ART I (Minor) College Prep Course # 7112 (Major) 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, ceramics, principles of photography, 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. Objectives will also stress exploration and discovery as an integral part of the creative process. Students will be encouraged to work at their own level in an open-studio environment to develop a personal voice.

ART II (Minor) College Prep Course # 7212 (Major) 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) College Prep Course # 7313 (Major) 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) College Prep Course # 7424
(Major) Honors 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 student's 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.

Photography I (Minor) College Prep Course # 7043
Prerequisite: None

With the advent of digital tools such as iPads, smart phones, and digital cameras of all description, we are more surrounded by photographs, and more of us take photographs regularly, than perhaps ever before. 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. For the purposes of the class, we will concentrate on mastering a type of film camera -- the 35mm SLR (single lens reflex) camera -- that several generations of professional and amateur photographers have found extremely versatile and useful as a tool both for documenting the world and for expressing oneself. Our emphasis throughout will be as much on artistry and expression as on technique: we will continually explore the kinds of choices that we are able to make when we use the camera. Through active participation in this course, you'll gain a good working understanding of how to use various camera controls to achieve particular visual effects. You'll also gain a hands-on understanding of what it means to use photography as an artistic medium, to convey or explore ideas, moods, and themes. The lessons you learn, even as we use film-based (darkroom) photography as our main medium, will be transferable to the world of digital photography, and this course will help you to put photography, as both a technology and an art form, into context.

Photography II (Minor) College Prep Course # 7053
(Major) Course # 7054

Prerequisite: Completion of Photography I with a grade of 80 or better.

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) College Prep Course# 7063
(Major) Course# 7064

Prerequisite: Completion of Photo II with a grade of 85 or better.

This course is intended to give committed and competent photography students a further opportunity to explore and to make individual artistic statements through the medium of photography. New topics and techniques will be introduced, and familiar ones will be revisited. 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.

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 <u>of</u> <u>Mentoring Teacher and Art Program Director</u>. Students must also have a minimum grade of 90 in previous art courses and 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.

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 Director of Art, 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.

Digital Art I (Minor) College Prep Course #7072

Prerequisite: None

We live in a world of visual images, and many of these images are digital. Countless images come to us via our various screens; likewise, many of the images that amuse, perplex, impress, or move us have been created (and/or enhanced) with digital tools. 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 markmaking and drawing, along with some limited 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) College Prep Course #7093
(Major) Course #7094

Prerequisite: Completion of Digital Art I with a grade of 80 or better.

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.

Digital Art III (Minor) College Prep Course #
(Major) Course #

Prerequisite: Completion of Digital Art II with a grade of 80 or better.

"Digital Art" is a broad term encompassing everything from highly sophisticated renderings to videos to collages to interactive computer art. 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; design of interfaces (exclusive of actual programming!) 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). Another shared learning experience will target students' abilities to make choices between alternative digital methods for carrying out various artistic tasks. This activity will also involve students in making work that involves multiple programs or apps.

Ceramics I (Minor) College Prep Course # 7012

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.

Ceramics II (Minor) College Prep Course # 7023 (Major) Course # 7024

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.

Ceramics III (Minor) College Prep Course # 7033 (Major) Course # 7034

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.

Ceramics IV (Minor) College Prep Course # 7083 (Major) Honors Course # 7084

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.

ENGLISH DEPARTMENT

Ms. Mary Lou Sallee, English Program Administrator 781-275-1700 ext. 2400

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 |
| American Perspectives | Introductory | 0302 | 11 | All | 4 | 5 |
| American Perspectives | College Prep | 0303 | 11 | All | 4 | 5 |
| American Perspectives | Honors | 0304 | 11 | All | 4 | 5 |
| American Perspectives | High Honors | 0305 | 11 | All | 4 | 5 |
| British Literature | Introductory | 0402 | 12 | All | 4 | 5 |
| British Literature | College Prep | 0403 | 12 | All | 4 | 5 |
| British Literature | Honors | 0404 | 12 | All | 4 | 5 |
| British Literature | High Honors | 0405 | 12 | All | 4 | 5 |
| Humanities | Honors | 0414 | 12 | All | 4 | 5 |
| Humanities | High Honors | 0415 | 12 | All | 4 | 5 |
| Global Voices | Introductory | 0422 | 12 | All | 4 | 5 |
| Global Voices | College Prep | 0423 | 12 | All | 4 | 5 |
| Global Voices | Honors | 0424 | 12 | All | 4 | 5 |

| Global Voices | High Honors | 0425 | 12 | All | 4 | 5 |
|--------------------------------|--------------|------|-------|-----|---|-----|
| Expository Writing | College Prep | 0563 | 11-12 | All | 2 | 2.5 |
| African American Studies | College Prep | 0613 | 11-12 | All | 2 | 2.5 |
| Asian American Studies | College Prep | 0653 | 11-12 | All | 2 | 2.5 |
| Creative Writing | College Prep | 0543 | 9-12 | All | 2 | 2.5 |
| Continuing Creative Writing | College Prep | 0553 | 9-12 | All | 2 | 2.5 |
| Drama | College Prep | 8713 | 9-12 | All | 2 | 2.5 |
| Honors Drama | Honors | 8724 | 10-12 | All | 2 | 2.5 |
| Film Analysis | College Prep | 0533 | 9-12 | All | 2 | 2.5 |
| Continuing Film Analysis | College Prep | 0583 | 9-12 | All | 2 | 2.5 |
| Journalism | College Prep | 0623 | 9-12 | All | 2 | 2.5 |
| World Mythology | College Prep | 0593 | 9-12 | All | 2 | 2.5 |
| Writing Lab | College Prep | 0633 | 9-12 | 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 www.bedford.k12.ma.us.

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 [I10] 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 10th 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 10th 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 10th 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 10th grade MCAS examination and other such assessments.

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.

AMERICAN PERSPECTIVES High Honors 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.

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.

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.

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.

SENIOR ENGLISH LEVELING

British Literature and Global Voices blend high honors and honors, and college prep and introductory. Instruction and assessment are differentiated within each of the courses. The Humanities course blends high honors and honors; it is not offered at the college preparatory level.

SENIOR ENGLISH MAJOR COURSES

All three senior English courses, British Literature, Global Voices, and Humanities, incorporate literature from various perspectives and genres, both around the world and across the ages. 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. Guided by such essential questions as "What does it mean to be human?" or "How does perspective shape and alter truth?" each course culminates in a project that incorporates in varying degrees research, synthesis, and a creative component connected to an essential question of the course.

BRITISH LITERATURE

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.

| BRITISH LITERATURE | High Honors | Course # 0405 |
|--------------------|--------------|---------------|
| BRITISH LITERATURE | Honors | Course # 0404 |
| BRITISH LITERATURE | College Prep | Course #0403 |
| BRITISH LITERATURE | Introductory | Course # 0402 |

GLOBAL VOICES

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.

| GLOBAL VOICES | High Honors | Course # 0425 |
|---------------|--------------|---------------|
| GLOBAL VOICES | Honors | Course # 0424 |
| GLOBAL VOICES | College Prep | Course #0423 |
| GLOBAL VOICES | Introductory | Course # 0422 |

HUMANITIES

Note: The Humanities course may be used to meet the Art/Music graduation requirements.

This course considers some of the most important and enduring questions facing human beings, and will look at how such questions are posed, and sometimes answered, in literature, music, and the visual arts. The course takes a broadly chronological approach, focusing on particularly rich and formative moments in culture and the arts, and/or on periods when the interrelationships between literature, music, and visual art were especially

significant. Study begins with the Medieval period and continues up to the present. In addition to analyzing works of art, students will have multiple opportunities to do creative and expressive work, culminating in an end-of-year creative project.

