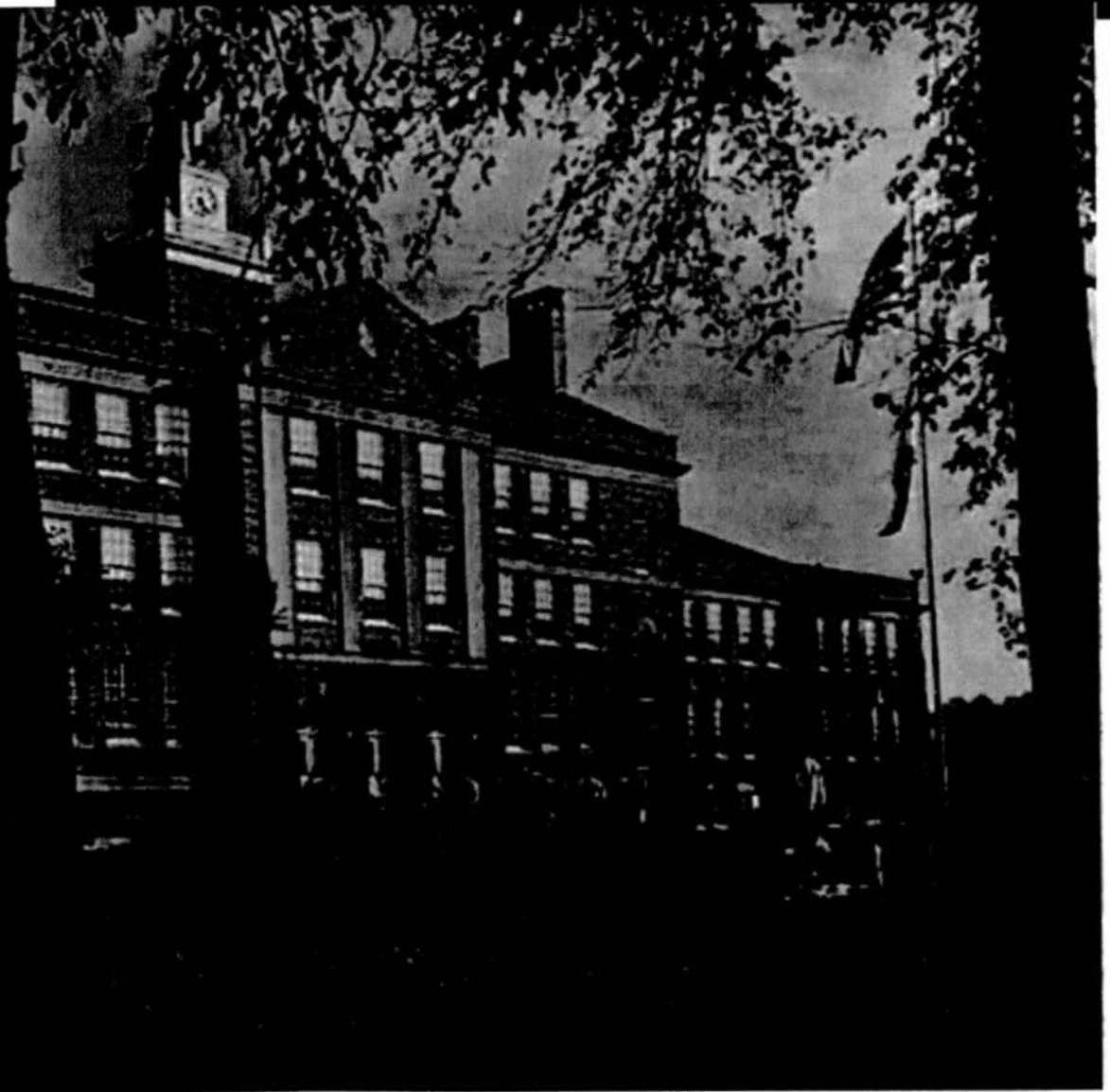


# Brighton High School



**2011-2012**  
*Program of Studies*

*Andy Worn*

# TABLE OF CONTENTS

<b>ADMINISTRATION/SUPPORT PERSONNEL</b> .....	1
<b>INTRODUCTION</b> .....	3
Format.....	3
Program Planning.....	3
Program Changes.....	4
Graduation Requirements.....	5
Academic Requirements.....	5
Required Exams.....	5
Diploma with Honors Designation.....	6
Students with Disabilities.....	7
Promotion.....	7
Guidelines for Graduating with Brighton High School Diploma.....	8
Student Load Requirements.....	8
Meaning of Credit.....	8
Course Level Classification.....	9
Enriched Sections.....	9
Advanced Placement Courses.....	9
Optional Opportunities.....	10
Pass-Not Pass Grading Option.....	10
Independent Study Program.....	10
Skills Development Lab.....	11
Credit by Examination.....	12
Internship Program.....	12
Resource Room.....	13
Counseling Center Program.....	14
Counseling Department/Parent Meetings.....	14
Academic Intervention Services.....	14
<b>BUSINESS DEPARTMENT</b> .....	15
<b>COMPUTER SCIENCE DEPARTMENT</b> .....	21
<b>ENGLISH DEPARTMENT</b> .....	22
<b>ENGLISH TO SPEAKERS OF OTHER LANGUAGES (ESOL)</b> .....	30
<b>EXTENDED STUDIES</b> .....	32
<b>FOREIGN LANGUAGE DEPARTMENT</b> .....	33
<b>AMERICAN SIGN LANGUAGE</b> .....	41

<b>HEALTH .....</b>	<b>43</b>
<b>MATHEMATICS DEPARTMENT .....</b>	<b>44</b>
<b>MOUNTAIN BOUND LEADERSHIP COURSE.....</b>	<b>51</b>
<b>PHYSICAL EDUCATION DEPARTMENT.....</b>	<b>53</b>
<b>SCIENCE DEPARTMENT .....</b>	<b>55</b>
<b>SOCIAL STUDIES DEPARTMENT.....</b>	<b>63</b>
<b>TECHNOLOGY DEPARTMENT .....</b>	<b>69</b>
<b>VISUAL AND PERFORMING ARTS .....</b>	<b>73</b>
