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Bedford School Board

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MASCOT- Bedford Bulldogs

SCHOOL COLORS – Black, Red, Silver, and White

ANTICIPATED OPENING DAY 2009 ENROLLMENT – 1200 students

Welcome, Bulldogs, to Bedford High School



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To Our Students, Parents and the School Community,

It is my pleasure to welcome you to the third Bedford High School Program of Studies. The publication of the Program of Studies is the kickoff of the course registration process for the 2009-2010 school year. Once again, an enormous amount of work has gone into this Program of Studies and the development of our 12th grade curriculum. I am extremely proud to be associated with such a great community where everyone is working so hard to serve our students.

I am especially proud that our curriculum includes courses that have been authorized by the International Baccalaureate program. This prestigious program will provide excellent opportunities for our students, our school and our community. We are very fortunate to have been selected for membership in this organization and to be the first IB school in New Hampshire. We have also included a significant number of AP classes. This provides challenging classes for a wide range of BHS students.

This Program of Studies is not only a book that lists all of the classes that will be offered at Bedford High School. It is also a guide to help students and parents navigate through the high school years. I encourage you to look at the courses available to you for the coming school year (and beyond) in making your selections. Think of high school, not as a series of four unrelated academic years, but as a four-year journey. Think of the way one year will prepare you for the next and the way high school will prepare you for the known and unknown challenges that wait for you in the future.

The course registration process that you are beginning is very important. This process will give the high school staff the information we need to determine the number and variety of classes to offer. It will also help us to determine the number of teachers that are needed in the various subject areas. Inaccurate information from you may lead to a shortage of classes or inappropriate classes available next year. So please give this process your careful consideration. I encourage all of our students to use this Program of Studies as a guide for course selection. In selecting classes, we ask you to ask yourself some questions about your strengths, weaknesses, your goals and dreams. Create a partnership with your parents, teachers, counselors and friends as you begin to finalize your choices.

Finally, I ask you not to rush through this process. Think about next year and life beyond Bedford High School. Think about who you are. Read the Bedford High School Statement of Purpose. I believe that it may inspire you to challenge your own comfortable limits, while at the same time challenging the comfortable limits of the Bedford High School community.

Good luck in the process and please do not hesitate to contact us if we can do anything to help you in your selection of classes for the 2009-2010 school year.

Sincerely,

George H. Edwards
Principal



How to Use This Program of Studies

It is our hope that this book will be dog-eared and well worn by the time you turn in your course selections for next year at Bedford High School! In these pages are enormous amounts of information to help you make all kinds of plans and decisions for not only next year, but for your entire high school career and beyond. Each page is loaded with ideas, plans, outlines, descriptions and contacts to help make this process easy, comprehensive and one that really gets you thinking about how you want to tailor your high school program to get you to amazing places in life. So go ahead – write all over the cover, its pages, jot notes, fold corners, rip out the Student Planning Worksheet. It all starts here! Here is to new beginnings, exciting opportunities, and a shared hope that your experience at Bedford High School will be everything you want it to be!

Below are a few guiding questions to think about as you navigate your way through this book and through the process of planning your high school program. Remember, you are not in this alone. Please have some great conversations about your high school plans with your family, your school counselor, your teachers, your friends, and all sorts of important people in your life. You'll be amazed at the perspectives you'll gain to enhance this experience!

Throughout your planning, consider the following:

- What are my strengths and weaknesses?
- What courses and activities might tap into these?
- How do I find out more about the courses listed here?
- What are my goals? For this year? For my future?
- What courses will help me achieve these goals?
- What else can I do to achieve these goals?
- What courses are required to graduate? To get into college? To expand upon what I know and need to know?
- How will the courses I select for next year effect the courses I need/want to take in the future?

As you can see, this process is the beginning of some long term planning that you'll do about your future – starting today! We look forward to working with you and your family to help you plan for an exciting and rewarding experience as a student at Bedford High School! The adventure awaits – let's go!

Go Bulldogs!



Bedford High School Profile

Bedford High School is a comprehensive public high school that opened its doors to students for the First time in August 2007. Bedford High School offers a full complement of rigorous and exciting courses and co-curricular activities leading our students to many opportunities in high school and beyond.

Students, staff and families have worked tirelessly to build a community of learners engaged in challenging academics, and committed to establishing Bedford High School as our home. In one year we have been able to realize the commitment to quality education through the many initiatives we are spearheading. We are implementing the state's competency-based education—leading the way for NH secondary schools which will all be competency based by '08-'09. We are proud to be the first school in New Hampshire to be a member of the International Baccalaureate Organization Programme offering the IB Diploma Programme to our first graduating class. We have established ourselves as a force to be contended with in an athletic realm, and musically our students have excelled in local, state, and regional competitions.

In accordance with state law and best practices, we are fully approved by the New Hampshire Department of Education. We are seeking candidacy for accreditation by the New England Association of Schools and Colleges (NEASC). The formal process of accreditation will begin once the school is in full operation. The Bedford High School curriculum, along with the schools' programs and policies, is designed to align with the NEASC accreditation standards, which will prepare us for accreditation.

As a member of the NH Interscholastic Athletic Association, Bedford High School's athletic teams will compete in Class I (schools with enrollment of 640-1200 students). This year we competed at a varsity level in sports. Our teams will compete against other Class I schools including Bishop Brady, Merrimack Valley, John Stark, Pembroke Academy, Kearsarge, Milford, Souhegan, Coe-Brown, and Plymouth.



Student Competencies

All graduates of Bedford High School will consistently demonstrate competency through a body of work in five major areas that support the accomplishment of the school's mission and are aligned with national, state, and local standards. These over-arching expectations encompass developmentally appropriate academic, civic, and social outcomes and identify what a Bedford High School student will know and be able to do upon graduation. The Student Competencies are:

SKILLS AND KNOWLEDGE: students will demonstrate mastery of academic competencies throughout the curriculum and extended learning opportunities.

PROBLEM SOLVING: students will collect, organize, analyze, and assess information and strategies to create, apply, explain, and evaluate solutions.

COMMUNICATION: students will communicate effectively through listening and speaking, reading and writing, and media.

SELF-MANAGEMENT: students will demonstrate respect and responsibility while managing personal time, conduct, and planning.

COLLABORATION: students will work effectively with others and strengthen group performance by sharing ideas and workloads.

Student Competencies Examples

- In *We the People*, one of the skills and knowledge competencies is: Analyze and connect various literary genres to historical events and themes.
- In *Algebra I*, one of the problem solving competencies is: Collect, organize, analyze, and assess information and strategies to create, apply, explain, and evaluate solutions.
- In *InWriting*, the Communication competency is: Incorporate pre-writing, drafting, editing, revising, and publishing into the writing process.
- In *French II*, one of the Skills and Knowledge competencies is: Accurately produce the language in written, oral, and manual communication appropriate to the level.
- In *Physical Science*, one of the Skills and Knowledge competencies is: Identify forces between and within our physical world.



Bedford High School Graduation Requirements – Class of 2010

Units

- ½ Arts (includes Fine Art, Music, Drama and Dance)
- ½ Digital Portfolio (Information Communication Technology)
- 4 English
- 3 Math (including Algebra I)
- 3 Science (including 1 unit of a Physical Science, 1 unit of a Biological Science)
- 2½ Social Studies (including 1 unit of US and NH History and Govt, 1/2 unit NH Government/Civics, 1/2 unit Economics, 1/2 unit Global Studies/Geography)
- 3 Wellness (including 1 unit PE, 1/2 unit Health)
- ½ Personal Finance
- ½ Senior Project
- ½ Advisory
- 6 Electives

Total = 24 units

Approved by the Bedford School Board – December 11, 2006

Real world learning requirements

- 12 hours Career Exploration and Planning
- 12 hours Community Involvement Service
- 6 hours Democratic Process
- 6 hours Cultural Enrichment
- 24 hours School Activities – minimum of 8 hours in 1 co-curricular activity each year

Total = 60 hours

Approved by the Bedford School Board – November 27, 2006

Bedford High School Graduation Requirements – Class of 2011, 2012 & 2013

Units

- ½ Arts (includes Fine Art, Music, Drama and Dance)
- ½ Digital Portfolio (Information Communication Technology)
- 4 English (including 1/2 unit Writing)
- 3 Math (including Algebra I)
- 3 Science (including 1 unit of a Physical Science, 1 unit of a Biological Science)
- 3 Social Studies (including 1 unit of US and NH History and Govt, 1/2 unit NH Government/Civics, 1/2 unit Economics, 1/2 unit Global Studies/Geography)
- 3 Wellness (including 1 unit PE, 1/2 unit Health)
- ½ Personal Finance
- ½ Senior Project
- ½ Advisory
- 6½ Electives

Total = 25 units

Real world learning requirements

- 16 hours Career Exploration and Planning
- 16 hours Community Involvement and Service
- 8 hours Democracy in Action
- 8 hours Cultural Enrichment
- 32 hours School Activities – minimum of 8 hours in 1 co-curricular activity each year

Total = 80 hours

Approved by the Bedford School Board – November 27, 2006



Course Levels at Bedford High School

The following information is intended as a general guideline for students, parents, and college admissions officers. The individual course descriptions provide more explicit information regarding each course.

Post-Secondary Preparation

The Post-Secondary Preparation courses require students to work at a rigorous and challenging pace. The competencies required of every student will be taught in the Post Secondary Preparation courses. Students are expected to develop and practice critical thinking and problem solving skills. Students are expected to be willing to seek help outside of class if there is a need. Typical classes include presentation of material, review of homework and skills, discussion and learning activities. Students can expect homework to both review concepts learned in class and to extend their learning and critical thinking. Homework will include writing, reading, projects, labs, and assessments. Successful completion of Post-Secondary Preparation courses will prepare students for college-level work.

Honors

The Honors courses require students to work at a faster pace, at a more rigorous and deeper level, and with a dedication to doing more work. The required Post-Secondary Preparation competencies will be taught along with additional Honors Level competencies. Students will be expected to learn material through many avenues including reading textbooks and other resources, through analysis and critical thinking, by solving problems on their own, as well as through teacher instruction. Typical classes include minimal review of homework and previously covered material. Students are expected to independently seek help outside of class if there is a need. Students can expect homework to both review concepts learned in class and to extend their learning and critical thinking. Homework will exceed the amount assigned in the Post Secondary Preparation courses, and will include more in-depth writing, projects, labs and assessments.

Advanced Placement

Advanced Placement courses require students to do college-level work in preparation for attending four-year colleges and universities. They will be offered in most of the major areas of study. Taking an AP course often requires summer work prior to the course.

International Baccalaureate

The International Baccalaureate (IB) Program is a two-year, liberal arts program that prepares students to be successful in college and in the ever changing world they will enter after high school. IB is designed to meet the needs of a variety of students by offering students choice within and across the IB subject areas. IB courses are available to juniors and seniors. To retain the IB designation on the transcript, students must take the IB exam.

A/B Courses

These are courses designed for students who are unable to access the skills and knowledge of the full-year course within the typical scheduled timeframe, even with support classes. These courses provide ample time for extra review, practice, and re-teaching of



prior knowledge. This is not a support class, but actual time spent on teaching and learning the subject material and competencies. For example, Algebra I A/B will meet twice as often as Algebra I and will meet all competencies for Algebra I and the state Algebra requirement. Students will earn two units for Algebra I A/B.

Foundations Courses

The Foundations courses are designed for students who need to build a strong academic base before moving on in an academic area. Foundations courses will focus on mastering the skills and knowledge required in order to fulfill the Student Competencies and Graduation Requirements. Courses will be prescribed according to a student's Individual Education Program. Please see your case manager or counselor for details.

Sequenced Courses

Sequenced courses require students to master the previous course's competencies or for a student who has demonstrated those competencies after an approved Extended Learning Opportunity. For the most part, math and science classes are sequenced but allow for Pathway choices and doubling up. World Language classes are clearly sequenced.

Electives

Electives give students the opportunity to explore areas of interest while gaining mastery in the over-arching Student Competencies. Electives are open for any student to take. The best gauges of the work associated with electives are a student's interest and the subject matter. The discipline a course falls under and the course's description should be the factors weighed when selecting an elective. Typical classes will require the same amount of work associated with a Post Secondary Preparation course with some electives having progressive levels of difficulty.

Extended Learning Opportunities

Students who are interested in learning outside the school day and Bedford High School course offerings may be able to earn credit for their work through a pre-approved Extended Learning Opportunity (ELO) experience. To earn ELO credit a student must obtain prior approval from the ELO committee and do some careful planning with the student's advisor, counselor, or teacher in the subject area to document his/her learning experience and present a portfolio of work to the faculty committee for review. By earning ELO credit a student will have demonstrated mastery of the competencies required in the course work studied. Prior to pursuing the ELO, the student will investigate the competencies needed and submit a curriculum outline to the ELO committee. Periodic review and revision will be scheduled and periodic assessment will provide feedback and guide the student's experience to maximize its fullest potential.

There are two formal opportunities to earn ELO credit at Bedford High School. Students have the option to earn half of their Wellness III credit through an ELO—please see the course description for Wellness III for details. Also, each Bedford High School student may earn as many as one or more of his/her elective credits of an ELO in any area of study. For example, maybe a student is taking private art lessons or other activities similar to courses offered at BHS or spending the summer working with children with disabilities—with a little planning and some formalized documentation, students could earn high school credit for doing something really cool!



Academic Support

If a student needs help with material in a class there are many options for that student to consider. At Bedford High School we are committed to offering support to all students who want and need help in school. There are several different programs and services set up to accommodate student needs. Of course, the first person to seek help from in class is the classroom teacher. Classroom teachers are available to assist students outside of class during the day, after/before school, and/or at other times depending on the schedule of the teacher and student. At Bedford High School, we encourage students and teachers to connect in an effort to maximize the learning opportunities in each class.

ACADEMIC CENTER – This is a program whereby any student who needs help in a class can obtain help. A student may be scheduled into the academic center room as a regularly scheduled time in his or her day or a student may access support during study time as needed. Our philosophy is that while some students will need consistent support throughout the year, others may need help or support as needed for certain units, concepts or during particularly difficult times in their lives (coming back from an extended illness, etc.). The Academic Center is open every period of every day and is staffed by at least one teacher at all times. Whether it be algebra help, organization strategies, help with homework, long-term and short-term planning, or daily help just to 'keep it all together,' our academic center program is sure to meet your needs.

SKILLS – In addition to the Academic Center, Skills is a program offered to students with Individual Education Plans that necessitate the instruction of core skills and objectives outlined in a student's Individual Education Program. This course will be added to a student's schedule based on the recommendation of the team (parents, teachers, student, counselor, administration, and other service providers). Please contact your case manager or school counselor for more information.

BRIDGES - In an effort to assist students who have a particularly difficult time transitioning from middle school to high school or a difficult time in high school – those deemed to be potentially at risk of dropping out of high school – we offer a comprehensive support system including academic support, personal planning and academic counseling. The goal of the program is to ensure that students experience a level of academic and personal success that will assist them in leading productive, responsible lives. Students are guided in the process of developing high expectations for themselves both academically and behaviorally within the school and the community.

Athletes – NCAA Approved Courses

The NCAA Initial-Eligibility Clearinghouse approves courses for use in establishing the eligibility status of students wishing to compete in athletics at the Division I/II college level. Students who are interested in being involved in athletics at the college level need to know that only certain courses from Bedford High School are accepted by the NCAA for eligibility purposes.



Students should consult the most up to date list of NCAA courses approved at the NCAA Clearinghouse website at <http://www.ncaaclearinghouse.net> or the Bedford High School's athletic website <http://www.bedfordhighschool.org>. Please refer to the NCAA Clearinghouse's website for a list of required courses and credits needed for students planning on participating in collegiate athletics.

It is the responsibility of the student and parent to meet the NCAA guidelines if the student wishes to be eligible at the collegiate level for athletic participation. A student's school counselor or the BHS Athletic Administrator will gladly assist in any questions you may have or if you need any assistance with this process.

Post-Secondary Education

"Building toward your future"

Choosing your courses for next year involves some reflective thought and planning. We have provided a guide and a worksheet to help you plot your thoughts and plans for your future and we will work with you every step of the way to make sure you have considered your options and formulated a plan that is flexible. We want to not only guide you toward your hopes and dreams for the future, but we'll even ask you to push yourself a little (or a lot) further to exceed what you ever dreamed imaginable!

Your high school academic program and the quality of the work you do during your years at Bedford High School will serve as your resume to a post-secondary institution. Your academic record, submitted as your high school transcript, is considered the most important factor in determining your admission.

Although students' abilities and performance are as diverse as each applicant, you should carry the strongest, most competitive program you can throughout your high school career. When choosing your courses, think about where each course will lead you. Will it open doors to other courses and other opportunities for growth? Will it help you explore an academic area you haven't tried yet? Will it meet a requirement for graduation? Will it meet a requirement for college admission?