HUMANITIESHigh HonorsCourse # 0415HUMANITIESHonorsCourse # 0414

ENGLISH ELECTIVE COURSES

English elective courses do not satisfy the English graduation requirement

HONORS EXPOSITORY WRITING Honors

Course #0564

Prerequisite: Junior or Senior with teacher or PA recommendation.

This course is designed for students who would like to develop a more versatile style and distinctive voice in their analytic writing. It will focus on advanced literary analysis and close reading specific to successful performance on the AP English Literature Exam given in May. It is expected that students enrolled in the course will have a record of strong performance in their English classes and will plan to take the AP exam.

AFRICAN AMERICAN STUDIES

College Prep

Course #0613

Prerequisite: open to students who have taken or are currently enrolled in American Perspectives
Using fiction, non-fiction, film, and online sources, students will examine the experience of people of African descent and investigate their impact on America and, conversely, the impact life in America has had on them. One of the goals of the class is to supplement the existing curriculum taught in American Perspectives and American History.

ASIAN AMERICAN STUDIES

College Prep

Course #0653

Prerequisite: open to students who have taken or are currently enrolled in American Perspectives

Using fiction, non-fiction, film, 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. One of the goals of the class is to supplement the existing curriculum taught in American Perspectives and American History.

CREATIVE WRITING College Prep

Course # 0543

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.

CONTINUING CREATIVE WRITING College Prep

Course #0553

This course gives those students who wish to take Creative Writing a second time the opportunity to do so.

DRAMA College Prep Course # 8713

Prerequisite: None

Drama serves as an introduction to stage and theater terminology, character development, blocking, direction, and playwriting. Students will learn acting and directing techniques through hands-on activities such as improvisation and group and individual performances.

HONORS DRAMA Honors Course # 8724

This course is designed for the student who has taken Drama or has had some experience with the theater, whether in acting or production. Students must take on additional responsibilities and assume a leadership role within the class.

FILM ANALYSIS College Prep Course # 0533

Prerequisite: None, but it is recommended that students 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.

CONTINUING FILM ANALYSIS

College Prep

Course #0583

This course gives those students who wish to take Film Analysis a second time the opportunity to do so.

JOURNALISM College Prep Course #0623

Prerequisite: None

This course provides a hands-on opportunity for students to learn the style of newswriting. Students will learn practical journalism: how to write an ethical news story, gather information, interview effectively, and write professional and direct news stories. Students will be able to join the staff of the BHS student newspaper *The Lookout*, which invites students to write, edit, and produce newsworthy features ranging from sports, arts, and opinion pieces, to photojournalism. Students will gain experience in advertising and fundraising as well as copy editing and layout for a major publication. This minor course requires significant writing and some homework.

WORLD MYTHOLOGY, FOLKLORE, AND LEGEND College Prep

Course #0593

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 College Prep Course # 0633

Prerequisite: Recommendation from English teacher or Guidance Department

This course provides freshmen and sophomores with expository writing support in terms of organization and the writing process. 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. It is strongly recommended for students who seek additional help with the MCAS-Language Arts test required for high school graduation.

FOREIGN LANGUAGE DEPARTMENT

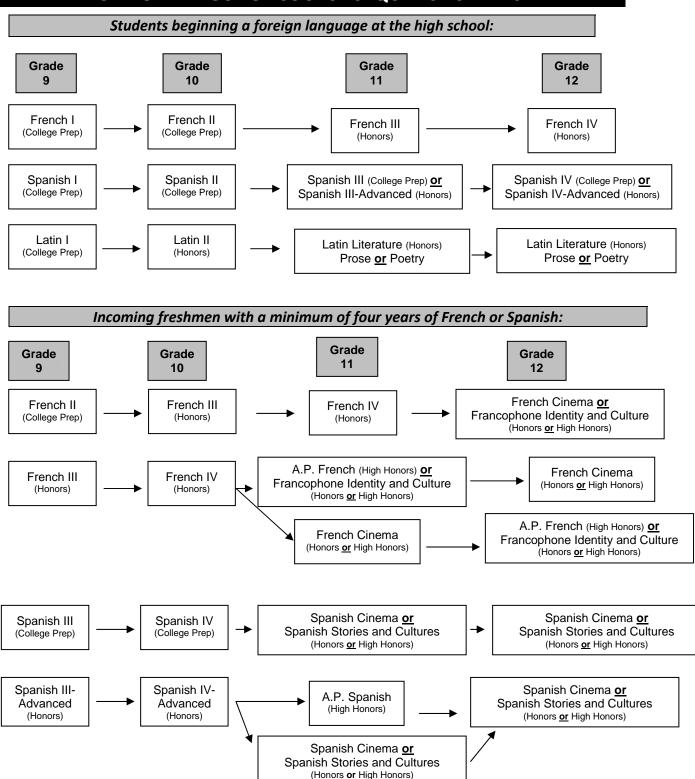
Mrs. Barbara Barnett, Foreign Language Program Administrator (781) 275-1700, ext. 5500

Foreign 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 | High Honors | 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 |
| Spanish Cinema | Honors High Honors | 4354 4355 | 11-12 | All | 4 | 5 |
| Spanish Stories & Cultures | Honors High Honors | 4364 4365 | 11-12 | All | 4 | 5 |
| A.P. Spanish - Language | High Honors | 4375 | 11-12 | All | 4 | 5 |
| Latin I | College Prep | 4213 | 9-12 | All | 4 | 5 |
| Latin II | Honors | 4224 | 10-12 | All | 4 | 5 |
| Latin Literature: Prose | Honors | 4254 | 11-12 | All | 4 | 5 |
| Latin Literature: Poetry | Honors | 4264 | 11-12 | All | 4 | 5 |

On the following page is a description of possible courses of study within Foreign Language.

FOREIGN LANGUAGE COURSE SEQUENCE CHARTS



- Summer Work involves completing self-paced online assignments.
- Since courses at different levels are distinguished by both content and depth of coverage of the various topics, students wishing to move up a level in French or Spanish must complete a review packet in order to do so and have teacher recommendation.
- Both A.P. Courses, A.P. French and A.P. Spanish, must have both teacher and program administrator approval.

PLEASE CHECK ALL COURSE DESCRIPTIONS FOR PREREQUISITES

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:

- Successful completion of French I with a grade of 70* or better; or
- Incoming freshmen with a minimum of four years of French with a grade between 70 and 79; and/or
- Teacher recommendation.
 - Students moving from French I to French II with a grade between 60 and 69 will have to complete summer work in order to do so and have 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:

- A final grade of 70 or better in French II; or
- · Incoming freshmen with a minimum of four years of French with a grade of 80 or better; and/or
- 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:

- Completion of French III with a final grade of 70 or better; and/or
- 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

- This course is only offered on school years ending with an odd number (2017, 2019...)
- 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 administrator before completing their class request form.

Prerequisite: For Honors:

- Successful completion of French IV with a grade of 70 or better; or
- Successful completion of Francophone Identity and Culture (Honors) with a grade of 70 or better;
- and/or Teacher recommendation.

Prerequisite: For High Honors:

- Completion of Francophone Identity and Culture (High Honors) with a grade of 70 or better; or
- Completion of A.P French with a grade of 70 or better;
- and/or Teacher recommendation.

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

• This course is only offered on school years ending with an even number (2016, 2018...)

Prerequisite: For Honors:

- Completion of French IV with a grade of 70 or better; or
- Completion of French Cinema (Honors) with a grade of 70 or better;
- and/or Teacher recommendation

Prerequisite: For High Honors:

- Completion of French IV or French Cinema (Honors) with a grade of 85 or better; or
- Completion of French Cinema (High Honors) with a grade of 70 or better; and/or
- and/or Teacher recommendation.

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

High Honors

Course #4175

- This course is only offered on school years ending with an even number (2016, 2018...)
- THIS IS A COLLEGE LEVEL COURSE

Prerequisite:

- Completion of French IV with a final grade of 90 or better; or
- Completion of French Cinema (High Honors) with a final grade of 90 or better;
- AND/OR Teacher and Program Administrator recommendations.