Visual Arts .....	73
Music.....	79
Instrumental Music .....	80
Choral/Vocal Music .....	82
Theater Arts .....	81
<b>VOCATIONAL TECHNICAL CENTER (EMCC) .....</b>	<b>82</b>

## STAFF & ADMINISTRATION

<b>Principal:</b>	<b>Dr. Nancy Hackett</b>	242-5001
Secretary to Principal	Mrs. Cindy Craig	242-5209
<b>Assistant Principals:</b>		
<b>Grade 9-12 (A-G)</b>	<b>Ms. Teresa Mosher</b>	242-5003
Secretary to Ms. Mosher	Mrs. JoAnn Ingraham	242-5002
<b>Grade 9-12 (H-O)</b>	<b>Mr. Brian Gee</b>	242-5005
Secretary to Mr. Gee	Mrs. Sandie Purdy	242-5004
<b>Grade 9-12 (P-Z)</b>	<b>Dr. Mike Liener</b>	242-5007
Secretary to Dr. Liener	Mrs. Charlotte Kimberly-Haag	242-5007
<b>Directors/Coordinators:</b>		
Visual Arts	Mr. Jason Berger	242-5046
Business	Mr. Brian Gee	242-5004
Computer Education	Mr. Brian Gee	242-5004
Counseling	Mrs. Debbie Bourne	242-5010
English	Mrs. Anne Maier	242-5043
Foreign Language	Ms. Dorene Estrada	242-5044
Mathematics	Mr. Evan Brauer	242-5050
Performing Arts	Mr. Jason Berger	242-5046
Physical Education	Mr. Ron Plummer	242-5070
Science	Mr. Jamie Porta	242-5042
Social Studies	Mr. Dan Wilmot	242-5040
Special Education	Mr. Tim Mashewski	242-5063
	Mr. Ben Vick	
Technology Education	Mr. Dick Tschorke	242-7521

## SUPPORT PERSONNEL

<b>High School Counselors:</b>		
Mrs. Debbie Bourne		242-5010
Mr. Kevin Hanna		242-5010
Mrs. Holly Likly-Juliano		242-5010
Mr. Philip Mallette		242-5010
Mrs. Jennie Viggiani		242-5010
Mr. Steve Robson		242-5010
Secretaries to Counseling Center:		
Mrs. Marilyn Lewis		242-5010
Mrs. Sandy Hellman		242-5009
<b>Internship/Independent Study Coordinator</b>		
Ms. Marcia O'Brien		242-5020