A solid high school program is one in which you are enrolled in courses which demonstrate competency in reading, writing, mathematics, natural and social sciences and world language. Courses in fine and performing arts, computers, business, family and consumer sciences and vocational/technical education enhance your high school experience, broaden your knowledge, and may lead to a great college major and/or lifelong pursuit!

You will be among the first students to head out to college from Bedford High School. While this is an exciting opportunity for you, it also may make you a little anxious that colleges may have no idea who we are. Put your fears to rest knowing that we have been doing a great deal of work to let our college colleagues know "There's a New Dog In Town!" While most of college admissions officers are quite familiar already with students from Bedford – kids from Bedford have been applying to and been accepted at great colleges for a very long time – colleges will have a new con-



text with which to view students. We'll provide them with a comprehensive Program of Studies, a very detailed profile of our town and our students, and ask them to visit us soon in the fall to meet you. Most college representatives, especially from New England, are very aware of who we are and that we are building a new school. They have been watching closely as we progress to opening our doors. They will surely welcome you with open arms, as they want to be the first to claim Bedford High School graduates as their own!

Recommended Course Planning for College Admissions

Many colleges require that a student follow certain recommended or prescribed courses of study in high school in preparation for entrance into college. Students should consult college catalogues and their counselor regarding the specific requirements of the colleges to which the student intends on applying. Bedford High School recommends the following as the best preparation for college entrance.

English	4 units
Mathematics	4 units
Social Studies	4 units
Laboratory Sciences	4 units
World Language	3-4 units in a single language

Each college is looking for students who take the most rigorous courses and programs they can handle. College admissions officers are also looking to see how each student maximized the opportunities available to them at their high school. High school credit granted for classes taken in middle school can not be substituted for these recommendations.





The International Baccalaureate program provides students around the world with a shared academic experience that emphasizes high standards, critical thinking, and an understanding of our diverse world. As a college preparatory program, the IB Program provides students with the skills and attitudes necessary for success in higher education and in employment in the ever changing world.

The IB Diploma Program encompasses six subject areas: first language, second language, history, sciences, math, and arts. These subjects are referred to as:

Group 1: Language A1

Group 2: Second Language

Group 3: Individuals and Societies

Group 4: Experimental Sciences

Group 5: Mathematics and Computer Science

Group 6: The Arts

In addition, there are three more IB components: a critical thinking course called Theory of Knowledge (TOK), an independent research project guided by a supervisor called Extended Essay (EE), and 150 hours of Creativity, Action, and Service activities (CAS).

To earn the IB Diploma, students must complete and successfully test in six subjects along with completing TOK, EE, and CAS. Diploma students are required to take six subjects in order to advance a wide range of knowledge and skills. In this way, IB meets the BHS mission to “exceed our comfortable limits” and “educate the whole person.” Within the six subject areas, students must take at least three but not more than four courses at the Higher Level (HL) and others at the Standard Level (SL). HL can be likened to a college major and SL to a college minor. Most courses run for two years. Diploma students will take both Group 1 at the HL level leaving two (or three) other HL course(s) to select.

A second way to participate in IB is as a Certificate student. Certificate students take fewer than six subjects and don’t participate in TOK, EE, or CAS. Certificate students still take the IB exam at the end of the course and still benefit from the IB program, just not as fully as a Diploma student.

For further information, please refer to the IB information on our school website, www.bedfordhighschool.org, or contact our IB Coordinator.



IB Courses

GROUPS

JUNIOR YEAR

SENIOR YEAR

Group 1:

Language A (English)

IB Global Studies Honors (HL)

IB European Literature (HL)

Group 2:

Language B

IB French IV (SL/HL)

IB French V (HL)

IB French V (SL)

IB Spanish IV (SL/HL)

IB Spanish V (HL)

IB Spanish V (SL)

Classical languages

IB Latin III

IB Latin IV (SL)

Group 3:

Individuals and Societies

IB Global Studies Honors (HL)

IB 20th Century Eastern Affairs (HL)

IB Environmental Systems and Societies (SL)

Or take this course senior year

Group 4:

Experimental Sciences

IB Biology I (SL/HL)

IB Biology II(SL/HL)

IB Chemistry (SL)

Or take this course senior year

IB Physics I (SL/HL)

IB Physics II (HL)

IB Environmental Systems and Societies (SL)

Or take this course senior year

Group 5:

Mathematics and Computer Science

IB Mathematics (HL)/ Calculus I/II

IB Mathematics (HL)/ Calculus II/III

IB Mathematics (SL)/ Calculus I

Or take this course senior year

IB Math Studies (SL)/ Calculus A

Or take this course senior year

Group 6:

The Arts

IB Film Studies (SL/HL)

IB Film Making (SL/HL)

IB Music I (SL/HL)
SL is a one year course

IB Music II (SL/HL)
SL can be taken this year

IB Visual Arts I (SL/HL)
SL is a one year course

IB Visual Arts II (SL/HL)
SL can be taken this year

Theory of Knowledge (TOK)

IB TOK second semester

IB TOK first semester

Creativity, Action, and Service (CAS)

150 hours over two years

Extended Essay (EE)

Begin first semester junior year

Due in October senior year



Interdisciplinary Program Requirements

Advisory

All Grades

4 years

1/2 unit Advisory and 1/2 unit Digital Portfolio (ICT), required

Advisory personalizes each student's educational experience in a small group, grade-level setting. Students will be guided through the following experiences in Advisory: their Personal Learning Plan, their Information-Communication-Technology (ICT) requirement, Student Competencies and Graduation Requirements documented in their digital portfolio, and Senior Project. Advisors will act as advocates for their students and work with them throughout their time at BHS. You do not need to schedule Advisory or reserve space in your schedule. It happens automatically!

Student Competencies: Self-Management

Internship

1/2 or 1 credit

Juniors and Seniors

An internship is a planned work experience, for juniors and seniors, in a field that is of interest to the individual student and will provide a learning experience that will prepare them for their career. It is an opportunity to apply the knowledge gained in the classroom to an occupation and employer that appeals to them. Students will also be able to acquire new skills that will be transferable to future employment. Students who participate in an internship find that it is a rewarding experience and does help their career development.

Student Competencies: Skills and Knowledge, Self Management, Collaboration

Personal Finance

1/2 unit, required

Juniors and Seniors

Semester

Personal Finance will prepare students to meet the economic demands of a 21st century world. This course will provide an understanding of many economic principles including money management and budgeting, saving and investing, compound interest, risk and return, credit, insurance, human capital, and financial markets. Students will be well-informed economic decision-makers and know their role as consumers, producers, investors, and voters.

Student Competencies: Skills and Knowledge, Problem Solving, Self-Management

Senior Project

1/2 unit, required

Seniors

Semester

Senior Project is the semester-long capstone course designed to fulfill the mission statement and culminate a student's career at Bedford High School. Students, in cooperation with their Advisor, will develop and present a proposed project to a faculty committee, initiate the project, conduct research, get involved with the community, present the completed project to faculty, students, and community members, and complete their digital portfolio. IB Diploma Program students fulfill this requirement through TOK, EE and CAS.

Student Competencies: Skills and Knowledge, Problem Solving, Communication, Self-Management, Collaboration.

Creativity, Action, Service

1/4 unit

IB Diploma Students

The Creativity, Action, and Service (CAS) requirement takes seriously the importance of life outside the world of scholarship, providing a counterbalance to the academic demands of the curriculum.



Participation in CAS encourages students to share their energies and special talents while developing awareness, concern, and the ability to work cooperatively with others. CAS requires 150 hours over the two years of the IB program. In combination with the Extended Essay, CAS fulfills the Senior Project requirements. Additionally, you do not need to schedule CAS, your hours will be scheduled outside of any class time much like your real world learning requirements are now.

Extended Essay

1/4 unit

IB Diploma Students

The Extended Essay (EE) offers students the opportunity to investigate a topic of individual interest in one of their IB subject areas. EE acquaints students with the independent research and writing skills expected at college. Students will begin work on their extended essay during their junior year, in conjunction with TOK, and submit it in October of their senior year. A subject specific supervisor guides students during the process. The extended essay has a prescribed limit of 4,000 words, about 15 pages. In combination with Creativity Action, and Service (below), the EE fulfills the BHS Senior Project requirements. Additionally, one does not need to schedule EE, it is scheduled automatically for an IB Diploma student.

Theory of Knowledge I

1/2 unit

IB Diploma Juniors

2nd Semester/Jr. Year

Theory of Knowledge (TOK) is a philosophical and practical exploration of the difficulties of attaining certainty about the things we know. It uses an interdisciplinary approach intended to stimulate critical thinking regarding knowledge and experiences. The course takes time to ask questions about how knowledge is gained and what obstacles lay in the way of that knowledge in each of the subject areas that form the IB curriculum. Course assessments prepare students to fulfill their IB diploma requirements including writing essays and giving oral presentations. Also included in the coursework and class meeting times are support for the Extended Essay and Creativity, Action, and Service Diploma requirements.

Student Competencies: Skills and Knowledge, Problem Solving, Communication, Self-Management.

Theory of Knowledge II

1/2 unit

IB Diploma Seniors

1st Semester/Sr. Year

TOK II is the continuation of the course begun in the junior year. Year two continues to provide IB students with the opportunity to develop a coherent approach to learning that transcends and unifies the academic subjects.

Student Competencies: Skills and Knowledge, Problem Solving, Communication, Self-Management.

Business and Computer Applications

The Computer and Business curriculum is dedicated to preparing students for the business world of today and tomorrow. The course selections will be continuously updated to provide the latest in advances in the field while building a firm business foundation based on best practices and experiences. Toward that end, course content may be expected to change from year to year, and course offerings may alter as business and computer education evolve.

Business courses will foster collaboration and an understanding of our diverse world. Students will be expected to apply business and communication skills and knowledge, and develop critical



thinking, and problem solving. These courses allow students to begin to build a business knowledge foundation and to discuss the strategies behind today's interactive marketplace.

Computer courses allow students to keep their technology skills current, while expanding their knowledge of our technological world. From the user side of computers to software programming to hardware design, students are able to move their skills forward in the direction that best fits their needs and learning style.

Accounting

1 unit, elective

Sophomores, Juniors and Seniors

Year

This course will present the fundamental principles and methods of keeping financial records. The course will provide the students with a basic understanding of the business transactions and preparing worksheets and financial statements. Students will establish an accounting system, complete daily transactions, record transactions through computer entry, print daily reports, prepare daily deposits, and analyze monthly statements for The Dog Pound (the school store).

Student Competencies: Skills and Knowledge, Problem Solving, Self-Management

Computer Animation

1/2 unit, elective

Open to All

Semester

This course will introduce students to the creative world of digital animation using the computer as a tool. Through the use of cutting edge, industry standard software such as Strata 3 D Pro, students will learn computer animation from basic lathe and extruding to skinning. Students will incorporate photographs, scanned images, and text, as well as other sources of imagery. The fundamentals of animation, such as storyboarding, timing, exaggeration, and staging will be emphasized. Students will be required to model objects and apply textures to produce individual animations.

Student Competencies: Skills and Knowledge, Problem Solving, Self-Management

Computer Animation II

1/2 unit, elective

Semester

Prerequisite: Computer Animation I

This course will further develop the methods and techniques of 3-D computer animation. Character design and animation, with advanced set design and environment creation will be explored. Video composition, and the sequencing of shots, script writing, storyboarding, video color theory, audio, and lighting complement the curriculum. Students will incorporate music and sound effects in their animations and machinimations, and may include photographs, scanned images, video clips and text, as well as other sources of imagery.

Student Competencies: Problem Solving, Skills and Knowledge, Communication, Self-Management

Computer Applications I

1/2 unit, elective

Open to All

Semester

This course combines basic and intermediate computer skills needed for college work or personal use and will serve as the first step to the successful use of computer technology. Units of instruction will include Word, Excel, PowerPoint, and Access using project-based learning. Reinforcement of keyboarding technique, speed, and accuracy will be ongoing

Student Competencies: Skills and Knowledge, Communication, Self-Management



Computer Programming

1/2 unit, elective

Open to All

Semester

This is an introductory course in computer science using Java as the programming language. The course will emphasize the analysis of problems, the careful selection of an appropriate algorithm, and the implementation of the algorithm in Java. Students will learn to design, code, and test their own programs. Class exercises will further develop the student's ability to problem solve and their understanding of creative uses of java applets and will focus on proper programming techniques that incorporate manipulating images.

Student Competencies: Skills and Knowledge, Problem Solving, Self-Management

Introduction to Business

1/2 unit, elective

Sophomores, Juniors & Seniors

Semester

This course introduces students to various business topics including economics, distribution, and banking. Students will study business terminology and the business cycle. Education in business will provide students with an overview of the many opportunities in business. Students will be required to create a small business plan of their own.

Student Competencies: Skills and Knowledge, Communication, Self-Management

International Business

1/2 unit, elective

Open to All

Semester

Prerequisite: Intro to Business

This course introduces students to explore major components of the global marketplace. The students will learn about foreign trade, the international monetary system, foreign exchange rates, foreign exchange markets and international financial markets. Students will gain understanding about the opportunities and the challenges involved with international business and for multinational corporations, such as trade barriers, emerging markets, and cultural differences. Students will participate in researching current events within the international financial market and explore international career opportunities.

Student Competencies: Skills and Knowledge, Collaboration, Self-Management

Marketing

1/2 Unit

Open to All

Semester

This semester course examines the basic functions involved in the exchange process designed to meet customers' needs. Such functions include marketing research, target market selections, product design, promotional and advertising activities, distribution, theories of consumer behavior and pricing. Students will have the opportunity to participate in managing and running the school store, The Dog Pound. Students in this course can also join DECA, a nationwide organization for marketing students.

Student Competencies: Skills and Knowledge, Collaboration, Self-Management

Sports and Entertainment Marketing

1/2 unit, elective

Juniors and Seniors

Semester

Prerequisite: Marketing

The course is designed for students interested in sports, entertainment, and event marketing. This course emphasized the management principles related to the business of sports. It includes personnel, programs, marketing, media, financial management and an overview of career possibilities in this growing field.

Student Competencies: Skills and Knowledge, Problem-Solving, Collaboration, Self-Management



Web I: Multi-Media

1/2 unit, elective

Open to All

Semester

Dig deeper into the multimedia software and program applications for the world wide web.. This course will allow students to further explore and develop their skills in digital video, web design, and multimedia. This is a project based course that will explore software such as FrontPage, Dreamweaver, and Flash.

Student Competencies: Skills and Knowledge, Communication, Self-Management

Web II: HTML Page Design

1/2 unit, elective

Semester

Prerequisite: Web I: Multi-Media

This course will introduce the methods and techniques of web page design using HTML (HyperText Markup Language) integrating technology education, math and art. This course will further explore web page design expanding on Dreamweaver, Photoshop and Flash. Students will work on overall site design by adding cascading style sheets, navigation bars, applying and customizing a graphical theme. The use of scripts with web pages will be introduced. The course will stress good design as well as function.

Student Competencies: Problem Solving, Skills and Knowledge, Communication, Self-Management

Family and Consumer Science

Family and Consumer Science courses will provide you, the student, with an opportunity to learn practical and essential life skills that you will need to survive in the world. The goal of the program is to help every student become self-sufficient and able to take care of him/herself. Don't go off to college without knowing how to make an omelet or banana bread or sew the button on your jacket! Explore the culinary cuisine of other parts of the world or explore the timeless architecture right here in NH! Through these courses you will surely add to the quality of your life by being knowledgeable and learned in the science and art of living well. Learn how to plan and cook nutritious meals in one class; design floor plans and coordinate furniture, accessories, and colors for your home in another. These courses not only help you prepare for life on your own but also may lead to an exciting and rewarding career. From quick breads to NYC's Fashion District – FACS courses will take you all over the world and back to making a better home and a better life.

Entrées, Desserts and Side Dishes: Creative Cooking

1/2 unit, elective

Open to All

Semester

Prerequisite(s): More than Mac N' Cheese: Introduction to Cooking

Students in Creative Cooking will expand their cooking knowledge, beyond what was learned in the Introduction to Cooking. The course will provide students with the opportunity to research, prepare and sample various types of food from around the world. Students will prepare both gourmet meals and ethnic cuisine. Skills related to cake decorating, the presentation of food and setting up buffets and meals will also be explored. The student will have the opportunity to create and run a catering business.

Student Competencies: Skills and Knowledge, Self-Management, Collaboration



Fashion and Design

1/2 unit, elective

Open to All

Semester

This course is designed to introduce the students to a career in the clothing/fashion industry. Students will learn concepts of fashion design, clothing merchandising and promotion, as well as concepts related to managing a retail operation. The use of the computer in merchandising will also be introduced to the students. The course gives students a broad overview of the role of merchandising at the retail level to include the many dimensions of the buyer's job. The students will be required to design window displays, run a catalog business and oversee a fashion merchandising business.