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 <u>first time</u>. 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:

- Successful completion of Spanish I with a grade of 70* or better; and/or
- Teacher recommendation.
 - O Students moving from Spanish I to Spanish II with a grade between 60 and 69 will have to complete summer work in order to do so and have 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:

- Successful completion of Spanish II with a grade of 70* or better; or
- Incoming freshmen with a minimum of four years of Spanish with a grade between 75 and 89 and a score in the 80th percentile in the Diagnostic Exam; and/or
- Teacher recommendation.
 - o Students moving from Spanish II to Spanish III with a grade between 60 and 69 will have to complete summer work in order to do so and have 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 8th 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:

- A final grade of 90 or better in Spanish II; or
- Incoming freshmen with a minimum of four years of Spanish with a grade of 90 or better and a score in the 90th percentile in the Diagnostic Exam; and/or
- 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:

- Completion of Spanish III, College Preparatory, with a grade of 70* or better; or
- Completion of Spanish III-Advanced, Honors, and/or
- Teacher recommendation.
 - Students moving from Spanish III to Spanish IV with a grade between 60 and 69 will have to complete summer work in order to do so and have 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:
- Completion of Spanish III-Advanced, Honors, with a final grade of 80 or better; or
- A final grade of 90 or better in Spanish III, College Preparatory; and/or
- 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

- This course is only offered on school years ending with an odd number (2017, 2019...)
- 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 administrator before completing their class request form.

Prerequisite: For Honors:

- Completion of Spanish IV (College Preparatory), Spanish IV-Advanced (Honors), or Spanish
- Stories and Cultures (College Preparatory or Honors) with a final grade of 70 or better;
- and/or Teacher recommendation.

Prerequisite: For High Honors:

- Completion of Spanish IV-Advanced (Honors) or Spanish Stories and Cultures (Honors) with a
- final grade of 85 or better; or
- Completion of Spanish Stories and Cultures (High Honors) with a final grade of 70 or better; or
- Successful completion of A.P. Spanish;
- and/or Teacher recommendation.

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

This course is only offered on school years ending with an even number (2016, 2018...)

Prerequisite: For Honors:

- · Completion of Spanish IV (College Preparatory), Spanish IV-Advanced (Honors), or Spanish
- Cinema (Honors or High Honors) with a final grade of 70 or better;
- and/or Teacher recommendation.

Prerequisite: For High Honors:

- Completion of Spanish IV-Advanced (Honors) or Spanish Cinema (Honors) with a final grade of 90
- or better: or
- Completion of Spanish Cinema (High Honors) with a final grade of 70 or better; or
- Successful completion of A.P. Spanish;
- and/or Teacher recommendation.

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

High Honors

Course #4375

• THIS IS A COLLEGE LEVEL COURSE

Prerequisite:

- Completion of Spanish IV-Advanced (Honors) with a final grade of 90 or better;
- Completion of Spanish Cinema (High Honors), or Spanish Stories and Cultures (High Honors), with a final grade of 90 or better;
- and/or Teacher and Program Administrator recommendations.

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. AP Spanish incorporates authentic language through music, films, radio broadcasts, and Spanish texts hence emphasizing listening, speaking, reading, and writing skills. The student reads and discusses excerpts of literature written in the target language 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. Although no prerequisite skills are required, the student, through the study of vocabulary and grammatical structures, will develop the ability to read, comprehend, and write basic Latin sentences.

LATIN II Honors Course #4224

Prerequisite:

- Successful completion of Latin I with a grade of 70* or better.
 - Students moving from Latin I to Latin II with a grade between 60 and 69 will have to complete summer work in order to do so.

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. By the end of the year, students will transition from reading textbook selections to reading authentic Latin literature.

LATIN LITERATURE: PROSE Honors Course #4254

This course is only offered on school years ending with an odd number (2017, 2019...)

Prerequisite: Successful completion of Latin II with a grade of 70 or better.

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. This course may be taken immediately after Latin II or after Latin Literature: Poetry.

LATIN LITERATURE: POETRY Honors Course #4264

• This course is only offered on school years ending with an even number (2016, 2018...)

Prerequisite: Successful completion of Latin II with a grade of 70 or better.

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. This course may be taken immediately after Latin II or after Latin Literature: Prose.

Mathematics Department

Mr. Patrick Morrissey, Mathematics Program Administrator 275-1700 ext. 5300

Mathematics Graduation Requirement: 4 Years / 20 Credits

| Course Title | Level | Course Number | Grade Level | Semester | # of Periods | Credits |
|---|-----------------------|------------------|-------------|----------|-----------------|---------|
| Mathematical Applications I | Introductory | 2102 | 9 | All | 4 | 5 |
| Mathematical Applications II | Introductory | 2132 | 10 | All | 4 | 5 |
| Algebra I | Honors | 2114 | 9 | All | 4 | 5 |
| Algebra I | College Prep | 2113 | 9-10 | 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 | High Honors | 2205 | 9 | All | 4 | 5 |
| Geometry | Honors | 2204 | 9-10 | All | 4 | 5 |
| Geometry | College Prep | 2203 | 10-11 | All | 4 | 5 |
| Algebra II | High Honors | 2305 | 10 | All | 4 | 5 |
| Algebra II | Honors | 2304 | 10-11 | All | 4 | 5 |
| Algebra II | College Prep | 2303 | 11-12 | All | 4 | 5 |
| Trigonometry/Statistics and Probability | Honors | 2414 | 12 | All | 4 | 5 |
| Pre-Calculus | High Honors | 2405 | 11 | All | 4 | 5 |
| Pre-Calculus | Honors | 2404 | 11-12 | All | 4 | 5 |
| Personal Finance | College Prep | 2313 | 12 | All | 4 | 5 |
| Personal Finance | Honors | 2314 | 12 | All | 4 | 5 |
| Calculus | Honors | 2504 | 12 | All | 4 | 5 |
| AP Calculus AB | Advanced Placement | 2505 | 12 | All | 4 | 5 |
| AP Calculus BC | Advanced Placement | 2515 | 12 | All | 4 | 5 |

| Drafting Technology I | College Prep | 6113 | 9-12 | All | 4 | 5 |
|-------------------------|--------------|------|-------|-----|---|---|
| Drafting Technology II | College Prep | 6123 | 10-12 | All | 4 | 5 |
| Drafting Technology III | College Prep | 6133 | 11-12 | All | 4 | 5 |

Grade 8 to Grade 9 Transition Rubric

If you have questions, please contact your child's 8th grade teacher and/or the Math Program Administrator. The Grade 8 teacher recommendation in determining a student's Grade 9 math course is made using the following guidelines:

Grade 8: Algebra Math Performance

| Grade 9 Course | Mid-Year Grade | Content Recall Test | Diagnostic Test |
|---------------------------------------|----------------|---------------------|-----------------------------|
| Geometry High Honors | 94% | 90% | 90 th Percentile |
| Geometry Honors | 87% | 80% | 80 th Percentile |
| Continuing Algebra/Geometry Honors | 80% | 70% | 70 th Percentile |
| Algebra I Honors | 60% | 60% | 40 th Percentile |

Grade 8: Pre-Algebra Performance

| Grade 9 Course | Mid-Year Grade | Content Recall Test | Diagnostic Test |
|---|------------------------|---------------------|-----------------------------|
| Algebra I Honors | 85% | 85% | 40 th Percentile |
| Algebra I College Prep | 70% | 70% | 10 th Percentile |
| Mathematical Applications I Introductory | Teacher Recommendation | | |

Typical Sequence of Mathematics Courses

| Grade 9 | Grade 10 | Grade 11 | Grade 12 |
|---|--|---|---|
| Mathematical Applications I Introductory | Algebra I College Prep | Geometry College Prep | Algebra II College Prep, Personal Finance College Prep, Drafting II College Prep |
| Algebra I College Prep or Honors | Geometry College Prep or Honors | Algebra II College Prep or Honors | Personal Finance College Prep or Honors Pre-Calculus Honors |
| Continuing Algebra/Geometry Honors | Continuing Geometry/Algebra II Honors | Continuing Algebra II/Pre-Calculus Honors | Calculus Honors Personal Finance Honors |
| Geometry Honors or High Honors | Algebra II Honors or High Honors | Pre-Calculus Honors or High Honors | Calculus Honors AP Calculus AB AP Calculus BC |

MATHEMATICAL APPLICATIONS I Introductory

Course # 2102

Prerequisite: Fulfills the requirements outlined in the Transition Rubric and Teacher Recommendation
This course is designed to help students develop a stronger number sense while exposing students to
Massachusetts Common Core Standards. Topics will include selected algebra and geometry concepts such as
manipulating irrational numbers, evaluating exponents, solving and graphing linear equations, geometric
transformations, and using the Pythagorean theorem. Students from this course may be recommended for
Mathematical Applications II or Algebra I.