**Middle School Counselors:**

Mrs. Erin Cusanno	242-5120/5121
Mrs. Abbie Paine	242-5120/5121
Ms. Catherine Liebel	242-5120/5121
Mrs. Nancy Mooney	242-5120/5121
Mrs. Erica Oliveri	242-5120/5121

**Prevention/Intervention Specialist**

Mr. Lance Mitchell	242-5012
--------------------	----------

**High School Registrars:**

Mrs. Mary Ellen Schulz	242-5027
Mrs. June Camardello / Mrs. Josie Leyens	242-5027

**School Psychologist**

Dr. Erin Merydith	242-5226
-------------------	----------

## **INTRODUCTION**

### **FORMAT OF THE PROGRAM OF STUDIES BOOKLET**

Course descriptions are grouped by departments. Each department exhibit begins with an introductory paragraph outlining the general purposes of instruction pertaining to all courses in that department. Each course description beginning with the course title, number, and level designation is followed by a paragraph outlining the content of the course. Charts diagramming the curriculum of some departments will be found with the course descriptions. These charts show sequential groupings or recommend programs within a subject area and are from left to right as the student progresses through high school.

### **STEPS IN PROGRAM PLANNING**

Each year with the help of their parents, teachers, and counselors, students plan their high school program for the year ahead. The steps in this process are outlined below:

**STEP 1:** January - Teachers present information about course offerings for the coming school year to students. Options for the next school year are shared with students in current classes in their discipline. Teachers make recommendations to the counseling staff based upon the student's current progress, apparent interest, motivation, and potential in that discipline. The middle school invites teachers and/or coordinators of high school departments to meet with current eighth graders to inform and to advise them about ninth grade options and to answer questions.

**STEP 2:** In January/February - Copies of the "Program of Studies" booklet are given to all students in grades eight through eleven. Students study the booklet with their parents and develop a tentative program for the coming year. Teachers and department coordinators provide further details about curricula.

**STEP 3:** Through homeroom and counseling seminars with their counselors, students in ninth, tenth, and eleventh grades complete their program plans for next year and resolve any remaining questions. The 8th grade counselor assists the eighth graders in completion of final program plans during the same period.

**STEP 4:** Departmental recommendations are prepared by teachers in English, Math, Science, Social Studies and Foreign Language. These recommendations are based upon past achievement, test data, estimates of interest and motivation. These recommendations are on the Course Registration Form and represent the best judgment of the school regarding the student's educational program. The choice of finally accepting these departmental

recommendations rests with the student and his/her parents. **The course recommended by the teacher will be used to plan a student's schedule, unless a parent, after conferring with the counselor, recommends otherwise.**

**STEP 5:** Course requests for the entire school are tabulated and these enrollment figures are used by department heads and administrators to make final decisions about course offerings and number of sections required for the coming school year. **In general, courses with fewer than 15 students will not be offered.** Students who elected to take courses that are not offered due to low enrollment will be notified and may then make alternate selections. Based upon this information, the master schedule for the school is designed.

### **PROGRAM CHANGES**

Throughout Program Planning, we have stressed the importance of making wise and sound decisions regarding course selections. If choices are made wisely, there is little need for change. If any changes are necessary, they will be made at the following times.

- a) when verification forms are received in April
- b) after final grades are reported in June  
(teachers may elect to change their recommendation)

Any course selection changes after July 1 must be processed through the Schedule Change Committee. **Changes will only be allowed during the first cycle.**

### **Schedule Change Committee**

The Schedule Change Committee is made up of a parent, teacher, student, assistant principal, and school counselor. With good initial decisions and proper planning, the need for changes in the fall should be almost nonexistent.