Student Competencies: Skills and Knowledge, Self-Management, Collaboration

Housing and Interior Design

1/2 unit, elective

Open to All

Semester

This course allows students to use their creativity, while applying the elements and principles of design, to the exciting world of interiors. Students will work with floor plans, color schemes, textures, fabrics, windows treatments, home furnishings and accessories. Architectural design features and furniture styles, as well as factors influencing housing choices will be explored. Utilizing knowledge and skills gained, students will create 3-D model rooms/houses, floor plans and design boards, as well as redesign rooms/houses, for a variety of home interiors.

Student Competencies: Skills and Knowledge, Self-Management, Collaboration

Human Relationships

1/2 unit, elective

Open to All

Semester

Students will complete inventories that identify their personal characteristics to determine their personality type. Students will analyze how this information affects their interpersonal relationships at home, on the job and in their personal lives. Students will practice skills and access resources necessary to prepare for current or future roles as individuals, partners, parents and employees. Students will discuss factors that influence relationships, role expectations and responsibilities at various life cycle stages. Topic areas include: understanding differences between males and females, handling emotions, stress management, communication, decision making, conflict resolution, friendship, dating, love and commitment, relationships, marriage, parenthood, divorce, separation and other life crises.

Student Competencies: Skills and Knowledge, Self-Management, Collaboration

More than Mac N' Cheese: Introduction to Cooking

1/2 unit, elective

Open to All

Semester

In this course, students will learn basic techniques in preparing food. Emphasis will be placed upon the value of knowing how to purchase, budget for, store, prepare and serve foods. Students will acquire skills that may be used in preparing foods on a daily basis. The course will serve as an introduction to the field of culinary arts.

Student Competencies: Skills and Knowledge, Self-Management, Collaboration



Parenting and Children

1/2 unit, elective

Open to All

Semester

Parenting and working with children can be a rewarding and joyous experience when individuals are prepared for the responsibilities. Students will study topics related to prenatal development, labor and delivery, as well as the importance of preparing for parenthood and the positive and negative influences on fetal development. The joys of “parenting” will be experienced through a simulation using computerized infants during the first part of the semester. An opportunity to practice the parenting skills and responsibilities involved with caring for an infant will be explored. This course provides an excellent foundation for students who plan to pursue a career working with children in elementary education, pediatrics, as well as those who will care for children or become parents in the future.

Student Competencies: Skills and Knowledge, Self-Management, Collaboration

Humanities

Humanities courses combine the study of the liberal arts – writing, literature, art, music, history, government, economics, and philosophy. Humanities courses at Bedford High School fall into two categories: required and elective.

The required courses are:

- Team-taught, interdisciplinary courses for freshman, sophomores, and juniors
- “In Writing,” a required, intensive writing course

The elective courses are:

- Advanced Placement courses
- Additional writing courses
- Social Studies and English electives
- IB Courses

The team-taught, interdisciplinary courses are designed to enrich every student’s learning experience by highlighting the connections between the liberal arts. Students will experience the in-depth relationships between disciplines that drive human experience and creativity instead of studying the disciplines as independent, isolated ideas.

The intensive writing course is designed to give concentrated attention to every student as they begin their high school career. In that way, every student will master the competencies necessary for a successful high school writing experience and every teacher will be able to expect mastery of those competencies. By this method, common assessments for writing will be used across the curriculum.

The Humanities courses will foster habits of open-inquiry and an understanding of our diverse world. Through the sequence of required courses and the complimentary electives, students will advance their skills, knowledge, critical thinking, and problem solving.

We the People: American Studies I

1 unit English, 1 unit Social Studies, required

Freshmen

2 Blocks, Year

We the People is a team taught, interdisciplinary course focused on the literature, history, government, and economics of the United States beginning with pre-Colonialism through to the early 1900s. Students will read primary documents and use technology to understand classic American



literature and key pieces of European literature that helped define our national identity. The foundation and structure of our democracy and the subsequent growth of our country will be examined and analyzed. In addition, New Hampshire's place in national history will be studied. Students will be engaged in the expository writing process, including speech writing, throughout the course in addition to vocabulary development. Students will learn the rights and responsibilities of New Hampshire citizens. Students will also be given the opportunity to fulfill part of the democracy in action requirement.

Student Competencies: Skills and Knowledge, Problem Solving, Communication, Self-Management, Collaboration

We the People: American Studies I Honors

1 unit English, 1 unit Social Studies, required

Freshmen

2 Blocks, Year

We the People is a team taught, interdisciplinary course focused on the literature, history, government, and economics of the United States beginning with pre-Colonialism through to the early 1900s. In each area of study, additional honors competencies will be taught and assessed. Working at a fast pace and at a more rigorous and deeper level, students will read primary documents and use technology to understand classic American literature and key pieces of European literature that helped define our national identity. The foundation and structure of our democracy and the subsequent growth of our country will be examined and analyzed. In addition, New Hampshire's place in national history will be studied. Students will be engaged in the expository writing process, including speech writing, at a sophisticated level throughout the course in addition to advanced vocabulary development. Students will learn the rights and responsibilities of New Hampshire citizens. Students will also be given the opportunity to fulfill part of the democracy in action requirement.

Student Competencies: Skills and Knowledge, Problem Solving, Communication, Self-Management, Collaboration

The American Dream: American Studies II

1 unit English, 1 unit Social Studies, required

Sophomores

2 Blocks, Year

The American Dream is a team-taught, interdisciplinary course focused on the literature, history, government, and economics of the United States from the First World War to the present. Students will read primary documents, classic and contemporary American literature, and essays and commentaries on American culture. Students will examine the United States' system of government and economics and understand how and why it works. Domestic and foreign policy, current events, and the rights and responsibilities of citizens will be explored in detail. New Hampshire's place in the national fabric will be examined. Students will be engaged in the expository writing process, including speech writing, throughout the course, including a major literary analysis, in addition to vocabulary development. Students will also be given the opportunity to fulfill part of the career exploration requirement.

Student Competencies: Skills and Knowledge, Problem Solving, Communication, Self-Management, Collaboration

The American Dream: American Studies II Honors

1 unit English, 1 unit Social Studies, required

Sophomores

2 Blocks, Year

The American Dream is a team-taught, interdisciplinary course focused on the literature, history, government, and economics of the United States from the First World War to the present. In each area of study, additional honors competencies will be taught and assessed. Working at a fast pace



and at a more rigorous and deeper level, students will read primary documents, classic and contemporary American literature, and essays and commentaries on American culture. Students will examine the United States' system of government and economics and understand how and why it works. Domestic and foreign policy, current events, and the rights and responsibilities of citizens will be explored in detail. New Hampshire's place in the national fabric will be examined. Students will be engaged in the expository writing process, including speech writing, at a sophisticated level throughout the course, including a major literary analysis, in addition to advanced vocabulary development. Students will also be given the opportunity to fulfill part of the career exploration requirement.

Student Competencies: Skills and Knowledge, Problem Solving, Communication, Self-Management, Collaboration

Global Studies

1 unit Eng, 1 unit Social Studies, required

Juniors

2 Blocks, Year

Global Studies is a team taught, interdisciplinary course focused on the literature, histories, governments, geography, and cultures of the world including Africa, China, India, Japan, and Russia. Students will read literature from many countries and peoples, examine the histories and governments of other peoples, learn the role geography has played in human development, and evaluate cultural differences. The development and role of the United Nations, the European Union, and other regional bodies will be investigated. Current events and points of world focus such as the Middle East will also be examined. Students will be engaged in the expository writing process throughout the course, including a major research paper, in addition to ongoing vocabulary development. Students will also be given the opportunity to fulfill part of the cultural enrichment requirement.

Student Competencies: Skills and Knowledge, Problem Solving, Communication, Self-Management, Collaboration

Global Studies Honors (HL)

1 unit Eng, 1 unit Social Studies, required

Juniors

2 Blocks, Year

Global Studies is a team taught, interdisciplinary course focused on the literature, histories, governments, geography, and cultures of the world including Africa, China, India, Japan, and Russia. In each area of study, additional honors competencies will be taught and assessed. Working at a fast pace and at a more rigorous and deeper level, students will read literature from many countries and peoples, examine the histories and governments of other peoples, learn the role geography has played in human development, and evaluate cultural differences. The development and role of the United Nations, the European Union, and other regional bodies will be investigated and analyzed. Current events and points of world focus such as the Middle East will also be examined. Students will be engaged in the expository writing process at a sophisticated level, including a major research paper, in addition to ongoing advanced vocabulary development. Students will also be given the opportunity to fulfill part of the cultural enrichment requirement. This course fulfills the junior year IB Group 1 (Language A1) and Group 3 (Individuals and Societies) HL requirements. Students who successfully complete this course will be prepared to take the senior year IB courses in these same Groups along with the associated IB exams at the end of their senior year.

Student Competencies: Skills and Knowledge, Problem Solving, Communication, Self-Management, Collaboration



Foundations Humanities

1 unit Eng, 1 unit Social Studies

Specialized Placement

2 Blocks, Year

The Foundations Humanities course is designed for students who need to build a strong academic base in language arts and social studies before moving on in the discipline. This course will focus on mastering the skills and knowledge required in order to fulfill the Student Competencies and the English and Social Studies graduation requirements.

Student Competencies: Skills and Knowledge, Problem Solving, Communication, Self-Management, Collaboration

Advanced Writing

1/2 unit, writing elective

Open to All

Semester

Advanced Writing will advance a student's written expression with a focus on the needs of upper classmen. Students will be asked to complete a wide variety of assignments that explore different forms of writing including the college essay, writing for the SATs, cover letters, literary analysis, analytical writing, and research-paper writing in addition to developing a personal voice and style. Reading and analyzing published writing will be a central exercise. Students will also be asked to conference and share their writing with peers.

Student Competencies: Skills and Knowledge, Communication, Self-Management

Archaeology

1/2 unit, Social Studies

Open to All

Semester

Students will trace the history of archaeology, examining how it has changed over the centuries. Students will also trace the history of the tools used by archaeologists. Students will look at important archaeological finds and their implications, from Egypt to China to Peru, as well as have the opportunity to examine archaeological opportunities in New Hampshire. Career Exploration opportunities.

Student Competencies: Skills and Knowledge, Problem Solving, Self-Management

Ancient Chinese History

1/2 unit, Social Studies

Open to All

Semester

This course traces Chinese history, from its beginnings through the major dynasties. Students will look at the influences of the rivers on early civilization in China, the lives and thoughts of ancient Chinese philosophers, the establishment of the early Chinese empires, the founding of the Chinese historiographical tradition, the flowering of Buddhism in China, the domestic and international politics at the formative stage of imperial China, and the daily life of ordinary people.

Student Competencies: Skills and Knowledge, Problem Solving, Self-Management

AP English Language and Composition

1 unit, elective

Sophomores, Juniors, Seniors

Year

This college-level survey course can be taken independently as a junior or senior or may be taken in sophomore year in conjunction with AP U.S. History to fulfill the American Studies II requirement. AP English Language and Comp will focus on an in-depth study of Western literature ranging from ancient to modern with an option to focus on American authors. Students will write weekly analytical essays in various forms of discourse based on the significant themes encountered in their reading. The course objectives are geared to prepare students for the Advanced Placement Test in Language and Composition that is given by the College Board in the spring.

Student Competencies: Skills and Knowledge, Problem Solving, Communication, Self-Management, Collaboration



AP English Literature & Composition

1 unit, English

Open to All

Year

Prerequisites: None

AP Literature is a college level survey course offered for potential college credit. It focuses on the close study of significant works of literature, including poetry, and on ways to write analytically and critically about that literature. The course objectives are geared to prepare students for the Advanced Placement test in Literature and Composition given by the College Board in the spring.

Student Competencies: Skills and Knowledge, Communication, Problem Solving, and Self-Management

AP European History

1 unit, Social Studies

Open to All

Semester

Prerequisites: None

AP Europe is a college level course offered for potential college credit. The course examines the leading intellectual, cultural, social, and political elements of the European past from the High Middle Ages to the post-World War II era. Essay writing and oral presentations will serve as the principal evaluative assessments for the course. The course objectives are geared to prepare students for the Advanced Placement test in European History given by the College Board in the spring.

Student Competencies: Skills and Knowledge, Communication, Problem Solving, and Self-Management

AP Psychology

1 unit, Social Studies

Open to All

Year

This year long survey course will increase students' understanding of psychology, its methods, theory, and research as they are introduced to the systematic and scientific study of behavior and mental processes. The course will explore the major subfields of psychology, including consciousness, learning, personality, and cognition, as it prepares students for the Advanced Placement exam. This college level course requires many writing assignments and projects, in addition to advanced study habits and regular class participation.

Student Competencies: Skills and Knowledge, Communication, Self-Management

AP United States History

1 unit, Social Studies

Sophomores, Juniors, Seniors

Year

This college-level survey course can be taken independently as a junior or senior or may be taken in sophomore year in conjunction with AP English and Composition to fulfill the American Studies II requirement. AP U.S. History will focus on United States history from the period of colonization to the present. Students will examine the cultural, economic, philosophical, political, and social development of the United States. Students will be required to complete frequently assigned written essays and oral presentations. The course objectives are geared to prepare students for the Advanced Placement Test in United States History that is given by the College Board in the spring. When taken sophomore year in conjunction with AP English Literature and Composition, this course replaces American Studies.

Student Competencies: Skills and Knowledge, Problem Solving, Communication, Self-Management, Collaboration



British Literature

1/2 unit, English

Open to All

Semester

Prerequisites: None

In this survey course, students will read British literature by authors such as Chaucer, Milton, Swift, Joyce, Shaw, Dickens, Austen and others, including modern British authors. Students will study novels, drama, short stories, essays, and poetry. In addition to emphasizing the development of literary and critical analysis, the course will continue to hone students' skills in communication, composition, vocabulary, and grammar.

Student Competencies: Skills and Knowledge, Communication, Self-Management

Citizenship in Action

1/2 unit, Humanities

Open to All

Semester

Hold a sign, shout a slogan, get fired up! Citizenship in Action will introduce students to being an active member of their community. Historical examples of citizens in action such as women's suffrage, the Civil Rights Movement, Habitat for Humanity, and get-out-the-vote will be analyzed with a focus placed on current events and current issues. Students will be shown how to get involved and will be required to get involved. Students will also be given the opportunity to fulfill part of the democracy in action and community service requirements.

Student Competencies: Skills and Knowledge, Self-Management, Collaboration

Contemporary Literature

1/2 unit, English

Open to All

Semester

Prerequisites: None

In this course, students will read literature from the second half of the 20th and first part of the 21st centuries. The reading will focus on contemporary social themes with selections from the New York Times Bestseller List as well as Oprah's Book Club. Students will continue to develop critical and analytical writing skills in response to the literary works.

Student Competencies: Skills and Knowledge, Communication, Self-Management

Creative Writing

1/2 unit, English

Open to All

Semester

Creative Writing will develop a student's writing style and expression of vision and voice. Students will explore writing both fiction and non-fiction including poetry, short stories, plays, personal narratives, and autobiographical works. Reading and analyzing published and peer work will be a central exercise.

Student Competencies: Skills and Knowledge, Collaboration, Self-Management

Culture of the 20th Century

1/2 unit, Social Studies

Open to All

Semester

This course will examine the connections that exist between popular culture and the events that shape it through the extensive examination of modern history, the arts, and literature. Class work will include discussion, short readings, handouts, lecture, and the use of multi-media (music, video, and audio) presentations.

Student Competencies: Skills and Knowledge, Communication, Self-Management



Economics

1/2 unit, elective

Open to All

Semester

Students will examine economic principles including microeconomics, macroeconomics, and international economics. This study will advance the understanding of the US economy and economic events taking place throughout the world. Economics will broaden and deepen the concepts presented in the team-taught Humanities classes.

Student Competencies: Skills and Knowledge, Problem Solving, Self-Management

Film Critique

1/2 unit, elective

Open to All

Semester

This course is designed to equip students with the tools necessary to critically view films and polish their analytical writing, speaking, and thinking skills in preparation for college. Response journals and class discussions will be at the center of the course, and each viewing experience will conclude with an analytical/critical paper, a creative project, an oral presentation, or a combination of these. Students will view films from the silent era to the present, analyzing them based on a variety of cinematic and narrative devices. As a final project, students will choose a genre of film and complete an in depth research project applying the concepts and terminology learned in class.

Student Competencies: Skills and Knowledge, Problem Solving, Self-Management

Geography

1/2 unit, Social Studies

Open to All

Semester

This course will explore the five themes of geography (location, place, human-environmental interactions, movement, and regions). Included is a survey of the following geographical areas: The United States, North America, South America, Europe, Russia (& outlying areas), Asia, Australia (& outlying areas), and Africa. Emphasis is placed on the physical and cultural systems that interact to produce the distinct regions of the earth.