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.

ALGEBRA I Honors Course # 2114

Prerequisite: Fulfills the requirements outlined in the Transition Rubric and Teacher Recommendation
The content of this course includes the study of integers, rational numbers, equations and inequalities, 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.

ALGEBRA I College Prep Course # 2113

Prerequisite: Fulfills the requirements outlined in the Transition Rubric and Teacher Recommendation

The content of this course includes the study of integers, rational numbers, equations and inequalities, 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.

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 if the sequence, students are prepared to take our Calculus Honors class. Summer work will be needed after junior year to accelerate to AP Calculus AB.

CONTINUING ALGEBRA I/

INTRO TO GEOMETRY Honors Course # 2124

Prerequisite: Fulfills the requirements outlined in the Transition Rubric and 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 # 2124

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.[12]

GEOMETRY High Honors Course # 2205

Prerequisites: Fulfills the requirements outlined in the Transition Rubric and Teacher RecommendationAligned 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

Middle School to High School Prerequisites: The student fulfills the requirements outlined in Transition Rubric and 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.

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.

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.

TRIGONOMETRY/STATISTICS AND PROBABILITY Honors Course # 2414

This course will provide students with a learner-centered resource of activities through which students can investigate both trigonometric relations and statistical concepts. Emphasis is on active learning, conceptual understanding, use of genuine real-world data, and technology integration with the TI-84 graphing calculator. The course begins with a study of trigonometric concepts for the first half of the year. Topics will include trigonometric functions, equations and applications, triangle trigonometry, trigonometric formulas. The second half of the course students will discover statistical concepts, explore statistical properties, and apply statistical techniques. Students will explore the design of surveys, polls and experiments to assess the validity of their results, to identify potential sources of bias, and to identify the types of conclusions that can be drawn. *This course will not be offered for the 2015-2016-school year.

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.

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,

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. Time permitting; students will explore additional topics including Functions of Several Variables, Multiple Integration and Differential Equations.

PERSONAL FINANCE College Prep Course # 2313 Honors Course # 2314

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 12th Graders. Course is only open to eleventh graders, who are taking Personal Finance concurrent with another mathematics course.

DRAFTING TECHNOLOGY COURSES IN THE MATHEMATICS DEPARTMENT

DRAFTING TECHNOLOGY I (Major) College Prep Course #6113

Prerequisite: None

DRAFTING TECHNOLOGY II (Major) College Prep Course #6123

Drafting Technology $\underline{\text{majors}}$ can be counted as one of the four (4) years of mathematics required for

graduation

Prerequisite: Drafting Technology I (#6113 or #6103)

DRAFTING TECHNOLOGY III (Major) College Prep Course #6133

Drafting Technology $\underline{\text{majors}}$ can be counted as one of the four (4) years of mathematics required for

graduation

Prerequisite: Drafting Technology I and II

See course descriptions in Technology Education section.

Computer Science Courses

| Course Title | Level | Course Number | Grade Level | Semester | # of Periods | Credits |
|--------------------------------------|--------------|------------------|----------------|----------|-----------------|---------|
| Introduction to Computer Science | College Prep | 2623 | 9-12 | All | 2 | 2.5 |
| Introduction to Computer Programming | College Prep | 2613 | 9-12 | All | 2 | 2.5 |
| Programming in C (Prt. 1) | College Prep | 2703 | 9-12 | All | 2 | 2.5 |
| Programming in C (Prt. 1) | College Prep | 2704 | 9-12 | All | 2 | 2.5 |
| Programming in C (Prt. 2) | College Prep | 2804 | 9-12 | All | 2 | 2.5 |
| UNIX Operating System | College Prep | 2603 | 9-12 | All | 2 | 2.5 |
| Shell Programming | College Prep | 2714 | 9-12 | All | 2 | 2.5 |
| Assembly Language Programming | College Prep | 2815 | 9-12 | All | 2 | 2.5 |
| Data Structures | College Prep | 2805 | 9-12 | All | 2 | 2.5 |
| Graphics Programming | College Prep | 2915 | 9-12 | All | 2 | 2.5 |
| JAVA Programming | College Prep | 2905 | 9-12 | All | 2 | 2.5 |
| HTML Programming | College Prep | 2713 | 9-12 | All | 2 | 2.5 |

INTRODUCTION TO

COMPUTER SCIENCE College Prep Course # 2623

Prerequisites: None

This course is an introduction to computer science for students with no prior programming experience. Students develop programs using visual programming languages such as Scratch, to create animated simulations, design games, and build internet and mobile applications. In addition, students are exposed to an overview of computing and its influence on modern society.

INTRODUCTION TO

PROGRAMMING College Prep Course # 2613

Prerequisites: None

This course is a general introduction to programming for the student with no computer experience. The course covers basic syntax for terminal I/O, conditionals, and loops 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.

PROGRAMMING IN C: Part 1 College Prep Course # 2703

Prerequisites: Introduction to Computer Programming

This course covers the concepts/syntax (in C) for arrays, structures, functions, arrays of structures, and pointers. Students will solve basic programming problems using these constructs. The course also introduces binary and hexadecimal arithmetic.

PROGRAMMING IN C: Part 1 College Prep Course # 2704

Prerequisites: Teacher recommendation or Introduction to Computer Programming

This course covers the concepts/syntax (in C) for arrays, structures, functions, arrays of structures, and pointers. Students will begin to solve more complex programming problems. Arithmetic in number systems other than base 10 will be introduced.

PROGRAMMING IN C: Part 2 College Prep Course # 2804

Prerequisite: Programming in C, Part 1, Level 3 or Level 4 and teacher recommendation

This course covers supplementary topics including (but not limited to) file I/O, command line parsing, macros, arrays of pointers, linked lists, and other data structures. Study of arithmetic in other bases will continue.

UNIX OPERATING SYSTEM College Prep Course # 2603

Prerequisites: None

This course familiarizes the student with the UNIX operating system and also covers some basic UNIX shell programming. No prerequisite is required but the student who is already familiar with a multi-user platform such as VAX/VMS will have considerably less difficulty mastering UNIX.

SHELL PROGRAMMING College Prep Course # 2714

Prerequisites: Introduction to the UNIX Operating System, Level 3 or Level 4 and Teacher Recommendation This course covers UNIX shell programming using the bourne shell and k-shell. The student will learn to write programs using the UNIX bourne shell and k-shell programming constructs.

ASSEMBLY LANGUAGE

PROGRAMMING College Prep Course # 2815

Prerequisite: Programming in C, Part 2 and Teacher Recommendation

Students learn to write programs in PC assembly language for 80386 and later processors. Students learn about machine language, binary logic, computer architecture, instruction cycles, etc. This course will prepare a student to become a Computer Science major in college.