### **Program Planning Timetable 2010-2011**

- |    |  |                                      |
|----|--|--------------------------------------|
| 1. | "Program of Studies" booklet handed out  | January 4, 2011                      |
| 2. | Teachers discuss course recommendations with students  | January 4-8, 2011                    |
| 3. | Students make final course selections for 2010-2011  | February 2-24 2011                   |
| 4. | Student verification forms mailed home   | April, 2011                          |
| 5. | Final copy of schedule mailed home   | Mid August, 2011                     |
| 6. | All schedule changes, other than level changes must be approved by Schedule Change Committee | Late August, 2011                    |
| 7. | No schedule changes, except for level changes after Cycle 1                                  | 1 <sup>st</sup> Cycle of school year |

**GRADUATION REQUIREMENTS**

**A. Academic Requirements**

**Regents & Local Diplomas**

**Regents Diploma with Advanced Distinction**

English	4	English	4
Social Studies	4 (b)	Social Studies	4 (b)
Math	3 (c)	Math	3 (c)
Science	3 (c)	Science	3 (c)
LOTE	1 (d)	LOTE	3 (d)(e)
Health	0.5	Health	0.5
The Arts	1	The Arts	1
Physical Education	2	Physical Education	2
Electives	3.5	Electives	1.5
Total (Minimum)	22	Total (Minimum)	22

(b) Four credits required, including one credit in U.S. History and Government and .5 credit each in Participation in Government and in Economics.

(c) An integrated course in math/science/technology may be used as the third required unit of credit in either math or science, but not both.

(d) Students are required to have completed two years of study in LOTE (Languages Other Than English) by the end of ninth grade, and earned 1 unit of credit by passing the final exam for the course (Checkpoint A) in Grade 8 or the course in Grade 9.

(e) Students acquiring 5 units in art, music, business, technology, or career and technical education may be exempt.

**B. Required Exams**

<b><u>Local Diploma for IEP students only</u></b>	<b><u>Pass</u></b>	<b><u>Regents Diploma</u></b>	<b><u>Pass</u></b>
English Regents	55	English Regents	65
Integrated Algebra I	55	Integrated Algebra I	65
Global History Regents	55	Global History Regents	65
U.S. History Regents	55	U.S. History Regents	65
One Science Regents	55	One Science Regents	65

**Students Entering Grade 9 in September 2008 and thereafter**

Students who first enter Grade 9 in September 2008 must attain a score of 65 or above on five of the five required Regents examinations.



<b><u>Regents with Advanced Designation</u></b>	<b><u>Pass</u></b>
English Regents	65
Global History Regents	65
U.S. History Regents	65
Two Science Regents*	65
*One of the two Regents Science exams must be Living Environment	
Regents LOTE Exam	65
Integrated Algebra I	65
Geometry	65
Algebra II / Trigonometry	65

### **C. Diploma “With Honors” Designation**

The words “with Honor” may be added to the Regents Diploma or the Regents Diploma with Advanced Distinction. To earn honors, a student must achieve an average of 90% or higher in all Regents examinations, or their equivalent, required for the diploma. Averages below 90% shall not be rounded upward to 90%.

## **STUDENTS WITH DISABILITIES**

### **Safety Net**

The safety net is available for students with disabilities entering grade 9 prior to September 2010 who meet the following qualifications:

- Students who have been identified by the Committee on Special Education (CSE) and who have an Individualized Education Plan (IEP). Specific language regarding the availability of the safety net does not have to be indicated on the IEP.
- Students with disabilities declassified while in grades 8-12, if the safety net is recommended and documented by the CSE in the declassified plan.
- Students with a 504 plan, if the safety net is recommended and documented in the plan.

The safety net allows eligible students who do not pass a required Regents Examination to take the Regents Competency Test (RCT) in that subject and receive local credit if they pass the RCT with a score of 65 or higher. (For ELA, students must receive a passing score on both the Reading RCT and the Writing RCT.) If a student earns a local diploma by passing the RCT(s), the diploma will report the test taken, the score, and a statement that the score is a passing score.

For students with disabilities who first enter grade 9 through September 2009 and thereafter, a score of 55-64 is considered a passing score on any Regents examination required for graduation. In such a case, the District may issue a local diploma to such students.

### **IEP Diploma**

This certificate is designed for the students who meet all the goals and objectives as outlined in their IEP but are unable to pass all of the New York State required assessments. Students must have completed 12 years of school beyond kindergarten or have reached the age of 21. A student may receive an IEP diploma and continue to attend school to work towards a high school diploma or until reaching age 21.

### **PROMOTION**

Guidelines for grade level classification are based on the following table:

5 credits	10 <sup>th</sup> grade standing
11 credits	11 <sup>th</sup> grade standing
16 credits	12 <sup>th</sup> grade standing
22 credits	

## **GUIDELINES FOR GRANTING BRIGHTON HIGH SCHOOL DIPLOMAS**

A Brighton High School diploma will be granted only to students registered in Brighton High School at the time of completion of New York State graduation requirements. In general, all such requirements for graduation shall be completed through the program of studies approved by the Board of Education in the Program of Studies booklet.