Student Competencies: Skills and Knowledge, Communication, Self-Management, Collaboration

IB European Literature (HL)

1 unit, English

Year

Prerequisite: Global Studies Honors

This senior year English class is designed for those students who are electing to continue in the IB diploma or certificate program of study. The course will primarily focus on the close reading of European authors in preparation for the necessary IB assessments. As such, first semester will largely focus on the poetry of Auden, Shelley, Rossetti, and one non-European, Neruda, with students developing the skills necessary to independently complete their second World Literature Assignment. Second semester will focus on the detailed study of two Shakespeare plays, the poetry of William Blake and Elizabeth Browning, as well as a close examination of Charlotte Bronte's *Jane Eyre*. Significant attention will be paid to the oral commentary and writing skills necessary for the IB assessments and to the time management skills needed to be successful on the end of the year examinations. Students who successfully complete this course are prepared to take the IB English exam.

Student Competencies: Skills and Knowledge, Communication, Problem Solving, and Collaboration.



IB 20th Century Eastern Affairs (HL)

1 unit, Social Studies

Open to All

Year

Prerequisite: Global Studies Honors

This course is the continuation of the IB/Honors Global Studies course and further prepares students to examine history as a discipline. It focuses on the political, social, and economic development of 20th century Russia and China, as well as selected Eastern European and Middle Eastern nations. These regions are critical players in current and future international affairs and organizations, and global markets. Thematic topics include the development of authoritarian and single-party states, and Cold War relations from the 1960s to the present. Students will examine the role that communism, revolutions, religious law, geopolitics, and power politics have played in the development of Eastern governments and international affairs. Students will learn to think and write like historians by analyzing the value and limitations of sources, and interpreting the global impact of key events and leaders. Students will be expected to make informed judgments and demonstrate independent thinking in essay writing, seminar discussions, document analyses, and college-level research papers. Students who successfully complete this course are prepared to take the IB History exam.

Student Competencies: Skills and Knowledge, Communication, Problem Solving, and Collaboration.

InWriting

1/2 unit, required

Freshmen

Semester

In Writing will enhance and improve a student's writing. A variety of writing skills and styles will be explored such as formatting, devices of language, elements of grammar, structure and organization, SAT writing, research paper writing, and analytical writing. Reading and analyzing a wide range of published, non-fiction writing will be a central exercise. Students will also be asked to conference and share their writing with peers. In Writing will prepare students for much of the writing they will experience at Bedford High School.

Student Competencies: Skills and Knowledge, Communication, Self-Management

Journalism

1/2 unit, elective

Open to All

Semester

This course will introduce students to the principles of writing for, and the art of designing, newspapers. The course objectives include the study of journalism skills: news, feature, and opinion writing; interviewing; reporting; advertising; page design; graphic design; photography; ethics; and editing. Students will receive hands-on publishing experience and learn the challenges of writing for a real audience, running a business, and working in a team situation as they publish Bedford High School's Unleashed.

Student Competencies: Skills and Knowledge, Communication, Self-Management

Law and Ethics

1/2 unit, Social Studies

Open to All

Semester

Could a character in Law and Order really do their job in a Law and Ethics world? This course will investigate the U.S. legal system with a focus on criminal and constitutional law. Students will participate in debates, meet individuals working in the field, and conduct mock trials.

Student Competencies: Skills and Knowledge, Problem Solving, Self-Management



Leadership

1/2 unit, Social Studies

Open to All

Semester

Throughout the course of history leaders have shaped nations, businesses, religious organizations, and the course of world events. Citizens, soldiers, workers, and faithful believers - everyone has been touched by the works of a leader. Leadership is an interdisciplinary course that will study leaders and leadership today and throughout history. Students will learn about leadership styles and will study the effects different leadership styles have had in different contexts. Students will also study about leaders and the effects they have had on the people they lead. Students in this class will participate in school-wide "Leadership Initiative" as a part of this course's requirements.

Student Competencies: Skills and Knowledge, Problem Solving, Self-Management

Literacy

1/2 unit, English

Specialized Placement

Semester

Literacy will provide support to students who have not met proficiency in literacy testing such as the NECAPS and NWEA's. Through Literacy, students will work towards mastery of the language arts competencies needed for graduation.

Student Competencies: Skills and Knowledge, Self-Management

Music and Humanities

1/2 unit, Social Studies

Open to All

Semester

This course will explore how music has impacted and has been influenced by multicultural traditions from the foundation of civilization through the 21st century. Students will experience how composers and musicians have been conduits for their cultures. The course will also focus on major musical trends and movements. Students will learn to analyze individual pieces of music and draw conclusions about their origin and place in history.

Student Competencies: Skills and Knowledge, Problem Solving, Self-Management

Public Presentations

1/2 unit, English

Open to All

Semester

This course is designed to provide the student with the opportunity to explore different speaking and presentation situations. The course will focus on the principles and formats of informative and persuasive presentations, including the various roles that technology can play. Students will develop skills in organization, logic, interviewing, and public speaking.

Student Competencies: Skills and Knowledge, Communication, Self-Management

Psychology

1/2 unit, elective

Open to All

Semester

This course will examine and study human behavior. Students will explore the topics of personality development and theory, psychological research and experimentation, altered states of consciousness and abnormal psychology.

Student Competencies: Skills and Knowledge, Communication, Self-Management



The Middle East

1/2 unit, elective

Open to All

Semester

Students in this course will analyze the multi-faceted points of view at work in the Middle East. A survey of the history of the region will be given with a focus on current events. Specific areas of study could include the various forms of government in the region, Israel and its relationship with neighboring countries, the Palestine Liberation Organization and other groups, Islamic law, U.S. influence and involvement in the area, the role the U.N. has played, and the roots of terrorism in the region. The course will incorporate primary and secondary sources that reflect the area's wide-ranging points of view.

Student Competencies: Skills and Knowledge, Problem Solving, Self-Management

The Origins of Western Civilization

1/2 unit, Social Studies

Open to All

Semester

This course will examine western civilization from the ancient worlds to the Enlightenment, emphasizing themes relating to history, the humanities, and the social sciences. Students will consider how perspectives are determined by oral and written history. In addition to reading literary and historical tests, students will examine artifacts from different cultures to see how they reflected that culture and influenced modern thought.

Student Competencies: Skills and Knowledge, Communication, Self-Management

Women's Studies

1/2 unit, Social Studies

Open to All

Semester

This course will introduce students to the important contributions women have made throughout history. Students will have the opportunity to examine the art, music, literature, science, and historic achievements of women.

Student Competencies: Skills and Knowledge, Problem Solving, Self-Management

World Religions

1/2 unit, Social Studies

Open to All

Semester

This class will explore the spiritual approaches of people around the world. The histories, practices, beliefs, and values of world religions will be the focus. Students will gain a clear understanding of how religion has informed the lives of people around the globe. Five major areas will be covered: Judaism, Christianity, Islam, Hinduism, and Buddhism. Texts include the Torah, Bible, Qur'an, Bhagavad-Gita, and Dhammapada. There will be several guest speakers representing the faiths we study and students will have the opportunity to ask questions and discuss the religion.

Student Competencies: Skills and Knowledge, Communication, Self-Management

Yearbook

1/2 unit, English

Open to All

Semester

This course is an interdisciplinary course combining the study of business, computer applications, writing, photography, and design. Students will design and produce Bedford High School's first yearbook. This group will also spearhead the school's process of choosing a name for the yearbook! Advertising, sales, marketing, layout, meeting deadlines, journalism, and learning sophisticated publishing software – this course covers it all! The experience will culminate in the production of the first ever Bedford High School Yearbook! Be a part of history – take Yearbook!

Student Competencies: Skills and Knowledge, Self-Management, Collaboration



Fine and Performing Arts

The Fine and Performing Arts provide the opportunity for students to know and understand their world through Dance, Music, Theater, and the Visual Arts. Students are given the opportunity to create, perform, and respond to the arts by actively participating in them. All students are required to complete one Arts semester course that includes a type of arts performance – dancing, acting, drawing, playing an instrument, singing, etc. Students are also given the opportunity to analyze and evaluate works of art from structural, historical, and cultural perspectives. There are additional, non-required arts electives listed under the Humanities electives.

Dance Courses

Students in Dance courses have the opportunity to express themselves through movement. Each course is designed to advance the skills and knowledge of different dance styles and to allow students to convey their unique vision.

Dance 1

1/2 unit, Arts

Open to All

Semester

Wow your friends at the winter semi or the prom with what you learn in Dance! This course will focus on a variety of styles of dance through the years and from various cultures. Ballroom dancing, salsa, rumba, street dancing, modern dance, jazz... a little bit of everything!

Student Competencies: Skills and Knowledge, Self-Management, Collaboration

Dance 2

1/2 unit, Arts

Open to All

Semester

Prerequisites: Dance 1 Competencies

You've seen it on Dancing with the Stars and now you can try it too! This course will focus on some familiar styles of dancing, building on your knowledge and dance skills from Dance 1. *Student Competencies: Skills and Knowledge, Self-Management, Collaboration*

Fine Arts Courses

The visual arts curriculum at Bedford High School reflects the National Standards for the Arts and the New Hampshire Curriculum Framework for the Arts. Students are challenged to develop their skills in critical and creative thinking as well as in problem solving. Students in Fine Arts courses may select from a variety of fine arts electives. Each course is designed to advance the skills and knowledge of different fine arts mediums and to allow students to convey their unique vision.

Art History

1/2 unit, Arts

Open to All

Semester

This course is designed to introduce students to the chronological and stylistic development of art beginning with prehistoric and continuing through the 20th century. The course will focus on major artistic movements, artists, and art's relationship to history and culture. Students will learn to analyze individual pieces of art and draw conclusions about their origin and place in history.

Student Competencies: Skills and Knowledge, Problem Solving, Self-Management



Ceramics I

1/2 unit, Arts

Open to All

Semester

Students will explore the potential of clay by being introduced to the basic techniques of hand-building and high- and low-fire glazing. Assignments are centered around functional and decorative projects and the skills of pinch, coil, and slab pots. An introduction to the pottery wheel and throwing simple projects will be included.

Student Competencies: Skills and Knowledge, Communication, Self-Management

Ceramics II

1/2 unit, Arts

Semester

Prerequisites: Ceramics I Competencies

In Ceramics II, students will create hand-built and wheel-thrown pieces ranging from utilitarian items to sculptural works. An emphasis is placed on the understanding of designing three-dimensional forms, considering volume, scale, shape, texture, and color, to create unique and expressive artworks.

Student Competencies: Skills and Knowledge, Communication, Self-Management

Directing

1/2 unit, Arts /English

Open to All

Semester

This course will introduce students to the fundamentals of creating a theatrical production. Students will explore directing techniques. The students will focus on play analysis, casting, blocking techniques, and working with a design team. The course will culminate in the directing of a one-act play.

Student Competencies: Skills and Knowledge, Problem Solving, Communication, Self-Management

Drawing I

1/2 unit, Arts

Semester

Through a series of projects that involve both observation and imagination, students will learn a variety of drawing techniques that involve essential coordination of the hand, eye, and mind. Students will become familiar with different drawing media, including pencil, Conté crayon, oil pastels and pen and ink. Sketchbook assignments will complement studio projects.

Student Competencies: Skills and Knowledge, Communication, Self-Management

Drawing II

1/2 unit, Arts

Semester

Prerequisites: Drawing I Competencies

Students will build on the basic techniques introduced in Drawing I, through various subjects, including still-life landscapes, self-portraiture, and the human figure. Emphasis is placed on learning to draw from direct observation, expanding to include an expressive reinterpretation of the visual world. The course will also encompass art history, art criticism, and the development of aesthetics as a supplement to the studio emphasis.

Student Competencies: Skills and Knowledge, Communication, Self-Management



Experiencing Art

1/2 unit, Arts

Open to All

Semester

Students will be introduced to the elements, principles, and vocabulary of design. Students will be introduced to a range of media and will explore personal interpretation through both observation and imagination. Students will develop appropriate studio habits and will be responsible for sketchbook assignments that complement classroom projects.

Student Competencies: Skills and Knowledge, Problem Solving, Communication, Self-Management, Collaboration

IB Film Studies (SL/HL)

1 unit, Arts or English

Juniors

Year

Film Studies teaches the content and skills necessary to complete a detailed study of film history or film theory based on four films. To prepare for that study, film history and theory will be studied in conjunction with films from various countries. In addition to the independent study, a short oral presentation detailing a critical analysis of a piece of a film will be completed. This course can be taken as a one year elective or as the first year in a two year IB film course in conjunction with IB Film Making. For IB, these courses can be taken as SL or HL courses.

Student Competencies: Skills and Knowledge, Communication, Self-Management, Collaboration

IB Film Making (SL/HL)

1 unit, Arts or English

Available '10-'11

Senior

Year

Alongside an in-depth study of film making, students create one film and an associated trailer. In addition, students explain their film and trailer in a short written rational. This course can be taken as a one year elective or as the second year in a two year IB film course in conjunction with IB Film Studies. For IB, these courses can be taken as SL or HL courses.

Student Competencies: Skills and Knowledge, Communication, Self-Management, Collaboration

IB Visual Arts/AP Studio Art

1 unit, Arts

Juniors and Seniors

1 or 2 Years

Prerequisite: Drawing I or Painting I

Visual Arts IB/AP Studio Art is a course for students who want to continue a serious study in the visual arts. The course is studio-based and will stress practice in the use of various media, the acquisition of techniques, the mature development of creative ideas, and the exploration of art as a universal language. Students will develop a strong, cohesive portfolio of art through work in thematic series. Students who choose the IB component of the course will fulfill the specific criteria set for both studio work and the Research Workbook.

Student Competencies: Skills and Knowledge, Communication, Self-Management

Jewelry I

1/2 unit, Arts

Open to All

Semester

Students will explore the potential of metals and stones in creating art through jewelry making. Students will learn the techniques and design of jewelry. This course covers the use of hand tools, piercing, fabricating, soldering, polishing, etching, forming, and designing jewelry. Extra materials for projects beyond the class assignments will have to be purchased by the student.

Student Competencies: Skills and Knowledge, Communication, Self-Management



Jewelry II

1/2 unit, Arts

Semester

Prerequisites: Jewelry I Competencies

Students in Jewelry II will explore metalworking in depth to create wearable and sculptural pieces. Assignments focus on solving conceptual problems as well as those dealing with form, combinations of materials, textures, and colors. Extra materials for projects beyond class assignments will have to be purchased by the student.

Student Competencies: Skills and Knowledge, Communication, Self-Management

Painting I

1/2 unit, Arts

Open to All

Semester

Students are introduced to basic techniques in media including watercolor and oil painting, and other. Color theory, composition, and a variety of techniques are covered through projects, demonstrations, and discussions. Subjects include still life, landscape, portraiture, and abstract works.

Student Competencies: Skills and Knowledge, Communication, Self-Management

Painting II

1/2 unit, Arts

Semester

Prerequisites: Painting I Competencies

An advanced level painting course for highly motivated painting students with extensive work exploring media, including watercolor, egg tempera, and oil painting. The spring term course offers experimentation with new approaches to painting while reinforcing basic concepts and techniques. Students develop a thematic series of works around one or two subjects including figure painting, color theory and abstraction, still life, and landscape.

Student Competencies: Skills and Knowledge, Communication, Self-Management

Photography: Digital and 35 mm

1/2 unit, Arts

Open to All

Semester

The student will be introduced to the basics of photography, including the study of the camera, photographic composition, and other photographic equipment. The student will learn how to develop black and white film and how to make enlargements. The basics of digital photography will be covered using Photoshop to edit images. A variety of photographic techniques and procedures useful in pictorial composition will be explored. Students will need their own 35 mm single-reflex camera, 5-10 mega pixel digital camera, and will be responsible for purchasing some paper and films. Extra materials for projects beyond class assignments will have to be purchased by the student.

Student Competencies: Problem Solving, Skills and Knowledge, Communication, Self-Management

Photography II

1/2 unit, Arts

Semester

Prerequisite: Photography I Competencies

Students will study advanced techniques, including elements of design and composition, to become more professional and creative in their approach to taking and developing images. They will continue the study of digital photography as well as Adobe Photoshop. Students will also participate in critiques and learn alternative darkroom and lighting techniques, which enhance the quality of their emerging portfolio. Students will need their own 35 mm single-reflex camera, 5-10 mega pixel digital camera, and will be responsible for purchasing some paper and films. Extra materials for projects beyond class assignments will have to be purchased by the student.

Student Competencies: Problem Solving, Skills and Knowledge, Communication, Self-Management



Music Courses

Music courses at Bedford High School may be selected from among three categories:

- Composition and Theory
- Choral Performance
- Instrumental Performance

All music courses offered at the high school level are elective. All course offerings require various levels of student commitment and involvement both in and outside the classroom setting. Regular homework assignments are associated with all music courses. Periodic assessments, term projects and the ability to work with others will be among the criteria used to determine the final grade a student earns for any course.