DATA STRUCTURES College Prep Course # 2805

Prerequisite: Programming in C, Part 2 and Introduction to the UNIX Operating System and Teacher Recommendation

This course covers advanced topics in algorithms and data manipulation. Successful completion of this course will prepare the student for the Computer Science AP exam

GRAPHICS PROGRAMMING College Prep Course # 2915

Prerequisite: Programming in C, Part 2 and Introduction to the UNIX Operating System, and Teacher Recommendation

This course uses the OpenGL "Red Book" to cover the basics of graphics programming from simple pixel plotting to basic animation. Use of color, lighting, and textures are some of the topics covered.

JAVA College Prep Course # 2905

Prerequisite: Teacher Recommendation

This course is for the student has mastered the C programming language. The course moves quickly through the basics of JAVA, including pointers, arrays and structures. About half of the course is spent mastering the concept and implementation of JAVA classes. After completing this course the student will be prepared to take the Computer Science AP exam.

HTML PROGRAMMING College Prep Course # 2713

Prerequisite: none This is an introductory course with no prerequisites, but students who wish to take this course should be familiar with the operation of a PC. Students will learn to write HTML programs (construct web pages) on their own and with the help of software tools. Students who excel will be able to work with scripts and scripting languages by the end of the course.

Music and Theater Arts Department

Mrs. Nicole O'Toole, Music Program Director 275-1700 ext. 4201

Music Graduation Requirement: 2.5 Credits

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

MUSIC PERFORMANCE MAJOR Honors Course

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 music and guidance 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. 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 a general level performance ensemble, which works on medium to advanced orchestra literature from a wide range of styles. This course is open to any students who play string instruments. 2 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. 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.

CHAMBER CHORUS College Prep Course # 8203

Prerequisite: Approval of the Instructor to determine appropriate level

Chamber Chorus 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[b5]. Student pianists are welcome to take this course as approved by the teacher. Student pianists must be willing to sing when the chorus performs a cappella music.

ADVANCED CHOIR Honors Course # 8224

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

Advanced 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 Advanced 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 course teaches basic piano skills to all students. 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.

MUSIC TECHNOLOGY College Prep Course # 8433

Prerequisite: None.

Students will learn and use industry-standard music notation and sequencing software. Using MIDI (Musical Instrument Digital Interface) keyboards, students will compose original music and arrange familiar tunes. In addition, students will use sound editing software, create podcasts, and add a soundtrack to a video clip. Piano experience is helpful but not necessary. <u>LIMITED NUMBER OF SPACES AVAILABLE.</u>

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

This hands-on course is designed as a complement to Drama and Advanced Drama. Throughout the year students will learn the ins and outs of what goes into producing a show from the perspective of the performers, the technical crew, and the director. To achieve this, students will work on productions of several short non-musical plays. All students will act in, design technical elements for (lights, sounds, sets, and costumes), and direct the plays. The class will culminate with a final project in which groups create and perform their own short productions using all of their experiences gained throughout the course. Come explore your creativity and expand your theatrical horizons!

THEATER PRODUCTION II

College Prep

Course # 8773

Prerequisite: Theater Production I and/or teacher approval.

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 taking leadership roles and directing some productions. Gain a deeper ownership of the theater while developing your own theatrical skills!

For Drama and Honors Drama courses # 8713 and #8724, please see the English Department course descriptions.

Occupational Education Courses

Occupational Education Graduation Requirement: 2.5 Credits

Business Education Courses

| Course Title | Level | Course Number | Grade Level | Semester | # of Periods | Credits |
|--------------------------|--------------|---------------|-------------|----------|--------------|---------|
| Introduction to Business | College Prep | 5003 | 9-12 | All | 4 | 5 |
| Business Enterprise | College Prep | 5033 | 11-12 | All | 4 | 5 |
| Intro to Marketing | College Prep | 5043 | 9-12 | All | 4 | 5 |
| Accounting I | College Prep | 5053 | 10-12 | All | 2 | 2.5 |
| Accounting II | College Prep | 5063 | 11-12 | All | 2 | 2.5 |
| Personal Finance | College Prep | 2313 | 11-12 | All | 4 | 5 |
| Personal Finance | Honors | 2314 | 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.

BUSINESS ENTERPRISE

College Prep

Course # 5033

Prerequisite: None

Students will learn about economic problems faced by consumers in American Society, and how business/consumers make economic decisions. Topics include supply and demand, savings and investing, entrepreneurship, business financing, labor force, competition, production, money and financial institutions, international trade and the global economy. With the assistance of a consultant from a local business, students will act as a CEO of and run a corporation. By participating in this model, students will learn and apply the concepts and regulations of business law as well as management, finance, and sales.

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.

PERSONAL FINANCE College Prep

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 12th Graders. Course is only open to eleventh graders, who are taking Personal Finance concurrent with another mathematics course.

PERSONAL FINANCE Honors Course # 2314

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 12th Graders. Course is only open to eleventh graders, who are taking Personal Finance concurrent with another mathematics course

Family and Consumer Science Courses

| Course Title | Course Number | Grade Level | Semester | # of Periods | Credits |
|----------------------------|---------------|-------------|----------|--------------|---------|
| Foods and Nutrition I | 6602 | 9-12 | All | 2 | 2.5 |
| Foods and Nutrition II | 6613 | 10-12 | All | 2 | 2.5 |
| Clothing | 6702 | 9-12 | All | 2 | 2.5 |
| Early Childhood Education | 6833 | 9-12 | All | 2 | 2.5 |
| CASE Internship | 6832 | 9-12 | All | 2 | 2.5 |
| Practicum: Early Childhood | 6823 | 9-12 | 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 food service 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.

CASE/PRESCHOOL INTERNSHIP

Course # 6832

Prerequisite: Teacher Approval

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

EARLY CHILDHOOD EDUCATION (3-6 Years)

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.

EARLY CHILDHOOD PRACTICUM

Course # 6823

Prerequisite: Teacher Approval

This course explores the period of child development from age six through age eight and represents the third in a sequence of 3 courses that focuses on early childhood. 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 field site teacher. Each student must be able to provide his or her own transportation to the field site.

Technology Education Courses

| Course Title | Level | Course Number | Grade Level | Semester | # of Periods | Credits |
|--|--------------|------------------|----------------|----------|-----------------|---------|
| Drafting Tech. I (Major) | College Prep | 6113 | 9-12 | All | 4 | 5 |
| Drafting Tech. I (Minor) | College Prep | 6103 | 9-12 | All | 2 | 2.5 |
| Drafting Technology II* | College Prep | 6123 | 10-12 | All | 4 | 5 |
| Drafting Technology II | College Prep | 6143 | 10-12 | All | 2 | 2.5 |
| Drafting Technology III* | College Prep | 6133 | 11-12 | All | 4 | 5 |
| Introductory Manufacturing & Production Technology I | Introductory | 6402 | 9-12 | All | 2 | 2.5 |
| Continuing Manufacturing & Production Technology II | Introductory | 6442 | 10-12 | All | 2 | 2.5 |
| Advancing Manufacturing & Production Technology III | Introductory | 6452 | 11-12 | All | 2 | 2.5 |
| School to Career | College Prep | 6003 | 12 | All | 4 | 5 |
| Robotics and Engine. I | College Prep | 6313 | 9-12 | All | 4 | 5 |
| Robotics and Engine. I | College Prep | 6303 | 9-12 | All | 2 | 2.5 |
| Women in Robotics | College Prep | 6353 | 9-12 | All | 2 | 2.5 |
| Robotics and Engine. I | Honors | 6314 | 9-12 | All | 4 | 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 |

^{*}Note that some courses meet graduation requirements in other departments.