Exceptions to the above may be considered by the principal. Requests for exceptions must be submitted in writing to the principal and approval must be granted prior to the beginning of the course or courses in question.

Exceptions shall include, but not be limited to the following:

- a) Students may complete up to one (1) high school unit or equivalent at any accredited institution in the summer following their senior year and still be a member of that graduating class. If completed later, date of graduation would be the June following the completion of graduation requirements.
- b) Students may complete up to one (1) high school unit or equivalent at any accredited college while enrolled in high school and have this credit used to meet the graduation requirements at Brighton High School.

### **STUDENT LOAD REQUIREMENTS**

All students shall carry a minimum of five (5) subjects plus physical education per semester. **Six courses are strongly recommended.** Taking seven (7) subjects requires approval of counselor and parent.

### **MEANING OF CREDIT**

A student earns a credit for successfully completing a subject. For a full-year course, a student gets one credit, and for a semester course 1/2 credit.

## **COURSE LEVEL CLASSIFICATION**

To assist students and parents in making course selections, all courses at Brighton High School have been categorized into levels based on the degree of teacher support, expectations for student independence, and academic rigor inherent to the course.

- Level 1 -** Courses at this level are designed for students who need targeted academic support from teachers as they develop independence with essential skills in the subject area. Classes are typically smaller so more individual assistance can be given to students.
  
- Level 2 -** Courses at this level are designed for students who have developed basic skills in the subject area, but continue to benefit from focused teacher support as they move towards greater degrees of independence.
  
- Level 3 -** Courses at this level are designed for students who have developed independence in the essential skills in the subject area and who seek out opportunities to be challenged academically.
  
- Level 4 -** Courses at this level are designed for students who are highly independent learners and who are prepared to engage in rigorous academic work.

### **ENRICHED SECTIONS (ES)**

These are special sections of courses in some subject areas offered to selected students who possess the necessary capability and interest to go beyond the normal course of study and to explore related topics.

### **ADVANCED PLACEMENT COURSES (AP)**

Advanced Placement (AP) courses are offered to students who have excelled in lower level courses and who have a teacher recommendation. A student taking an AP course is required to take the exam and pay a fee. The 2010-2011 fee for each exam (set by the Education testing Service) is \$86.

Advanced Placement courses and examinations are developed for the College Board by the Educational Testing Service (ETS), a private non-profit agency in Princeton, NJ. The exams are administered in May in schools throughout the world.

In June, the examinations are graded on a five-point scale: 5 = extremely well qualified, 4 = well qualified, 3 = qualified, 2 = possibly qualified, or 1 = no recommendation. In July, the grades are sent to the students, their designated colleges, and their high schools. High achievement in these courses may result in college credit, advanced placement in college courses or both.

## **OPTIONAL OPPORTUNITIES**

### Vocational-Technical Courses

Vocational-Technical courses for Brighton High School students are provided at the Eastern Monroe Career Center. Students interested in any of the variety of offerings should make arrangements through their counselor after studying the course description appearing in this booklet. Students planning to attend the EMCC should allow approximately 4 Periods per day of class time. A student must show evidence of strong interest in the occupational area and be passing required subjects for graduation, grades 9 and 10.

### High School In Israel Program

Students who attend the High School in Israel Program will be awarded credit(s) upon receipt of an official transcript from the school. The maximum credit allowed will be:

- 1/2 credit in English
- 1/2 credit in Social Studies
- 1/2 credit in Foreign language (Hebrew)

The courses and credits will be added on the official Brighton high School transcript and can be used for an elective credit, but not for a required course. Courses that carry 1/2 credit or more will be included in determining the student's cumulative average.

### **PASS-NOT PASS GRADING OPTION (P-NP)**

Juniors and seniors may elect one unit of credit each year on a Passed-Not Passed grading basis. Sophomores may take 1/2 unit of credit per year on a Pass-Not Passed basis. Freshmen are not allowed to take any courses on a P-NP basis. Credit for P-NP courses will count toward the 22 credits needed to graduate. However, it may not be used for any courses required for graduation. Passed-Not Passed course grades are not included in computation of cumulative average.