In performance (ensemble) classes, in addition to regular class attendance, students will be expected to participate in all dress rehearsals and scheduled performances. Class time is used to evaluate the individual student's ability to learn music for performance as well as to learn how to function effectively as a member of an ensemble. Periodic seating auditions are required in the instrumental groups and for solo work in the vocal ensembles. Students are expected to practice daily and are encouraged to engage in private study to enhance their proficiency level. It is our intent to offer a balanced music curriculum with adequate opportunities for all students to enhance their musical development.

Composition & Theory

Music Theory

1/2 unit, Arts

Open to All

Semester

This course is intended for those interested in developing an understanding of the fundamentals of music. Sight-reading, rhythmic and melodic dictation, and composition are included. The construction and use of scales, keys, intervals, and elementary harmony is emphasized and put to use on student compositions.

Student Competencies: Skills and Knowledge, Communication, Self-Management

IB Music I (SL/HL)

1 unit, Arts

Juniors and Seniors

1 Year or 2 Years

Designed for music students with varied backgrounds, IB Music gives students the opportunity to explore and enjoy the diversity of music throughout the world by enabling them to creatively develop their knowledge, abilities, and understanding through performance, composition, and world music history. Students will demonstrate their understanding of music by performing in a group or solo, by exploring their own composition writing, and by using appropriate music terminology in analyzing musical works from many cultures and periods. All IB students must take this course in conjunction with one other BHS performance group such as Concert Band, Concert Choir, Guitar, Garage Band, or Jazz Band among others. This course can be taken as a one year SL course or as a two year HL course.

Student Competencies: Skills and Knowledge, Communication, Self-Management, Problem Solving, Creativity



Choral Performance

Concert Choir

1 unit, Arts

Open to All

Year

This course can be repeated for credit

Concert Choir will prepare and perform a wide range of challenging choral music representative of all styles and periods, including at least one major work, each year. Study of vocal techniques and sight singing is approached through the music prepared for performances. Concert Choir will perform at several evening concerts during the school year. Attendance is required at all performances. Concert Choir is excellent preparation for the annual Music Drama Production.

Student Competencies: Skills and Knowledge, Self-Management, Collaboration

Instrumental Performance

Concert Band

1 unit, Arts

Open to All

Year

This course can be repeated for credit

This course is open to all students who play a band instrument. Performances include formal concerts, football games, band shows, parades, individual and group competitions, and festivals. Attendance is required at all performances.

Student Competencies: Skills and Knowledge, Self-Management, Collaboration

Garage Band

1/2 unit, Arts

Open to All

Semester

Students in Garage Band will develop a band and style of music, write lyrics, study performance skills, and perform for a live audience. Students should be proficient with at least one instrument.

Student Competencies: Skills and Knowledge, Self-Management, Collaboration

Guitar I

1/2 unit, Arts

Open to All

Semester

Guitar is a course for students wanting to learn to play guitar or learn to play guitar better. Students will learn how to read notes, rhythms, guitar tablature, build chords, and tune and maintain their guitar. Various music styles will be explored. Students are required to have their own acoustical guitar.

Student Competencies: Skills and Knowledge, Communication, Self-Management

Guitar II

1/2 unit, Arts

Semester

Prerequisite: Guitar I or permission of instructor.

This is a continuation of Guitar I. In this class students will explore barre chords, melody playing, finger picking, ensemble playing, arpeggios, rhythm playing and soloing techniques.

Student Competencies: Skills and Knowledge, Communication, Self-Management

Piano

1/2 unit, Arts

Open to All

Semester

This course is designed for students who want to learn how to play the piano. Students will learn how to play melodies and chords while learning how to read music. A variety of music and styles will be explored. Students will play on digital electronic keyboards that are interfaced with computers. No experience is necessary for this course.

Student Competencies: Skills and Knowledge, Self-Management, Collaboration



Theater Courses

Each course is designed to advance the skills and knowledge of theater and drama and to allow students to convey their unique vision. Theater courses compliment the co-curricular drama opportunities.

Acting

1/2 unit, English

Open to All

Semester

The Acting course is designed with both the beginner and experienced actor in mind. The course will explore acting techniques and styles through an active approach to the art. Students will experience improvisation and line memorization and have a chance to develop short skits and one act plays. Students will end the course with a public performance for their friends and family to enjoy.

Student Competencies: Skills and Knowledge, Self-Management, Collaboration

Acting II

1/2 unit, elective

Semester

Prerequisite: Acting I Competencies

This course is designed for experienced student actors who have either taken Acting I or have participated in professional theatre. Students will refine the skills learned in Acting I, focusing on voice, movement, and expression, in addition to writing and performing longer scenes. The course will culminate in the creation and performance of an original one-act play.

Student Competencies: Skills and Knowledge, Self-Management, Collaboration

Stagecraft

1/2 unit, elective

Open to All

Semester

Stagecraft will introduce students to the fundamentals of technical theatre production. The course will familiarize students with theater safety, the elements and principles of set design, lighting, sound, stage management, and the use of computer technology. Students will be expected to assist with the high school theatrical productions.

Student Competencies: Skills and Knowledge, Problem Solving, Communication, Self-Management

World Language

World Language offers courses in American Sign Language, French, Latin, Mandarin Chinese, and Spanish. German will be offered only to students who previously started their study of the language and wish to complete it at Bedford High School. We recommend that students pursue the study of at least one world language throughout their high school experience. Acquiring language skills and knowledge of cultures outside of one's own is a rich aesthetic and intellectual experience.

A minimum three-year high school world language course sequence is recommended for students seeking admission to competitive colleges, two years for other colleges. Colleges express no preference among languages, so take a language that interests you and expands your world.



American Sign Language

American Sign Language I

1 unit, World Language

Open to All

Year

This course provides an introduction to American Sign Language. Areas studied include the structure, usage, and history of ASL. Students will focus on ASL expressive and receptive skill development, using interactive reinforcement practice, role-plays, dialogues, and ASL storytelling.

Student Competencies: Skills and Knowledge, Communication, Self-Management

American Sign Language II

1 unit, World Language

Year

Prerequisites: ASL I Competencies

This course will build on students' receptive and expressive ASL skills. The emphasis is on continued vocabulary development and the acquisition of additional simple grammatical structure. Using activities and media, students will develop strategies to help them interpret authentic sign pieces. The Deaf culture will continue to be explored. This class is taught primarily in American Sign Language.

Student Competencies: Skills and Knowledge, Communication, Self-Management

American Sign Language III

1 unit, World Language

Year

Prerequisite: ASL II Competencies

Designed as a continuation of American Sign Language II, this course is intended for advanced students with intermediate background and experience in ASL. Students will learn advanced ASL skills and display them with conversational competence. Additionally, students will be required to sign skits, songs, stories, and poetry. The class is taught using American Sign Language with voice and written communication kept to a minimum.

Student Competencies: Skills and Knowledge, Communication, Self-Management

French

French I AB

1 unit, World Language

Open to All

Year

This course is for students beginning their study of French who would benefit from having the material presented in a decelerated manner. Students will take this course for two years, allowing sufficient time to develop understanding of vocabulary and elementary grammatical structures. Through work and activities, students will learn the four basic language skills of listening, speaking, reading, and writing. French-speaking cultures will be explored. This course prepares students for French II.

Student competencies: Skills and Knowledge, Communication, Self-Management

French I

1 unit, World Language

Open to All

Year

This course is for students who are beginning their study of French and for those coming into the high school that would like to strengthen their basic skills before moving on to French II. Through work and activities, students will learn the four basic language skills of listening, speaking, reading, and writing. The emphasis is on vocabulary development and elementary grammatical structures. French-speaking cultures will be explored. This course prepares students for French II.

Student Competencies: Skills and Knowledge, Communication, Self-Management



French II

1 unit, World Language

Year

Prerequisites: French I Competencies

This course will build on students' abilities to speak, read, write, and listen in French. The emphasis is on continued vocabulary development and the acquisition of additional simple grammatical structure. Using activities and media, students will develop strategies to help them interpret authentic French materials. French culture will continue to be explored. This course is taught primarily in French.

Student Competencies: Skills and Knowledge, Communication, Self-Management

French III

1 unit, World Language

Year

Prerequisites: French II Competencies

This course is for motivated students who are able to build upon a strong foundation. The acquisition of grammatical structures and idiomatic vocabulary is emphasized. Through the in-depth study of stories, literature, poems, songs and popular French films, students will acquire vocabulary and speech patterns that go beyond the average textbook. Students will significantly improve their ability to understand authentic spoken French while using the language to learn about and discuss francophone cultures, history, and other topics of interest. On a structural level, students will use compound tenses and the subjunctive mood to articulate emotions and reactions in real life situations, both orally and in writing. This course is taught exclusively in French.

Student Competencies: Skills and Knowledge, Communication, Self-Management

IB French IV (SL/HL)

1 unit, World Language

Year

Prerequisites: French III Competencies

This course is for motivated students who are interested in applying their knowledge of French to communicate, discuss, and analyze information in French. The curriculum uses a communicative approach and will use a variety of texts to further develop the four skills of language learning: speaking, listening, reading, and writing. Course work will emphasize the importance of using the language as a means of communication and will also focus on more complex grammatical structures. Narration, description, and interaction will be more detailed as the vocabulary and grammar base include more depth. Students will continue to study French and Francophone culture and literature, applying this knowledge in a variety of forms in French. The course fosters cross-cultural understanding and emphasizes real-life applications. This course is taught exclusively in French. Students who successfully complete this course will be prepared to take French V along with the associated IB exam.

Student Competencies: Skills and Knowledge, Communication, Self-Management

IB French V (SL)

1 unit, World Language

Year

Prerequisites: French IV competencies

This course is for motivated students who would like to expand and apply their knowledge of the French language. The course uses a communicative approach to improve students' comprehension, production, and communication skills. This course is taught exclusively in French. In addition, students will be prepared for the IB SL exam.

Student Competencies: Skills and Knowledge, Communication, Self-Management

**IB French V (HL)****1 unit, World Language****Year***Prerequisites: French IV competencies*

This course is for motivated students who would like to expand and apply their knowledge of the French language. The course uses a communicative approach to improve students' comprehension, production, and communication skills. This course is taught exclusively in French and will utilize French literature as a component in the course. In addition, students will be prepared for the IB HL exam and the AP French Language exam.

*Student Competencies: Skills and Knowledge, Communication, Self-Management***German****German IV****1 unit, World Language****Year***Pre-requisite: German III competencies*

This course is for motivated students who are interested in applying their knowledge of German to communicate, discuss, and analyze information in German. The curriculum uses a communicative approach, using a variety of texts to further develop the four skills of language learning: speaking, listening, reading, and writing. Course work will emphasize the importance of using the language as a means of communication and will also focus on more complex grammatical structures. Narration, description, and interaction will be more detailed as the vocabulary and grammar base include more depth. Students will continue to study German culture and literature, applying this knowledge in a variety of forms in German. The course fosters cross-cultural understanding and emphasizes real-life applications. This course is taught exclusively in German.

*Student Competencies: Skills and Knowledge, Communication, Self-Management***Latin****Latin I****1 unit, World Language****Open to All****Year**

The first year of Latin stresses the study of basic vocabulary and grammar to help students learn to read and comprehend the Latin language. The course also develops an understanding of some of the features of Roman influence on Pompeian and British history and civilization. Additional attention is given to English derivatives and Latin phrases and sayings used in the English language.

*Student Competencies: Skills and Knowledge, Communication, Self-Management***Latin II****1 unit, World Language****Year***Prerequisites: Latin I Competencies*

Latin II features a review of Latin I grammar and an introduction to more advanced grammatical structures such as participles, deponents, and ablative absolutes. The development of reading comprehension, as well as literal translations, is encouraged. Vocabulary and the study of English derivatives are continued. The course also seeks to develop an understanding of some of the features of Roman civilization.

Student Competencies: Skills and Knowledge, Communication, Self-Management



Latin III

1 unit, World Language

Year

Prerequisite: Latin II Competencies

Students will continue to review grammar learned in Latin II as they begin to translate Latin prose. This course will focus on the period of the late Republic and include works of the authors Cicero, Ovid, Pliny, Eutropius, and Horace. Grammar will be studied and reviewed to support translation. Logical argument and persuasive oratory, as they relate to good communication, will be discussed. Elements of the civil war, politics, and warfare, as well as philosophical topics, will be studied with the goal of understanding the historical, cultural, and ethical mores of the Republican era.

Student Competencies: Skills and Knowledge, Communication, Self-Management

IB Latin IV (SL)

1 unit, World Language

Year

Prerequisite: Latin III Competencies

This Classical language elective is designed to provide insight into the Augustan Age of Rome and its strong influence on literature, government, and the arts and sciences. Students will translate excerpts of the *Res Gestae* by Augustus, *Tristia* and *Metamorphoses* by Ovid, and *The Aeneid* by Virgil. Additionally, students will draw cultural insights made from the works of Horace, Ovid, and Petronius. Advanced grammar and poetic device and meter will be reviewed. Supplementary study of mythology, history, and Roman culture, as they relate to the reading, will be included. Participation and expression, both verbal and written, are expected. In addition, students will be prepared for the IB SL exam.

Student competencies: Skills and Knowledge, Communication, Self-Management

Mandarin Chinese

Mandarin I

1 unit, World Language

Open to All

Year

The first year of Mandarin Chinese is to develop the ability to communicate orally, emphasizing vocabulary development and basic language functions. Students will use the language to exchange information about topics relating to themselves, their families, and leisure activities. Students will learn basic radicals and stroke order in writing and be introduced to Chinese culture.

Student Competencies: Skills and Knowledge, Communication, Self-Management

Mandarin II

1 unit, World Language

Year

Prerequisites: Mandarin I Competencies

Mandarin Chinese (Putonghua) level II is designed for students who have successfully completed level I. More emphasis will be given to the training of standard pronunciation, listening comprehension, writing simplified characters, grammar and conversational vocabulary usage through essential real-life topics. Chinese history and culture will also be introduced as it relates to each language lesson.

Student Competencies: Skills and Knowledge, Communication, Self-Management



Mandarin III

1 unit, World Language

Year

Prerequisites: Mandarin II Competencies

This course is a continuation of Level II and is taught at a faster pace. Students will acquire vocabulary and speech patterns that go beyond the textbook. It allows students an opportunity to improve both oral and written proficiency. Students learn more complex sentence structures and idiomatic expressions. Readings of increasing difficulty are introduced to expand students' oral and written skills. Students are expected to discuss readings on a daily basis and write weekly journal entries. History, culture, and geography are emphasized through focused research projects.

Student Competencies: Skills and Knowledge, Communication, Self-Management

Spanish

Spanish I AB

1 unit, World Language

Open to All

Year

This course is for students beginning their study of Spanish who would benefit from having the material presented in a decelerated manner. Students will take this course for two years, allowing sufficient time to develop understanding of vocabulary and elementary grammatical structures. Through work and activities, students will learn the four basic language skills of listening, speaking, reading, and writing. Spanish-speaking cultures will be explored. This course prepares students for Spanish II.

Student Competencies: Skills and Knowledge, Communication, Self-Management

Spanish I

1 unit, World Language

Open to All

Year

This course is for students who are beginning their study of Spanish and for those coming into the high school who would like to strengthen their basic skills before moving on to Spanish II. Through work and activities, students will learn the four basic language skills of listening, speaking, reading, and writing. The emphasis is on vocabulary development and elementary grammatical structures. Spanish-speaking cultures will be explored. This course prepares students for Spanish II.

Student Competencies: Skills and Knowledge, Communication, Self-Management

Spanish II

1 unit, World Language

Year

Prerequisites: Spanish I Competencies

This course will build on students' abilities to speak, read, write, and listen in Spanish. The emphasis is on continued vocabulary development and the acquisition of additional simple grammatical structure. Using activities and media, students will develop strategies to help them interpret authentic Spanish materials. Spanish culture will continue to be explored. This course is taught primarily in Spanish.

Student Competencies: Skills and Knowledge, Communication, Self-Management



Spanish III

1 unit, World Language

Year

Prerequisites: Spanish II Competencies

This course is for motivated students who are able to build upon a strong foundation. The acquisition of grammatical structures and idiomatic vocabulary is emphasized. Through the in-depth study of stories, literature, poems, songs and popular Spanish films, students will acquire vocabulary and speech patterns that go beyond the average textbook. Students will significantly improve their ability to understand authentic spoken Spanish while using the language to learn about and discuss culture, history, and other topics of interest. On a structural level, students will use compound tenses and the subjunctive mood to articulate emotions and reactions in real-life situations, both orally and in writing. This course is taught exclusively in Spanish.