DRAFTING TECHNOLOGY I (Major) College Prep
DRAFTING TECHNOLOGY I (Minor) College Prep

Course # 6113 Course # 6103

Prerequisite: None

These courses introduce 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; some exposure to CAD drawing's and such technology will be covered as well. 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 (Major) College Prep Course #6123
DRAFTING TECHNOLOGY II (Minor) College Prep Course #6143

Drafting Technology <u>majors</u> can be counted as one of the three years of mathematics required for graduation Prerequisite: Drafting Technology I (#6113 or #6103)

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 (Major) College Prep

Course #6133

Prerequisite: Drafting Technology I and II

Drafting Technology <u>majors</u> can be counted as one of the three years of mathematics required for graduation 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 Introductory Course #6402

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.

MANUFACTURING & PRODUCTION TECHNOLOGY II Continuing Course # 6442 MANUFACTURING & PRODUCTION TECHNOLOGY III Advancing Course # 6452

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.

SCHOOL TO CAREER College Prep Course #6003

Prerequisite: Grade 12 students only, by counselor recommendation

School to Careers 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.

| ROBOTICS AND ENGINEERING I (Major) | College Prep | Course #6313 |
|------------------------------------|--------------|---------------|
| ROBOTICS AND ENGINEERING I (Minor) | College Prep | Course #6303 |
| Women in Robotic (Minor) | College Prep | Course # 6353 |
| ROBOTICS AND ENGINEERING I (Major) | Honors | Course #6314 |
| ROBOTICS AND ENGINEERING II | College Prep | Course #6323 |
| ROBOTICS AND ENGINEERING II | Honors | Course #6324 |

Prerequisite: Robotics and Engineering I or Women in Engineering for Robotics II Note: *Major meets one year of science requirement.

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. 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. Women in Robotics is limited to female only students. Robotics is a growing industry in the United States that has a wide variety of application areas and an ability to inspire technology education. The Women in Robotics course is being offered to encourage women to enter the field and provide a base peer group.

ROBOTICS AND ENGINEERING III Honors

Course #6334

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

This course 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 FIRST Robotics Competition and Science Olympiad, or the annual B.U. robotics competition.

Physical Education & Health Department

Keith Mangan, Physical Education and Health Program Director 275-1700 ext. 1109

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 |
|------------------------------|---------------|-------------|----------|--------------|---------|
| Fitness Concepts I | 9112 | 9 | 1 or 2 | 2 | 1.25 |
| Health Education I | 9012 | 9 | 1 or 2 | 2 | 1.25 |
| Health Education II | 9032 | 10 | 1 or 2 | 2 | 1.25 |
| Fitness Concepts II | 9131 | 10 | 1 or 2 | 2 | 1.25 |
| Peer Leadership | 9043 | 11-12 | All | 2 | 2.5 |
| Lifetime Activities | 9211 | 11-12 | 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: From Tango to Hip-Hop | 9272 | 9-12 | 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)
 - o Regular participation in athletics ninth through eleventh grades
 - Completion of a junior year elective other than "Sports Activities"
 - Completion of the health education requirement

FITNESS CONCEPTS I Unleveled Course # 9112

This course is an introduction to the principles of exercise and activities needed to lead a healthy lifestyle. Principles include muscular strength and endurance, flexibility and cardiovascular endurance. Students will complete a pre-test and post-test of the "Fitnessgram", as well as a final personal cross training program.

HEALTH I Unleveled Course # 9012

This course will establish a foundation of skill-based health. Factual information on nutrition, mental health, stress and stress management techniques in addition to topics on communication, refusal, assertiveness/self-advocacy, decision making goal setting and internet safety and responsibility.

HEALTH II Unleveled Course # 9032

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.

FITNESS CONCEPTS II Unleveled Course # 9131

This course will continue to reinforce the elements of fitness while introducing skill related components of fitness. These activities include: cardio respiratory fitness, speed, agility, reaction time, coordination, and balance. Students will continue to maintain active and healthy lifestyles. Students will also learn safety training for emergencies and introductory Adult CPR (opportunities will be available for certification).

PEER LEADERSHIP College Prep 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 Unleveled 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 Unleveled 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 Unleveled 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 Unleveled 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 trends. This is an active class where students will be required to change for the majority of class meetings.

DANCE: FROM TANGO

TO HIP-HOP Unleveled 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.

English As A Second Language

| Course Title | Level | Course Number | Grade Level | Semester | Credit |
|--|-----------------|------------------|----------------|----------|--------|
| English as a Second Language | College Prep | 7552 | 9-12 | All | 2.5 |
| Make a Difference: High School Tutors for English Language Learners* | College Prep | 0984 | 11-12 | All | 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.

MAKE A DIFFERENCE: High School Reading Tutors for English Language Learners Pass/Fail College Prep Course#0984

Prerequisite: Instructor Approval

This course is offered to students who are interested in working with JGMS/HS English Language Learners as a tutor in the English as a Second Language classroom. Under the guidance of the ESL teacher, tutors will work with students to increase their knowledge of English vocabulary, reading, writing and conversational skills.

Reading Courses

| Course Title | Course Number | Grade Level | Semester | Credit |
|---|---------------|-------------|----------|--------|
| Reading Elective | 0912 | 9-12 | All | 2.5 |
| English as a Second Language | 7552 | 9-12 | All | 2.5 |
| Reading Tutors | 0943 | 11-12 | All | 2.5 |
| Make a Difference: Reading Tutors for Young Readers | 0954 | 12 | All | 5 |
| Individualized Reading | 0952 | 9-12 | All | 2.5 |
| Word Study | 0902 | 9-12 | All | 2.5 |

Other grades by approval

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 TUTORS Course # 0943

Prerequisite: Instructor Approval

This course is offered to students who are interested in working with the high school students in the classroom as a reading tutor. Under the guidance of the classroom teacher, tutors work with students as a cross-age reading tutor. This includes helping students improve their reading and vocabulary skills, and, in some cases, helping students read a their content area texts. This course is offered to students on a limited basis, on approval only. (Grade 11, 12) Pass/Fail.

MAKE A DIFFERENCE: READING TUTORS FOR YOUNG READERS Course # 0954

Prerequisite: Instructor Approval

This course is offered to seniors who are interested in an internship as a reading tutor, for children in grades one to four. Tutors will work under the guidance of teachers and specialists at the Lane and Davis schools helping children learn to read. The course is offered as a major, and each participant is required to complete either a curriculum project or a short paper each term. Attendance is strictly limited, and enrollment is based upon instructor approval and parental permission. Course qualifies as an Occupational Education requirement. (Grade 12) Pass/Fail.

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 writing.

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 a flexible strategy for decoding long 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.

Science Department

Mr. Michael Griffin, Science Department Program Administrator 275-1700 ext. 5400

Science Graduation Requirement: 3 Years / 15 Credits

| Course Title | Level | Course Number | Grade Level | Semester | # of Periods | Credits |
|-----------------------------------|--------------------|------------------|----------------|----------|-----------------|---------|
| Science Explorations (Lab) | Standard | 3002 | 9-12 | All | 4 | 5 |
| 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 |
| Forensic Science (Lab) | Honors | 3604 | 12 | All | 4 | 5 |
| Introduction to Engineering (Lab) | College Prep | 3623 | 12 | All | 4 | 5 |
| Introduction to Engineering (Lab) | Honors | 3624 | 12 | All | 4 | 5 |
| Marine Biology (Lab) | College Prep | 3213 | 12 | All | 4 | 5 |
| Marine Biology (Lab) | Honors | 3214 | 12 | All | 4 | 5 |
| A.P. Biology | Advanced Placement | 3255 | 12 | All | 4 | 5 |
| AP Chemistry | Advanced Placement | 3355 | 11-12 | All | 4 | 5 |
| AP Physics 1&2 | Advanced Placement | 3405 | 11-12 | All | 4 | 5 |
| AP Environmental Science | Advanced Placement | 3605 | 11-12 | All | 4 | 5 |
| AP Physics (C) | Advanced Placement | 3415 | 12 | All | 4 | 5 |
| Robotics and Engine. I | College Prep | 6313 | 9-12 | All | 4 | 5 |
| Robotics and Engine. I | College Prep | 6303 | 9-12 | All | 2 | 2.5 |

| Robotics and Engine. I | Honors | 6314 | 9-12 | All | 4 | 5 |
|--------------------------|--------------|------|------|-----|---|-----|
| Women in Robotics | College Prep | 6304 | 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 |