Student Competencies: Skills and Knowledge, Communication, Self-Management

IB Spanish IV (SL/HL)

1 unit, World Language

Year

Prerequisites: Spanish III Competencies

This course is for motivated students who would like to expand and apply their knowledge of the Spanish Language. It is part of a two-year course of studies that will prepare students for the International Baccalaureate exam in Spanish. This course uses a communicative approach to continue to improve students' comprehension, production, and communication skills, as well as knowledge and application of cultural phenomena present in the Spanish-speaking world. Course work will emphasize communication for a variety of purposes, such as description, narration, argumentation, and analysis. Students will continue to study cultural trends, products, and traditions throughout and across Spanish-speaking populations and time. This course will be taught exclusively in Spanish. Students who successfully complete this course will be prepared to take Spanish V along with the associated IB exam.

Student Competencies: Skills and Knowledge, Communication, Self-Management

IB Spanish V (SL)

1 unit, World Language

Year

Prerequisite: Spanish IV Competencies

This course is for motivated students who would like to expand and apply their knowledge of the Spanish language. The course uses a communicative approach to improve students' comprehension, production, and communication skills. This course is taught exclusively in Spanish. In addition, students will be prepared for the IB SL exam.

Student Competencies: Skills and Knowledge, Communication, Self-Management

IB Spanish V (HL)

1 unit, World Language

Year

Prerequisite: Spanish IV Competencies

This course is for motivated students who would like to expand and apply their knowledge of the Spanish language. The course uses a communicative approach to improve students' comprehension, production, and communication skills. This course is taught exclusively in Spanish and will utilize Spanish literature as a component in the course. In addition, students will be prepared for the IB HL exam and the AP Spanish Language exam.

Student Competencies: Skills and Knowledge, Communication, Self-Management



Math, Science, Technology

Math

The mathematics program offers a substantive sequence of courses to prepare students for their futures in our technology-rich world. Our goal is to support each student to reach his or her potential in an academically focused environment. In every mathematics course, students will explore and discover mathematics, collect data, observe patterns, make conjectures, and reason both inductively and deductively. Students will create mathematical models and represent solutions algebraically, geometrically, numerically, and verbally. Students are expected to develop perseverance and habits of mind to think analytically and critically. Through their overall experiences in mathematics, students will come to appreciate the beauty of the language of math, and the power of the solutions that mathematics can provide.

CALCULATORS AT BEDFORD HIGH

Throughout all mathematics courses, students will be expected to be personally proficient in mathematical operations and math facts without the use of calculators. Students will not be allowed to use a calculator during a significant number of assignments and with the expectation that students learn the mathematics behind the calculator.

However, through the judicious use of educational technology, students can be actively engaged in genuine mathematical exploration, inquiry, and analysis. Students can determine patterns and analyze graphs, and discover the effects of change in a personalized way. Toward this end, we recommend that all students have consistent access to a graphing calculator that will be used for classwork, homework, data collection, and assessment throughout their high school education. The Texas Instruments TI-84 Plus® Graphing Calculator will most uniformly fit with the data downloads and instructional materials and methods used in all math courses. This level of calculator is essential to the distribution and sharing of data and programs integral to the math program. The calculator and the technological skills learned will directly transfer to science and other classes.

Foundations Math

1 unit, Math

Specialized Placement

Year

Students in this course will build a stronger math foundation and strengthen basic math skills prior to taking Algebra I. This course will be designed based on the needs of the students. Pre-testing will determine the areas of mathematics that are studied so that the course is tailored to the specific needs of the students. This course will include numerical skills work without a calculator so that students become competent in math facts and recall. The course will emphasize problem-solving skill development using real-world and non-routine problems. Concepts are introduced in an appropriate manner and pace, with time for development of understanding of the branches of mathematics. This course can prepare students for Algebra I AB (required for graduation), or repeated as necessary, due to the personalization of the course.

Students Competencies: Skills and Knowledge, Problem-Solving, Self-Management

Numeracy

1/2 unit, elective

Specialized Placement

Semester

Numeracy will provide support to students who have not met proficiency in numeracy testing such as the NECAPS and NWEAs. Through Numeracy, students will work towards mastery of the math competencies needed for graduation.

Student Competencies: Skills and Knowledge, Self-Management



Algebra I AB

2 units, Math

Specialized Placement

2 Blocks, Year

Enrollment based on need and recommendation of math teacher

Students in this course will develop problem-solving skills through the use of algebra, functions, relations, data collection, and analysis. The concepts are introduced in a decelerated manner, with time for development of understanding of algebra and related mathematics. Pre-algebra concepts will be reviewed as needed. Students will become fluent in algebraic simplification, solving, and transforming both explicit and recursive equations. Students will study linear and non-linear regression and modeling, proportions, systems, and polynomials. Algebra, patterns, models, tables, sequences, and graphs will form a basis for analyzing and generalizing data. Students will practice clearly communicating their processes and solutions both orally and in writing. They will be expected to solve a significant number of problems without the use of a calculator. This course will meet the NH state requirement for Algebra and will meet all the competencies in the Algebra I course as well as pre-algebra competencies. Students will be prepared to take Geometry after successfully completing this course. This course meets for a full block every day so that the material and concepts can be practiced, reviewed, and reinforced. Therefore, reserve two blocks for this course when planning your schedule.

Student Competencies: Skills and Knowledge, Problem-Solving, Self-Management

Algebra I

1 unit, Math

Year

Students in this course will develop problem-solving skills through the use of algebra, functions, relations, data collection, and analysis. Students will become fluent in algebraic simplification, solving, and transforming both explicit and recursive equations. Students will study linear and non-linear regression and modeling, proportions, systems, and polynomials. Algebra, patterns, models, tables, sequences, and graphs will form a basis for analyzing and generalizing data. Students will be expected to effectively communicate their processes and solutions both orally and in writing, and solve a significant number of problems without the use of a calculator.

Student Competencies: Skills and Knowledge, Problem-Solving, Self-Management

Algebra I Honors

1 unit, Math

Year

This course will move at a fast pace, and is designed for students who have strong mathematical skills and excellent study habits. Students in this course will develop problem-solving skills through the use of algebra, functions, relations, data collection, and analysis. Students will become fluent in algebraic simplification, solving, and transforming both explicit and recursive equations. Students will study linear and non-linear regression and modeling, proportions, systems, and polynomials. Algebra, patterns, models, tables, sequences, and graphs will form a basis for analyzing, generalizing, and synthesizing data. Students will study deeper and broader algebraic concepts from a theoretical and abstract view. These will include concepts such as algebraic proofs, variables as exponents, and multiple-step word problems using several mathematical concepts. Students will be expected to develop the ability to analyze and solve open-ended and non-routine problems. Students will be expected to clearly communicate their processes and solutions both orally and in writing, and solve a significant number of problems without the use of a calculator.

Student Competencies: Skills and Knowledge, Problem-Solving, Self-Management



Geometry

1 unit, Math

Year

Prerequisites: Algebra I Competencies

Students will study geometry with a focus on basic geometric figures and ideas, congruence, similarity, transformations, right triangles, coordinate geometry, circles, area and volume. Students will use exploratory tools such as the compass, straightedge, and dynamic geometry software to provide interactive learning and develop deductive reasoning skills. Students will investigate geometric probability and statistical analysis, as well as solving problems on and off the coordinate plane, and applying algebraic skills to geometric problems. Real-world problem solving, spatial reasoning, and methods of proof will be threaded throughout the course. It is expected that most knowledge and skills from prior courses will be retained and applied. Some difficult concepts will be reviewed. Students should seek help when prior knowledge is not solid or basic concepts are difficult. Students will be expected to clearly communicate their processes, proofs, and solutions both orally and in writing.

Student Competencies: Skills and Knowledge, Problem-Solving, Self-Management

Geometry Honors

1 unit, Math

Year

Prerequisites: Algebra I Competencies

This course will move at a fast pace, and is designed for students who have strong mathematical skills and excellent study habits. Students will study geometry with a focus on geometric figures and ideas, congruence, similarity, transformations, right triangles, coordinate geometry, circles, area and volume. Students will use exploratory tools such as the compass, straightedge, and dynamic geometry software to provide interactive learning and develop deductive reasoning skills. Students will investigate geometric probability and statistical analysis as well as solving problems on and off the coordinate plane and applying algebraic skills to geometric problems. Students will be involved with real-world problem solving, connecting geometry to other branches of mathematics and other disciplines. Students will study deeper and broader geometric concepts from spatial, theoretical, and abstract views. They will be expected to formalize proof. It is expected that knowledge and skills from prior courses will be retained and applied on a consistent basis, as these will not typically be reviewed. Students should independently seek help when prior knowledge is not solid or concepts are difficult. Students will be expected to clearly communicate their processes, proofs, and solutions both orally and in writing.

Student Competencies: Skills and Knowledge, Problem-Solving, Self-Management

Algebra II

1 unit, Math

Year

Prerequisites: Algebra I

Students will continue their study of algebra in this course with a focus on expanding algebraic, numeric, and graphical solutions to problems. The study of mathematics expands into the complex number system, rational exponents, logarithms, series, polynomials, and more complex functions. Students study classes of functions and investigate their characteristics and their applications to real-world problems. It is expected that much knowledge and skills from prior courses will be retained and applied, but some difficult concepts and skills will be reviewed. Students should seek help when prior knowledge is not solid or concepts are difficult. Students are expected to clearly communicate their processes and solutions both orally and in writing.

Student Competencies: Skills and Knowledge, Problem-Solving, Self-Management



Algebra II Honors

1 unit, Math

Year

Prerequisites: Algebra I and Geometry Competencies

This course will move at a fast pace, and is designed for students who have strong mathematical skills, excellent study habits and a desire to study calculus. Students will continue their study of algebra in this course with a focus on expanding algebraic, numeric, and graphical solutions to problems. The study of mathematics expands into the complex number system, rational exponents, logarithms, series, polynomials, and more complex functions. Students study classes of functions and investigate their characteristics and their applications to real-world problems. Additionally, students will study deeper and broader algebraic and trigonometric concepts from theoretical and abstract views, including infinite series and identities. It is expected that knowledge and skills from prior courses will be retained and applied on a consistent basis as these will not typically be reviewed. Students are responsible for independently seeking help when prior knowledge is not solid or concepts are difficult. Students are expected to clearly communicate their processes and solutions both orally and in writing, including formal proofs.

Student Competencies: Skills and Knowledge, Problem-Solving, Self-Management

Pre-Calculus

1 unit, Math

Year

Prerequisite: Algebra II Competencies

The purpose of Pre-Calculus is to provide students who are pursuing non-math related careers an opportunity to explore mathematics and relate math to external curricular topics as well as home, work and leisure situations. Mathematical Studies is a comprehensive study of algebraic processes, functions and their graphs, advanced geometry and trigonometric topics, sequences and series, statistics, finance, probability, and an introduction to differential calculus. Students will explore international mathematicians throughout history and connect current mathematical uses to the past in oral and written presentations. Throughout the course, students will gather and analyze data, relating the results to real problems, mathematical models and reasonable solutions. An individual project based on an area of personal interest will be formally presented orally and in writing. Students may choose to take math studies to fulfill the requirements for the IB certificate or the full IB diploma.

Student Competencies: Skills and Knowledge, Problem-Solving, Self-Management

Pre-Calculus, Honors

1 unit, Math

Year

Prerequisites: Algebra II, Honors Competencies Highly Recommended

This course prepares students to take college-level courses in calculus and statistics that will be used in their major course of study. This course is intended for those students who have strong mathematical skills and the drive to work hard. Classes of functions and their attributes, compositions, operations, and regressions will be expanded. There will be a focus on algebraic, geometric, and analytic solutions to problems. Trigonometry and its applications, conic sections, polar and parametric equations, and limits will be studied. Students are expected to develop multiple approaches to problem solving, use critical thinking in analyzing and critiquing processes and solutions, and communicate clearly and effectively. It is expected that knowledge and skills from prior courses will be retained and applied on a consistent basis. Students who took the non—honors Algebra II course should see their math teacher for assistance in self-preparing for this Honors Pre-Calculus class, as Algebra II Honors competencies are presumed. Students may choose to take mathematics studies to fulfill the requirements for the IB certificate or the full IB diploma.

Student Competencies: Skills and Knowledge, Problem-Solving, Self-Management



IB Mathematical Studies SL/Calculus A

1 unit, Math

Year

Prerequisite: PreCalculus

This course will prepare students for the SL Math Studies Exam and for mathematical work at a college level. Students will formalize their understanding of modeling, and use descriptive statistics to analyze data and present clear solutions to problems. Students will focus on solving complex problems involving more than one area of mathematics and demonstrating their knowledge in formal ways. Topics include sequences and series, advanced trigonometry, financial mathematics, two-variable statistics, and introductory differential calculus. Students who prefer a calculus course to prepare for the AP exams should take Mathematics/IB SL or HL.

Student Competencies: Skills and Knowledge, Problem Solving, Self-Management

IB Mathematics SL/Calculus I

1 unit, Math

Year

Prerequisite: Pre-Calculus Honors

This course is offered to provide a very high level of mathematical rigor in pre-calculus and calculus, with statistics and discrete math. The purpose of IB Mathematics SL/Calculus I is to provide students who are planning on math-related careers an opportunity to deeply explore mathematics at a very high level and fast pace. IB Mathematics SL/Calculus I is a comprehensive study of functions and their applications, matrices, vectors, advanced geometry and trigonometric topics, sequences and series, statistics, finance, probability, and introductory calculus. Students will make deep mathematical connections to internal and external curricular topics, and explore the history and proof of math. Students are expected to have retained thorough knowledge and skills in all previously taught mathematics, using these skills frequently and comfortably. Throughout the course, students will gather and analyze data, relating the results to real problems, mathematical models and reasonable solutions. At the end of the year students will also be prepared to take the AP Calculus AB exam.

Student Competencies: Skills and Knowledge, Problem Solving, Self-Management

IB Mathematics HL/Calculus I/II – Year 1

1 unit, Math

Year

Prerequisite: Pre-Calculus Honors

This course is offered to provide the highest level of mathematical rigor in pre-calculus and calculus, with statistics and discrete math. The purpose of IB Mathematics HL/Calculus II is to provide students who are planning on math-related careers an opportunity to deeply explore mathematics at a very high level and fast pace. IB Mathematics HL/Calculus II is a comprehensive study of functions and their applications, matrices, vectors, advanced geometry and trigonometric topics, sequences and series, statistics, Finance, probability, calculus, and differential equations. Students will make deep mathematical connections to internal and external curricular topics, and explore the history and proof of math. Students are expected to have retained thorough knowledge and skills in all previously taught mathematics, using these skills fluently and comfortably. Throughout the course, students will gather and analyze data, relating the results to real problems, mathematical models and reasonable solutions. At the end of the second year students will be prepared to take the AP Calculus AB and/or BC exam.

Student Competencies: Skills and Knowledge, Problem-Solving, Self-Management



IB Mathematics HL/Calculus II/III - Year 2

1 unit, Math

Year

Prerequisite: IB Mathematics HL/Calculus I/II – Year 1

This course is offered to provide the highest level of mathematical rigor in calculus with statistics and discrete math. The purpose of Mathematics IB/HL is to provide students who are planning on careers in mathematics an opportunity to deeply explore mathematics. Mathematics IB/HL will conclude two-year IB HL comprehensive study of functions, matrices, vectors, advanced geometry and trigonometric topics, sequences and series, statistics, finance, probability, and calculus. Students will make deep mathematical connections to internal and external curricular topics, and explore the history and proof of math. Students are expected to have retained thorough knowledge and skills in all previously taught mathematics, using these skills frequently and comfortably. In the fall, student may select either the Mathematics SL or HL exam to sit for at the end of the year. Students will also be prepared to take the AP Calculus AB or BC exam.

Student Competencies: Skills and Knowledge, Problem Solving, Self-Management

Discrete Mathematics

1/2 unit, Math

Semester

Prerequisite: Algebra II

Discrete Mathematics is a branch of mathematics that delves into non-continuous data, problems and algorithms. Topics include counting techniques, graph and network theory, voting and apportionment methods, Gantt charts and business applications, and game theory. Coding theory including methods of security on charge cards, bar codes and computer data transfer packets will be explored. Technology, such as computers and graphing calculators, will be used frequently. Students will use a wide variety of problem solving utilizing their algebra skills.

Student Competencies: Skills and Knowledge, Problem Solving, Self-Management

History of Mathematics

1/2 unit, Math

Semester

Prerequisite: Algebra II

This course will investigate mathematics from a historical perspective, beginning with the birth of number systems to present-day developments in mathematics. It will follow events in a chronological order. Students will explore concepts such as the development of fractions and arithmetic operations, the Pythagoreans, the founders of Algebra, Geometry and Calculus, roles of women in mathematics and other important mathematical figures. Students will become familiar with, use, and possibly create various mathematical tools such as the abacus, slide rule, and compass and straightedge. Various mathematical writings and texts will be used to further understanding of each topic. Students will be expected to be able to effectively communicate their understanding of topics through the use of writing and presentations. In addition, students will be recreating mathematical discoveries in their solutions to problems.

Student Competencies: Skills and Knowledge, Self-Management



The Geometry of Art

1/2 unit, Math

Semester

Prerequisite: Algebra II

Students in this course will discover the mathematics underlying art and architecture in the world around us. From the past, they will uncover the hidden math in sculptures and buildings from the Parthenon in ancient Greece and the Pyramids in ancient Egypt, to perspective drawing and buildings from the Renaissance. Patterns such as frieze, cyclic, and dihedral groups, and the lattice structures of tessellations will be categorized and created. Students will also explore the golden section from nature, modern art including Escher, and the current mathematics involved in knots, chaos, and fractals. Students will use their geometry, algebra, and problem-solving skills throughout this course.

Student Competencies: Skills and Knowledge, Problem Solving, Self-Management

Statistics and the Media

1/2 unit, Math

Semester

Prerequisite: Algebra II

The purpose of this course is to introduce the student to the concepts of statistics as represented in the media. Possible media explorations are sports statistics, political polling, advertising, and evaluating misleading statistics. Students will analyze the mathematics behind what the media presents to the public in order to make judicial decisions in their lives. Statistical topics include measures of center and variability, probability, permutations and combinations, normal distributions, samples, confidence intervals, proportions, and binomial distributions. Students will learn how related fields use these concepts and to apply these concepts in making decisions.

Student Competencies: Skills and Knowledge, Problem Solving, Self-Management

Science

The science program is designed to produce scientifically literate students who are proficient in experimental methods and have developed an understanding of the major concepts, laws and theories of the various sciences. All courses emphasize experimental investigations, data collection and analysis, critical thinking, and evaluation. Through these lab-based courses, students will develop analytical thinking and the ability to critically evaluate “scientific facts” as presented in the media and advertising. Through organizing and analyzing data, testing hypotheses and drawing conclusions, students will internalize scientific processes and build a life-long skill. Students will develop an appreciation for the complex world in which they live, and the abilities of science to organize, analyze, and test hypotheses.

All students are required to take a Physical Science (either Physical Science or Physics) and Biology, which must be taken by junior year. A third course must be taken for graduation and can be taken in any year.



Foundations Science

1 unit, Science

Specialized placement

Year

Students in this course will strengthen basic science knowledge and lab skills for students who need to build a stronger science foundation before taking Physical Science. This course will be designed based on the needs of the students. Pre-testing will determine the areas of science that are studied, so that the course is tailored to the specific needs of the students. This course will include extensive hands-on investigations in order to help students internalize science. Measurement, data collection, and organization will be emphasized, and interpretation of results will be discussed. The concepts are introduced in an appropriate manner and pace, with time for development of understanding scientific methods. This course can prepare students for Physical Science or repeated as necessary due to the personalization of the course.

Student Competencies: Skills and Knowledge, Collaboration, Self-Management

Physical Science

1 unit, Science, required

Year

Physics can be substituted for Physical Science by junior year

Students will explore physical science through an examination of physical and chemical processes. The course is centered on labs, activities, and investigations to learn scientific concepts. Students will use measurements to collect data, learn how to organize and display data in useful ways, and develop methods of analyzing to test theory against measurement. They will study such concepts as force, energy, electricity, magnetism, sound and light, properties of matter, and earth and space science. Students will apply such mathematical tools and skills as introductory algebra, simple geometry, functions, discussion of error and graphing. Students are expected to clearly communicate ideas and findings both orally and in writing, including organizational techniques such as tables, graphs, and lab reports.

Student Competencies: Skills and Knowledge, Collaboration, Problem Solving

Physical Science Honors

1 unit, Science, required

Year

Physics can be substituted for Physical Science by junior year

This course is designed for students who have strong science knowledge and skills, desire to work at a highly rigorous pace and level, and have excellent study habits. Students will explore physical science through an examination of physical and chemical processes. The course is centered on labs, activities, and investigations to learn scientific concepts. Students will be expected to be more independent when collecting, organizing and analyzing data to test theory against measurement. Students will use experimental situations, problem-solving skills, and concepts learned to analyze and deduce scientific laws. They will study such concepts as force, energy, electricity, magnetism, sound and light, properties of matter, and earth and space science. Students will apply such mathematical tools and skills as introductory algebra, simple geometry, functions, discussion of error and graphing. Students are expected to have retained past knowledge and skills in math and science and to develop abstract and theoretical thinking. Students are expected to clearly communicate ideas and findings orally and in writing, including formal research papers. Students can expect homework to review concepts learned in class, to learn new material on their own, and to develop critical thinking.

Student Competencies: Skills and Knowledge, Collaboration, Problem Solving



Biology

1 unit, Science, required

Year

This course and the laboratory component are designed to develop an understanding of biological principles. Topics include cell structure, cell function, and matter and energy transfer, chemistry of life, and genetics. The course emphasizes the connections between living systems and their environment. Students will investigate biological concepts and connections through labs, activities, technological resources, and the scientific process. Students are expected to have retained much prior math, science, and data representation skills. Generally, complex or difficult skills will be reviewed as needed. Students are expected to seek help for general skills and knowledge that are not solid. Students are expected to demonstrate effective formal and informal communication of processes and ideas.

Student Competencies: Skills and Knowledge, Communication, Problem Solving

Biology Honors

1 unit, Science, required

Year

This course is designed for students who have excellent science abilities, a desire to work at a highly rigorous pace and level, and have solid study habits. This course and the laboratory component are designed to develop a deep understanding of biological principles. Students will investigate biological concepts and connections through labs, activities, technological resources, and the scientific process. Topics include cell structure, cell function, and matter and energy transfer, chemistry of life, and genetics, as well as honors concepts. This course emphasizes the development of interrelated connections between living systems and their environments. Students are expected to have retained prior math, science, and data representation skills, as these will generally not be reviewed. Sound formal and informal communication of processes and ideas is expected. In order to maximize in-depth class discussions and exploration of concepts, students will often be expected to learn material on their own by reading the textbook and other resources.

Student Competencies: Skills and Knowledge, Communication, Problem Solving

IB Biology I (SL/HL) – Year 1

1 Unit, Science

Juniors

Year

Prerequisite: Biology Competencies

IB Biology I (SL/HL) is a two-year course of study designed for students who seek the challenge of an in depth study of biology. Topics include statistical analysis, biochemistry, cell structure and function, genetics, plant science, evolution, ecology, human physiology, behavior and the international nature of science. Students will use information and communication technology (ICT), including a graphing calculator, data logging software, spreadsheets, databases, and computer modeling as tools to investigate, organize and analyze data. An interdisciplinary group project (Group 4 Project) helps students make connections between the scientific disciplines. The HL curriculum requires students to spend 60 hours on laboratory investigations. IB exams take place during the spring of Senior year.

Student Competencies: Skills and Knowledge, Collaboration, Problem Solving



IB Biology II (SL/HL) - Year 2

1 Unit, Science

Seniors

Year

Prerequisite: IB Biology I – Year 1

IB Biology II (SL/HL) is a two-year course of study designed for students who seek the challenge of an in depth study of biology. Topics include statistical analysis, biochemistry, cell structure and function, genetics, plant science, evolution, ecology, human physiology, behavior and the international nature of science. Students will use information and communication technology (ICT), including a graphing calculator, data logging software, spreadsheets, databases, and computer modeling as tools to investigate, organize and analyze data. An interdisciplinary group project (Group 4 Project) helps students make connections between the scientific disciplines. The HL curriculum requires students to spend 60 hours on laboratory investigations. IB exams take place during the spring of Senior year.

Student Competencies: Skills and Knowledge, Collaboration, Problem Solving

Chemistry

1 unit, Science

Sophomores, Juniors, Seniors

Year

Prerequisite: One high school-level science course and Algebra 1

A lab-based course, chemistry will emphasize measurement, safe lab processes, data analysis, and the evaluation of lab results. Topics will include states of matter, the mathematics of chemistry and the chemical equation, molecular motion and energy, the periodic table, and the atomic and nuclear structure of matter. Students will investigate chemical bonding, energy, kinetics, and changes in matter. Students will be expected to apply math and prior science skills and knowledge in this course. Effective formal and informal communication of processes and ideas is expected.

Student Competencies: Skills and Knowledge, Self-Management, Problem Solving

Chemistry Honors

1 unit, Science

Sophomores, Juniors, Seniors

Year

Prerequisite: One high school-level science course and Algebra 1

The honors version of Chemistry is for the highly motivated student who plans on entering a competitive college or whose career will include the sciences. It is expected that students will apply scientific methods, retain and apply lab skills, and be proficient with mathematics, as these competencies will not typically be reviewed. Topics will be covered from a theoretical as well as concrete point of view. These will include states of matter, the mathematics of chemistry and the chemical equation, molecular motion and energy, the periodic table, and the atomic and nuclear structure of matter. Students will investigate chemical bonding, equilibrium, stoichiometry, energy, and states and changes in matter. Sound formal and informal communication of processes and ideas is expected. In order to maximize in class discussions and investigations, students will often be expected to learn concepts on their own through homework readings and explorations.

Student Competencies: Skills and Knowledge, Self-Management, Problem Solving

IB Chemistry (SL)

1 unit, Science

Year

Prerequisites: Chemistry Honors

IB Chemistry is a course of study designed for students who seek the challenge of an in-depth study of the experimental science of chemistry which combines academic study with the acquisition of practical and investigational skills. The IB chemistry course includes the essential principles of the



subject but also a selection of options. The syllabus for IB chemistry course is divided into three parts: the core, the AHL material and the options. Core Topics include: Quantitative chemistry, Atomic structure, Periodicity, Bonding, Energetics, Kinetics, Equilibrium, Acids and bases, Oxidation and reduction, Organic chemistry, Measurement and data. Options may include: Environmental chemistry, Medicines and drugs, Chemistry in industry and technology, and Food chemistry.

Students Competencies: Skills and Knowledge, Problem Solving, Self-Management

IB Environmental Systems and Societies (SL)

1 unit, Science or Social Studies

Year

Prerequisite: Biology and Chemistry

This IB course is designed to help students understand the natural environment and the environmental problems that we face today, from both a local and global perspective. Major topic areas include: a comprehensive discussion of planet Earth from the core to the outer crust, ecological principles, investigation of biomes, understanding population dynamics and species interaction, identifying the geologic time scale, air quality, the flow of energy through the environment, global change, and the study of conservation methods. Students will explore how human society and technology impacts our environment, both in a negative way and as part of the solution.

Student Competencies: Skills and Knowledge, Problem Solving, Self-Management

Physics

1 unit, Science

Juniors

Year

Prerequisite: Pre-Calculus (can be concurrent) and two years of high school science

The study of physics will continue to develop problem-solving and communication skills in the science field. Students will be expected to apply algebra, strategic thinking and complex analysis to investigations and scientific problems. Topics studied will include work, energy, momentum, kinematics and mechanics, harmonic motion, electrostatics, magnetism and optics. This course assumes the competencies from Physical Science, and will review them quickly as introductory material. Mathematics is fully integrated in physics competencies, and students should have good command of mathematical concepts, processes, and problem solving.

Student Competencies: Skills and Knowledge, Problem Solving, Self-Management

IB Physics I (SL/HL) – Year 1

1 unit, Science

Juniors, Seniors

Year

Prerequisite: Pre-Calculus (can be concurrent)

The study of physics will continue to develop problem-solving and communication skills in the science field. Students will be expected to apply algebra, strategic thinking and complex analysis to investigations and scientific problems. Mathematics is fully integrated in physics competencies, and students should have good command of mathematical concepts, processes, and problem solving. Topics studied will include work, energy, momentum, kinematics and mechanics, harmonic motion, electrostatics, magnetism and optics. Students should expect a rigorous course, independent learning, and a fast pace. Competencies from Physical Science are assumed, and students who do not have a strong grasp of those should plan on individually learning those concepts. Students may elect to take the second course in this series, IB Physics II to complete the IB Physics curriculum.

Student Competencies: Skills and Knowledge, Problem Solving, Self-Management



IB Physics II (SL/HL) Year 2

1 unit, Science

Seniors

Year

Prerequisites: IB Physics I (core) and a concurrent IB Mathematics course

Physics IB/HL, year 2, will continue in-depth study of energy, momentum, kinematics and mechanics, harmonic motion, electrostatics, magnetism and optics. Additional topics may include relativity, particle physics and/or medical physics. Students will explore both classical and modern physics. They will be prepared to take either the IB Physics SL or HL exam. Students select the exam level in the fall of year 2, and sit for the exam in the spring. Students will also be prepared for the AP Physics B or AP Physics C: Mechanics exams at the end of this two-year course.

Student Competencies: Skills and Knowledge, Problem Solving, Self-Management

Astronomy

1/2 unit, Science

Sophomores, Juniors, Seniors

Semester

Prerequisites: Physical Science or Physics and Algebra 2 (can be concurrent)

Astronomy is the study of the universe. Students investigate the appearance of the sky, the many types of celestial objects, and the structure of the solar system. The course offers an in-depth look at the history of astronomy from the past to the present and the tools that astronomers use to locate and discover things in the universe. Students use experiments and computer simulations, to learn about how seasonal changes, lunar phases, planetary motion, and the characteristics of our Sun and the stars are explained. This course prompts the discussion of modern theories such as extraterrestrial life, the evolution of galaxies, quasars, and black holes. Students make group planetarium and observatory visits, as well as required nighttime observations where they demonstrate their ability to locate constellations and common asterisms, and use telescopes properly. Students are expected to have retained much prior math, science and data representation skills. Students are expected to demonstrate effective formal and informal communication of processes and concepts.

Student Competencies: Skills and Knowledge, Problem Solving and Self Management

The Power of Nature

1/2 unit, Science

Sophomores, Juniors, Seniors

Semester

Prerequisite: One Year High School Science

This course integrates the principles of life, earth and physical science to explore meteorology and natural disasters. Students collect and research environmental data to examine local and worldwide weather conditions, make their own forecasts, and explain climate patterns. The class emphasizes the variety and history of severe weather in New England. Students learn about the atmospheric and geological processes that cause storms, hurricanes, tornados, earthquakes, tsunamis and volcanic eruptions. The effect these events have on our society is discussed, as well as the human impact on the future of our planet. Students are expected to demonstrate proper scientific data collection skills, as well as effective formal and informal communication of processes and concepts.

Student Competencies: Skills and Knowledge, Problem Solving and Self-Management

Sports, Health and Exercise Science

1 unit, Science

Year

Prerequisites: Biology and Chemistry

This is a course that is designed for those interested in the medical field as physician, physical therapists, nurses, coaches, and anyone curious about what allows great athletes to perform at the highest levels. The course will cover the anatomy of the skeletal and muscular system, the structure



and function of the ventilatory and cardiovascular system, nutrition, metabolism, neuromuscular function, joints and biomechanics, skill and psychology in sport, information processing, and measurement and evaluation of human performance. This course will use data collection and lab work to understand the concepts covered. Students will delve deeper into the world of bio-machinery and anatomy that exists inside them and the world's greatest athletes.

Student Competencies: Skills and Knowledge, Problem Solving, Self-Management

Technology

Explorations in Technology I

1/2 unit, Science

Open to All

Semester

Students in this course will explore a variety of technical and career related topics. Working safely in a multi-station classroom environment is a primary goal. Students will work in teams to study a variety of technology modules. Modules may include: aerodynamics, flight simulations, laser and fiber optic communications, technical CAD, robotics, structural technology, fluid power (pneumatics), CAD/CAM technology with CNC lathe and/or mill. Students are expected to positively contribute to some whole-class problem-solving situations.

Student Competencies: Skills and Knowledge, Collaboration, Problem Solving

Explorations in Technology II

1/2 unit, elective

Semester

Prerequisite: Explorations in Technology I

This course will allow students to continue to explore a variety of technical and career related topics. Working safely in a materials processing environment is a primary goal. A variety of team study, technology problem solving situations will build upon students' foundations from Explorations in Technology I. Typical problems may include: aerodynamics, flight simulations, laser and fiber optic communications, technical CAD, robotics, structural technology, fluid power (pneumatics), CAD/CAM technology with CNC lathe and mill.

Student Competencies: Skills and Knowledge, Collaboration, Problem Solving

Explorations in Technology III

1/2 unit, elective

Semester

Prerequisite: Explorations in Technology I and II competencies

Students will learn and apply the basic theories and operational concepts relating to common power and energy systems. Topics include the design and use of these power systems in all aspects of the modern world around us. Students will study alternative energy sources including wind, water, solar, and geothermal. Students will plan, problem solve and construct solutions to real and simulated energy problems faced in our society presently and in the future.

Student Competencies: Skills and Knowledge, Collaboration, Problem Solving

Architectural Design

1/2 unit, elective

Open to All

Semester

Design and model your ultimate house. In Architectural Design students will be introduced to the architectural design process. Work with landscape design creating spaces inside and out. The course will utilize an action based modeling process for architectural three-dimensional models. Students will use problem-solving skills to create several solutions to a single problem. Students will also use CAD to find solutions to real world architectural design problems.