Science Program

Science Course Progression by Year & Initial Course Enrollment

| Science Course 1108/1005/01/27 Tear a militar Course Emounterie | | | |
|---|----------|----------------------|--|
| Series One | | Series Two | |
| Physics | Grade 9 | Science Explorations | |
| Chemistry | Grade 10 | Physics | |
| Biology | Grade 11 | Chemistry | |
| Science Elective | Grade 12 | Biology | |

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 12 | Anatomy and Physiology | Biology |
| Grade12 | AP Environmental Science | Biology |
| Grade 12 | AP Physics C | Physics and Calculus |
| Grade 12 | Marine Biology | Biology |
| Grade 12 | Forensics | Two years of Science |
| Grade 12 | Intro to Engineering | Two years of Science |
| Grade 12 | AP Biology | Biology |

Science Exploration (Lab) Standard

Prerequisite: Teacher Recommendation

Course# 3002

Science explorations will develop the science skills to prepare students for studying science topics in the future. Emphasis will be on experimental design, creating and analyzing data, science laboratory skills, science inquiry, and the math of science. **Students taking this course in grade 9 will take the 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 a more 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 problems by applying algebraic methods. It will serve as an important component of college preparatory study.

PHYSICS (Lab) Honors Course # 3104

Prerequisite: Must be taken concurrently with Continuing Algebra/Geometry or Geometry

This course will include a more 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: Taken concurrently with Algebra I or Continuing Algebra/Geometry

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 the primary method used to cover topics such as gases, atomic theory, chemical bonding, ionization, 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.

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. 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 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. It will serve as an important component of college preparatory study. 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.

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.

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.

BIOLOGY (Lab) Honors Course # 3204

Prerequisite: Chemistry Level 4 or Grade of 90% in Chemistry Level 3 or teacher recommendation. Using guided instruction this course reviews and deepen 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 taking level 5 will be required to complete independent research topics for each unit of study.

MARINE BIOLOGY (Lab) Honors Course # 3214
MARINE BIOLOGY (Lab) College Prep Course # 3213

Prerequisite: Grade 12 and Teacher Recommendation

Marine Biology surveys the plants and animals in the ocean, their habitats and how they relate to the changing geological, physical, and chemical properties of the sea. Students should have reading skills at grade level. Skills that will be developed include observation, 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) Honors Course #3604

Prerequisite: Grade 12 and Teacher Recommendation

This course will explore the science of forensic investigations. Students will investigate and discuss the methods of observing, identifying, collecting, and comparing physical evidence around a crime scene. Analytical techniques both in and out of the classroom will be utilized. Topics that will be addressed include: Crime Scene Investigations, Eyewitness Accounts, Fingerprint Analysis, Hair and Fiber Analysis, Serology, DNA Evidence, and Questioned Documents. This is a lab-based course.

INTRODUCTION TO ENGINEERING (Lab) Honors Course # 3624
INTRODUCTION TO ENGINEERING (Lab) College Prep Course # 3623

Prerequisite: Passing grade of 70% or above in Chemistry, Physics and Biology.

The course introduces students to the skills used in engineering by working in teams to solve technical problems. Students will study technological advances and apply the engineering process. Students enrolled in Level 4 will conduct term projects that require independent research in various aspects of technology. Students enrolled in Level 4 will also do a team-based, independent keystone project that identifies a need and develops a product to meet that 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 or contact Michael Griffin, Science Program Administrator). ALL AP Science courses are equivalent to a College Level Course.

A.P. CHEMISTRY Advanced Placement Course # 3355

Prerequisite: Chemistry and Algebra II and teacher recommendation.

This course is designed to be a college level course. Topics such as the structure of matter, kinetic theory of gases, chemical equilibrium, chemical kinetics and the basic concepts of thermodynamics will be covered in considerable depth. Meaningful laboratory work will help prepare a student for sophomore level chemistry courses in college.

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.

A.P. PHYSICS 1 & 2 Advanced Placement Course # 3405

Prerequisite: Physics and teacher recommendation.

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 B 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.

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.

| ROBOTICS AND ENGINEERING I (major) | College Prep | Course # 6313 | |
|------------------------------------|--------------|---------------|--|
| ROBOTICS AND ENGINEERING I (minor) | College Prep | Course # 6303 | |
| ROBOTICS AND ENGINEERING I (major) | Honors | Course # 6314 | |
| WOMEN IN ROBOTICS (minor) | College Prep | Course # 6304 | |
| ROBOTICS AND ENGINEERING II | College Prep | Course # 6323 | |
| ROBOTICS AND ENGINEERING II | Honors | Course # 6324 | |
| ROBOTICS AND ENGINEERING III | Honors | Course # 6334 | |

Prerequisite: Robotics and Engineering I for Robotics II Note: *Major meets one year of science requirement.

Course Descriptions for Robotics are on page 56 in Technology Education Courses.

Academic Support Center

Ms. Sakelakos, Director of Student Achievement 275-1700 ext. 5209

| Course Title | Course Number | Grade Level | Semester | # of Periods | Credits |
|------------------|---------------|-------------|----------|--------------|---------|
| Academic Support | See Below | 9-12 | All | 2 | 2.5 |
| MCAS Support | 8831 | 9 - 12 | All | 2 | 2.5 |
| EXCEL Program | 8821 | 9-12 | All | 2 | 2.5 |

The Skills Center offers a range of support services for regular education students. Services include:

- Academic Support Programs
- EXCEL Program
- MCAS Support Programs

ACADEMIC SUPPORT Tier 2 Intervention*

Course # Assigned by Guidance Counselor

Students who do not experience academic success despite Tier 1 classroom interventions, will receive targeted interventions and progress will be monitored frequently to determine the intervention's effectiveness. If one intervention is not successful another more intense intervention may be tried. (2x during a 6 day cycle)

MCAS SUPPORT Course # 8831

Prerequisite: Recommendation must go through the Guidance Counselor and Director of Student Achievement.

Students who have failed one or more MCAS test(s) or who have scored in the "Needs Improvement" category of the MCAS will be assigned to this course. Each student's detailed MCAS scores will be analyzed for areas of weakness. Materials used by the student during this course will be designed to strengthen areas shown to be weak on the MCAS test(s). (2x during a 6 day cycle)

EXCEL PROGRAM Course# 8821

Prerequisite: Faculty nomination and recommendation must go through the Guidance Counselor and Director of Student Achievement.

For students currently taking level 2 or 3 classes and want to move up to a level 3 or 4 course **for the first time.** This program will emphasize successful academic practices needed to support a student with the academic rigor of higher level course expectations. (2x during a 6-day cycle)

Tiered Support:

Response to Intervention (RTI) is an intervention program aimed at providing timely academic or behavioral supports to struggling students. Early screening, using common assessments, review of past performances or current grades, leads to classroom-based (Tier I) supports. If these do not sufficiently improve student performance, students may then be referred to supplemental Tier II interventions that target specific needs, which are defined as measurable goals and objectives. Please see *Bedford Public Schools: Tiered Intervention* the district web page, www.bedford.k12.ma.us for a more detailed explanation.

Social Studies Department

Mrs. Christine Butler, Social Studies Program Administrator 275-1700 ext. 2500

Social Studies Graduation Requirement: 3 Years / 15 Credits

| Course Title | Level | Course Number | Grade Level | Semester | # of Periods | Credits |
|---------------------------|---------------------|---------------|-------------|----------|--------------|---------|
| Foundations of America | High Honors | 1105 | 9 | All | 4 | 5 |
| Foundations of America | Honors | 1104 | 9 | All | 4 | 5 |
| Foundations of America | College Prep | 1103 | 9 | All | 4 | 5 |
| Foundations of America | 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 |
| Modern American History | High Honors | 1305 | 11 | All | 4 | 5 |
| Modern American History | Honors | 1304 | 11 | All | 4 | 5 |
| Modern American History | College Prep | 1303 | 11 | All | 4 | 5 |
| Modern American History | Introductory | 1302 | 11 | All | 4 | 5 |
| Economics | Honors/High Honors | 1554/1555 | 12 | All | 4 | 5 |
| Gender Studies | Honors/High Honors | 1544/1545 | 11/12 | All | 4 | 5 |
| Government | Honors | 1704 | 11/12 | All | 4 | 5 |
| Introduction to Law | Honors/High Honors | 1604/1605 | 12 | All | 4 | 5 |
| Psychology | Honors/High Honors | 1534/1535 | 11/12 | All | 4 | 5 |
| Real World Social Studies | College Prep/Honors | 1313/1314 | 11/12 | All | 4 | 5 |
| Sociology | Honors | 1524 | 11/12 | All | 4 | 5 |

FOUNDATIONS OF AMERICA

This course is required for students in 9th grade. Students will be introduced to the social studies critical thinking skills system. Emphasis is placed on understanding and diagramming cause and effect, comparison, and generalization reasoning. Students will apply these skills to their study of diverse interpretations of core American values such as liberty, equality, and individualism. Students will conduct short as well as more sustained research projects. Students will write clear arguments that are well supported by evidence and will use technology to demonstrate their learning. The course content spans the colonial era up to the early 1900's, including the American Revolution, the creation and adoption of the United States Constitution, the Civil War and Reconstruction, westward expansion, and industrialization. Students are expected to learn material by reading a variety of sources including the textbook and supplementary articles. **REQUIRED FOR GRADUATION.**

FOUNDATIONS OF AMERICA 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.

FOUNDATIONS OF AMERICA

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.

FOUNDATIONS OF AMERICA

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 regarding study skills, organizational skills and learning strategies to help students become independent learners.

FOUNDATIONS OF AMERICA

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 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. The course examines world history by following the rise of the liberal value system of democracy, individual rights and capitalism, beginning in the Enlightenment and French Revolution through the Age of Progress at the turn of the twentieth century, and how this value system was successful against the twentieth century challenges of authoritarian communism, fascism, and Nazism. The course is designed to have students repeatedly address the essential questions, "How did the world become modern?" and "Is the whole world modern?" by drawing on the historical events and philosophies covered in the course. In addition, the course builds on the critical thinking skills developed in Foundations of America by placing an emphasis on synthesizing and expressing well structured arguments that draw on historical sources. **REQUIRED FOR GRADUATION**.

MODERN WORLD HISTORY

High Honors

Course # 1205

Prerequisites: Recommendation of Foundations of America Teacher and Program Administrator.

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: Foundations of America

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: Foundations of America

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: Foundations of America

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.

MODERN AMERICAN HISTORY

This course is required for students in 11th 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 research projects including the History Fair Project. Students will write clear arguments that are well supported by evidence and will use technology to demonstrate their learning. **REQUIRED FOR GRADUATION**.

MODERN AMERICAN HISTORY High Honors

Course # 1305

Prerequisites: Recommendation of Modern World History teacher and Program Administrator.

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 history fair projects at the Winter History Fair in one of five different forms: documentary, exhibit, paper, performance or website. This course includes a summer assignment. Students must complete the assignment independently and hand it in on the first day of school.

MODERN AMERICAN HISTORY Honors

Course # 1304

Prerequisites: Foundations of America 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.

MODERN AMERICAN HISTORY College Prep

Course # 1303

Prerequisites: Foundations of America 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 regarding study skills, organizational skills and learning strategies to help students become independent learners.

MODERN AMERICAN HISTORY Introductory

Course # 1302

Prerequisites: Foundations of America 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 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. This course includes a summer assignment for High Honors. Students must complete the assignment independently and hand it in on the first day of school.

GENDER STUDIES Honors/High Honors Course # 1544/1545

This course examines gender in societies around the world, both past and present. Students will do this through 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. Students will be expected to complete a 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. Students enrolled in High Honors should write at an advanced level and be prepared for differentiated assessments on tests, quizzes, and projects. This course includes a summer assignment for High Honors. Students must complete the assignment independently and hand it in on the first day of school.

GOVERNMENT Honors Course # 1704

Prerequisite: Modern American History (can be taken in same year)

This course explores the relationships between the American governmental system and its people by examining the issues that most affect the decision-making role citizens must assume in a participatory democracy. Students must be able to read and write above grade level. Students will develop a political vocabulary, acquire a practical knowledge of government operations, and systematically analyze current issues through the use of research, critical thinking, and decision-making techniques.

INTRODUCTION TO 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 assessment on tests and quizzes. This course includes a summer assignment for High Honors. Students must complete the assignment independently and hand it in on the first day of school.

PSYCHOLOGY Honors/High Honors Course # 1534 / 1535

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 should be capable of critically analyzing and evaluating additional independent readings and should write at an advanced level. Students enrolled in High Honors have differentiated assessment on tests, quizzes and projects as well. This course includes a summer assignment for High Honors. Students must complete the assignment independently and hand it in on the first day of school.

REAL WORLD SOCIAL STUDIES

College Prep/Honors

Course #1313/1314

Prerequisite: None

This course introduces students to several disciplines within social studies. Topics include personal finance, economics, psychology, gender studies, sociology, constitutional law, and government. A primary objective is to foster awareness and understanding of issues that will impact students' lives. 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.

Special Education Department

Michelle DellaValle, Program Administrator 275-1700 ext. 1140

Bedford High School offers an array of special education services to meet the individualized needs of diverse learners. Please contact Michelle DellaValle, Program Administrator, for specific questions about services. Individual course descriptions are available in the special education office.

Additional Course Offerings

DEPARTMENT INTERN Pass / Fail

Prerequisite: 12th Grade, Program Administrator's or Program Director's Approval

This course offers 12th graders an opportunity to become involved with an academic department in a manner that differs from the regular curriculum. Students, who are interested in being a Department Intern, should set an appointment with the respective Program Administrator or Director <u>after</u> the initial Course Selection process is complete. During the meeting, the head of the Department will provide a description of requirements, expectations and department-specific responsibilities, and will outline the application and approval process.

LIBRARY INTERN Pass / Fail 2.5 Credits Course # 7501

Prerequisite: Librarian's approval

This course trains interested students in the day-to-day operation of the Library. Students learn book repair techniques, magazine management (such as check-in, stamping, filing and display), shelving of returned books and general maintenance of the facility. Students must carry 35 credits before electing to become a Library Intern.

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.

DIRECTED STUDY Pass / Fail 1 Credit Course # 0101

This course is designed to assist students in organizing and working on homework assignments, long-term research papers and projects. The course will help students develop routines that will lead to greater independence.

BROADCAST JOURNALISM (Minor) Course #0643

In Broadcast Journalism students will learn both the technical components of television broadcasting and the theoretical foundations of the field. Students will develop media literacy, help produce the morning television program, BHS Live, and create short group video productions for school-wide broadcast. Students will learn to use Apple's Final Cut Pro editing software. Students are required to film 3 outside events over the course of the year.

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.

The first quarter of the year will be devoted to a seminar-style exploration of education, motivation, and how people learn most effectively. At the same time, students will begin to develop the essential questions that will guide their individual work, zeroing in on specific information they hope to learn. 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 reconvene occasionally to share progress and ideas. At the end of the year, 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 Ms. Sussman in June prior to their senior year; students are expected to attend this meeting prepared with a brief written proposal for their tentative idea.

(Offered for both 2.5 and 5 Credits)

MinorCollege PrepCourse # 6033MajorCollege PrepCourse # 6043