Student Competencies: Skills and Knowledge, Collaboration, Problem Solving



Architectural - Civil Engineering

1 unit, elective

Year

Prerequisites – Principles of Engineering or Architectural Design.

Work designing and building a community based project such as a ramp for handicapped access, a storage facility for a community based program, or other projects identified through community needs. The focus will be on Architectural/Civil design principles learned in other classes. This class may support senior projects.

Student Competencies: Skills and Knowledge, Self-Management, Problem Solving

Computer Aided Design

1/2 unit, elective

Open to All

Semester

Students will be introduced to the mechanical/architectural drafting process of CAD. The course will utilize an action based modeling process for both mechanical and architectural three-dimensional models. Students will use problem-solving skills to create several solutions to a single problem. Students will also use CAD to find solutions to real world problems.

Student Competencies: Skills and Knowledge, Self-Management, Problem Solving

Digital Electronics

1/2 unit, elective

Semester

Prerequisites – Principles of Engineering or Algebra II

Build electronic surveillance circuits, integrate microcontroller logic with your own logic circuit designs. This course will involve circuit logic, Boolean algebra and bread boarding your circuit designs. Learn about discrete electronic components and interfacing with microcontrollers. All learning is prototype based and may include Junior Engineering Technical Society (JETS) design challenges.

Student Competencies: Skills and Knowledge, Self-Management, Problem Solving

FIRST Design

1/2 unit, elective

Open to All

Semester

The next step from Lego Robotics into Sumo Robot Battles. This course will prepare students to enter the world of robotics design, using electronics, pneumatics, gears and motors to create a robotic system. Students will be taught fundamentals in 'C' programming, mechanical design, and testing as they prepare for a Sumo Battle.

Student Competencies: Skills and Knowledge, Collaboration, Self-Management

FIRST Design Advanced

1/2 unit, elective

Open to All

Semester

The second semester FIRST Design will emphasize sensor control and will center around the E.I.R.S.T. Technical Challenge (a FIRST competition) We will emphasize the importance of balancing knowledge, skills, creativity, and teamwork in the design process. Students will work in teams, and participate in ways that enhance the group's performance.

Student Competencies: Skills and Knowledge, Collaboration



Introduction to Engineering Design

1 unit, elective

Open to All

Semester

Learn CAD by building models. This introductory engineering design course is for students interested in engineering concepts that have little or no experience in drafting and design. Students will be involved in multiple problem-solving challenges that will involve structural planning and design using various mechanical and electrical systems. Problem solving skills will be developed as students work individually and in teams to build prototypes.

Student Competencies: Skills and Knowledge, Self-Management, Problem Solving

Materials Processing I

1/2 unit, elective

Open to All

Semester

Would you like to know how to build furniture or machine and weld parts for your car? Through problem-solving skills, students will design and construct objects from wood, metals, and composites (fiberglass, carbon fiber, Kevlar). The course will include a brief introduction to Computer Aided Manufacturing. In addition, students will analyze the design and manufacture processes as they create useful products.

Student Competencies: Skills and Knowledge, Collaboration, Self-Management

Materials Processing II

1/2 unit, elective

Open to All

Semester

Prerequisite: Materials Processing I

Through problem-solving skills, students will design and construct objects of metal, and composites (fiberglass, carbon fiber, Kevlar). The course will include a brief introduction to Computer Aided Manufacturing. In addition, students will analyze the design and manufacture process as they create airfoils for wind generators and other assemblies.

Student Competencies: Skills and Knowledge, Collaboration, Self-Management

Principles of Engineering

1/2 unit, elective

Open to All

Prerequisite: Introduction to Engineering Design, Algebra II (or Concurrent)

Design and build bridges and other systems as Engineers do. This course is designed to follow Introduction to Engineering Design and will cover topics in strength of materials – structural analysis, microprocessor control, and digital electronics. Students will be involved in multiple problem-solving challenges that will involve structural planning and design using various mechanical and electrical systems. Problem solving skills will be developed as students work in teams to build prototypes.

Student Competencies: Skills and Knowledge, Self-Management, Problem Solving

Video Production I

1/2 unit, Art or Technology

Open to All

Semester

Students in video production will script, shoot, and edit a variety of video productions including news segments, commercial and political advertisements, film shorts, and personal projects. Students will investigate and evaluate current video and media phenomenon such as YouTube and how video footage can inform public opinion. Students will also have the opportunity to visit BCTV to experience a working video studio and to broadcast one of their projects.

Student Competencies: Skills and Knowledge, Communication, Self-Management



Video Production II (TV Production)

1/2 unit, Art or Technology

Open to All

Semester

Prerequisite: Video Production I

This course will focus on the technical and performance aspects of television broadcasting. Set design, three camera video production, script writing, research, and editing using Final Cut Pro will be a focus. Students enrolling in this course should be prepared to develop both highly technical, as well as creative skills. The course will be comprehensive including: creative writing assignments, as well as research based on a journalistic approach.

Student Competencies: Problem Solving, Skills and Knowledge, Communication, Collaboration, Self-Management

Manchester School of Technology Program Offerings

The Manchester School of Technology (MST) is a regional Career and Technical school offering career related programs. Juniors and seniors from Manchester, Bedford, Goffstown, and Londonderry have the opportunity to enhance their education by enrolling in one of sixteen programs.

Students enrolled at MST come for one program (100 minutes) and return to their home school. Bus transportation is provided through Bedford High School. Students receive two high school credits per year upon successful completion. Extra high school credits may be earned through the cooperative work experience program as well as apprenticeship hours towards licensing (electrical, plumbing, and cosmetology).

- 90% of students say that their experience at MST has made them more confident to enter college and the job market.
- 86% of students say that the course that they are taking relates to what they plan to do after graduation.

The goal of MST is to improve learning through interesting and relevant experiences that integrate school-based learning and foster real-world applications of principles and concepts. The Manchester School of Technology experiences are designed to develop young people's competence, confidence, and connections that can ensure successful careers. These result in multiple options: four-year college, two-year college, technical training, skilled entry-level work on a career path, and the pursuit of lifelong learning.

When you are going to be a junior or senior (2010 and 2011) at Bedford High School, you can sign up at BHS during the course selection process. See your guidance counselor for details.

Listed are the courses offered at MST in 2009-10. Please see the website for more details about each program at www.mansd.org/mst.

Academy of Finance
Applied Business
Automotive Technology
Collision Repair and Refinishing
Cosmetology
Culinary Arts
Design Communications
Early Childhood Education
Electrical Technology
Graphic Design & Gaming

Health Science Technology Education
Landscape & Horticulture
Manufacturing Technology I
Manufacturing Technology II
Public Safety/Law
Residential Carpentry
Residential Plumbing & HVAC
Sports & Entertainment Marketing
Video Productions



Wellness

Wellness is a three-year requirement at Bedford High School that integrates Physical Education, Health, and Career Guidance Curriculum. The curriculum fulfills the state graduation requirement in PE and Health. The BHS Wellness program is designed to promote health, wellness, and physical fitness for all students. It is also intended to provide lifelong health wellness skills students need to develop and maintain a healthy lifestyle into adulthood.

Health topics include drug alcohol abuse prevention, anatomy, physiology, and human sexuality, basic first aid, nutrition, and CPR, as well as prevention and care of illness and injury. Physical Education components will include traditional sports such as volleyball, basketball, tennis, and softball, as well as outdoor activities such as snowshoeing, hiking, walking, initiative games and team building.

Wellness 1: Personal Planning and Fitness

1 unit, required

Freshmen

Year

This comprehensive physical education and health program for all freshmen will focus on personal health and fitness. Integrated into a year-long course, freshmen will design and implement a personal fitness plan and become certified in CPR. Through the process of reflection and planning, students will begin to map out their high school career and learn about educational and professional opportunities beyond high school. Wellness 1 focuses on personal fitness, self-esteem, goal setting, personal values, and decision-making skills.

Student Competencies: Knowledge and Skills, Collaboration, Self-Management

Wellness 2: Community and Health

1 unit, required

Sophomores

Year

Programs for sophomores are integrated into this year long required course, focusing on the concepts of relationships, responsibility, and commitment. It will be firmly based in factual knowledge of the reproductive anatomy and physiology, sexually transmitted diseases, birth control, and HIV/AIDS per the state health curriculum. Throughout the year, students will recognize and promote the importance of self-respect within relationships. The drug and alcohol abuse prevention studies will focus on teaching students the physiology of addiction while emphasizing the dangers of adolescent experimentation. The students will learn to see and make the connections between self-worth and substance abuse in today's society.

Student Competencies: Skills and Knowledge, Problem Solving, Self-Management

Wellness 3: Just Do It!

1 unit, required

Juniors

Year

(1 Extended Learning Opportunity (ELO) can replace the active component of Wellness 3)

It takes 100 days to make a habit! The focus of this wellness course is to put into practice what the first two years of Wellness introduced – that is, the consistent and meaningful practice of fitness and wellness in your life. Through an active and healthy lifestyle you will be able to enjoy life, have more energy, look and feel better and live longer. We'll keep you active, introduce all sorts of activities for you to try and hopefully they will become part of your life. Perhaps you are already very active in your life. You may wish to use this opportunity to work with us to get approval for the Extended Learning Opportunity option and create a plan to document the personal physical fitness you are already involved with. Do you take ballet class several times a week? Perhaps you are a practicing brown-belt? Swim at the 'Y'? On an athletic team? Earn half of your third Wellness credit this way. Whatever the route we want to help you make fitness and health a part of your life every day! The semesterized classroom component of Wellness 3 consists of college and career planning, nutrition and healthy living.

Student Competencies: Skills and Knowledge, Problem Solving, Self-Management



Wellness Electives

Extreme Sports

1/2 unit, Wellness

Juniors and Seniors

Semester

Prerequisites: Wellness 1 & 2 Competencies

Extreme Sports offers a number of non-traditional active opportunities for students in grade 11 and 12. The class will be broken into four main areas of interest: skateboarding, mountain biking, snowboarding, and climbing/hiking. Throughout the duration of this class students will learn the history of these sports and how they have evolved over the years. Students will understand the different types of equipment needed for these activities and the proper ways to fix and maintain them. The class will learn the advantages of taking the appropriate precautions to avoid the potential dangers of these activities. Students are required to have all of the necessary equipment for these activities in order to enroll in this interactive class. We will travel to different locations from skate parks to local mountain-biking trails. We will learn the techniques needed to perform these extreme sports as well as help to develop local trails and areas to ride and hike.

Student Competencies: Skills and Knowledge, Collaboration, Self-Management

Fitness Through Movement

1/2 unit, Wellness

Juniors and Seniors

Semester

Prerequisites: Wellness 1 & 2 Competencies

This course will focus on various types of movements through different styles of aerobic exercise and resistance training. It will introduce the body to a selection of diverse aerobic activities like Tae-Bo, Hip Hop, Basic Aerobics, Resisted Aerobics, Physio Balls and Yoga. This class is designed for individuals who are interested in improving their physical fitness through a non-traditional method.

Student Competencies: Skills and Knowledge, Collaboration, Self-Management

Peer-To-Peer

1/2 unit, elective

Open to All

Semester

Bedford High School embraces a philosophy of including students with disabilities in all of our classes and all aspects of our school community. This course is designed to deepen that inclusion by fostering the development of relationships between students with and without disabilities. The two major components of this course are: 1.) Learning about disabilities and the academic and life challenges they present and, 2.) Mentoring a student with a disability in an academic class, such as art, wellness, math, or science. The focus of the mentor's work will be learning how to provide peer support in a respectful way. Students will also be given the opportunity to fulfill part of the community involvement and service real world requirement.

Student Competencies: Skills and Knowledge, Self-Management, Collaboration



Strength & Conditioning I

1/2 unit, Wellness

Sophomores, Juniors and Seniors

Semester

Prerequisite: Wellness I Competencies

This course is designed for students in grade 10, 11, and 12. This strength and conditioning course is designed to improve overall body strength and conditioning through weightlifting, cardiovascular training, and ply metric training. The aim of this course is to increase muscular strength, improve cardiovascular efficiency, enhance flexibility, improve balance and coordination, and increase speed. Students are required to be self-motivating to train hard every class period and will be required to maintain a daily log which charts their progress through the course. Each student will design (with the help of the teacher) their own personal fitness and weight training program to fit their personal needs. This class will last one semester.

Student Competencies: Skills and Knowledge, Collaboration, Self-Management

Team Sports

1/2 unit, Wellness

Juniors and Seniors

Semester

Prerequisites: Wellness 1 & 2

Students will increase their knowledge and skills in various competitive and lifelong physical activities. Emphasis will be on skill development, strategy and team building to enhance success and enjoyment.

Student Competencies: Skills and Knowledge, Collaboration, Self-Management



Driver Education Program

This program is offered through Hampshire Driving School, Nashua NH

LOCATION: Bedford High School
CLASS SIZE: The class size will be twenty-five students.

COURSE REQUIREMENTS:

Classroom Portion: 30 hours of classroom instruction in fifteen (15) 2-hour classes. Students must earn a passing grade of 70% on tests and 80% on the final exam. Written pre-class assignments and homework must be completed and given to the instructor. One make-up class will be offered at course completion, additional make-up classes can be made up during the next course at a cost of \$25 per class. The exact same missed class must be attended.

Driving Portion: 10 hours of driving the driver education vehicle. Driving hours start and end outside Bedford High School. Driving is offered after school, evenings, and some weekends.

Observation Portion: 6 hours of observation of other students driving the driver education vehicle.

Program Completion Time Limit: Students have six (6) months from the start of the program to complete the course.

REGISTRATION PROCESS:

To enroll, a student must turn sixteen (16) years of age before the scheduled class ends. Registration will occur at Bedford High School, 47B Nashua Rd., Bedford, NH 310-9000. The office hours for registration are 7:00 a.m. to 4:00 p.m. Monday through Friday.

SNOW DAYS:

If there is no school in the Bedford School District or an early release due to bad weather, there will be no driving or class. On non-school days, students will be called if driving is cancelled due to bad weather. If a student or observer must be cancelled due to circumstances other than bad weather, they will be called if time permits.



Important Information

TITLE IX-EDUCATION AMENDMENT, 1972

Title IX states; "No person in the United States shall on the basis of sex be excluded from participation in, be denied benefits of, or be subjected to discrimination under any education program or activity receiving Federal Financial assistance. . ."

The administration of the Bedford School District does not discriminate on the basis of sex in any education program or activity receiving federal financial assistance and is in compliance with the requirements of Title IX. This affirmation of non-discrimination extends to employment and admissions.

Questions about the application of TITLE IX - SECTION 504 or complaints alleging non-compliance within Bedford High School should be directed to the Director of Human Resources, the Title IX Coordinator for Bedford High School. They will explain how complaints will be handled by the district to people who feel they may have a complaint.

NOTICE OF NONDISCRIMINATION

The Bedford School Board hereby notifies all parents/guardians and students that the Bedford School District does not discriminate in its educational programs, activities or employment practices on the basis of race, color, national origin, age, sex or handicap under the provisions of Title VI of the Civil Rights Act of 1964, the Age Discrimination Act of 1967, Title IX of the Educational Amendment of 1972, Section 504 of the Rehabilitation Act of 1973 and the Education for all Handicapped Children Act of 1975. Any person having inquiries concerning compliance with the regulations implementing these laws may contact:

Director of Human Resources
Bedford School District
103 County Road
Bedford, New Hampshire 03110
Phone: 472-3755

Any person may also contact the Assistant Secretary for Civil Rights, U.S. Department of Education, or the Director, U.S. Department of Education, Office for Civil Rights, Region I, Boston, Massachusetts.



RESIDENCY

Bedford High School students must be residents of the Town of Bedford. All registration documents must list specific street or highway addresses. Any non-resident student wishing to attend Bedford High School must make a formal request to the Bedford School Board through the Superintendent of Schools.

CHILD FIND NOTICE

As mandated by the EDUCATION FOR ALL CHILDREN ACT - public schools must provide special education for all children determined to be educationally handicapped. The law also requires a school district to identify such children from birth through 21 years of age. This law applies to all children including those in non-public schools, pre-schools and hospital settings.

If at any time you suspect your child might have an educationally handicapping condition, you are encouraged to contact your child's school to discuss your concerns. School personnel will provide you with information on the procedures for determining if a child is educationally handicapped and in need of special education services.

For more detailed information about the policies, procedures and services established in your school district for special education, the Bedford School District SPECIAL EDUCATION PLAN is available for review at the Superintendent's Office.

BEDFORD HIGH SCHOOL HANDICAPPED ACCESSIBILITY

This policy is designed to insure that school facilities and programs provide access for physically handicapped students, parents, and guests.

All students who have educational disabilities and who attend Bedford High School will have an equal opportunity to complete a course of studies leading to a high school diploma.