## **INDEPENDENT STUDY PROGRAM**

**83400**

### ***What is Independent Study?***

Independent Study is a self-directed learning activity in which students are able to involve themselves in projects of special interest. They work on a one-to-one basis with a consultant from the faculty or the community who serves as a resource person. Independent Study enlarges the offerings beyond those courses which can be offered in a regular curriculum. It is an elective, and there are no limitations in subject matter except that a student may not undertake independent study for a course which is available through a scheduled class. Also, credit for independent study cannot be used as part of the 22 credits needed to meet graduation requirements.

### ***Who Can Undertake Independent Study?***

Any student in Brighton High School may undertake Independent Study. Students must be well motivated and seriously interested in the subject matter. Since independent study is an unstructured approach to learning, students must possess sufficient initiative, responsibility, persistence and curiosity to carry such a task to completion.

### ***Why is Independent Study Offered?***

To provide an opportunity for students:

- to develop attitudes of curiosity and inquiry;
- to increase ability to define and solve problems;
- to utilize their resourcefulness and creativity;
- to cultivate a continuing interest in learning;
- to refine their degree of self-direction and independence.

It is also offered to increase the range of learning opportunities so that the needs of students with a variety of interests and abilities can be met.

### ***What Types of Independent Study are Possible?***

Many Independent Study projects are school-based, associated with one of the instructional departments. These are carried on primarily in the school or at home, utilizing such facilities as labs, art studios, the Media Center. Some projects are community-based and are carried out in association with community organizations or resource persons. Some examples are Advanced Architecture, Art History, Computer Languages, Environmental Studies, Music Theory, Advertising and Fashion Design.

### ***What is the Procedure for Doing Independent Study?***

Students should first review their interest with their counselor and then see the Internship/Independent Studies Coordinator. A review of the requirements for the successful completion of the program will be given. Applications should be completed and returned to the Internship Coordinator at the beginning of the semester during which the program is being undertaken.

## **SKILLS DEVELOPMENT LAB**

**82000**

The lab will provide support services to students whose skill levels impede academic progress and require intervention. Students are provided with tutorial intervention in the core subjects with an emphasis on study skills and time management. The skills lab staff also serves as academic advisors to students with 504 plans and students new to the district.

The lab helps students who have made an attempt to improve skills through the content area Help Room and/or 1:1 teacher/student contact, either or both of which have proven insufficient. Students are assigned through recommendations of a high school faculty member, parental or self-advocacy or because of state mandated AIS support.

Students are instructed in small groups with a certified teacher. The skills lab tutors identify areas of academic need within the core subjects and provide students with effective strategies and support for reaching success. Once scheduled, attendance is required.

### **CREDIT BY EXAMINATION**

As part of the REGENTS ACTION PLAN, students may earn a maximum of 6 1/2 units of credit for either a Regents or local diploma through the credit by examination alternative. Students interested in this option should discuss the option with a counselor. Requirements for the credit by examination include a pre-test, application, completion of a project, and scoring 85% on the state-prepared or approved examination. The credit by examination is for students who have received substantially equivalent instruction to that offered at Brighton High School.

### **INTERNSHIP PROGRAM**

**83000**

An Internship is a community-based program, associated with possible career development, which permits a student to spend a portion of time pursuing a learning program within a community organization. This program is primarily available to seniors and juniors. Internships are planned individually in accordance with the needs and interests of each student. One-half elective credit per Internship may be earned. Internships must be planned in advance of the time a student's schedule is developed so that other required courses can be arranged. Internships are offered during the school day, summertime, and after school hours.

#### ***What are some examples of Internship programs?***

Internship placements are developed according to student needs and interest, so that these may change from one year to another. More than 100 community organizations have been involved in the program to date, and development of additional placements is done on an ongoing basis. Some examples of internship sites and community placements have been within the following careers:

Education	Medicine
Business	Information Technology
Social Service Agencies	Criminal Law/Justice
Communications	Engineering
Architecture	Building Trades
Graphic Design	TV and Radio Broadcasting
Speech Therapy	Research
Physical Therapy	Veterinary Medicine
Dentistry	Travel and Tourism

#### ***What is the Procedure for Doing an Internship Program?***

Students should contact the Internship Coordinator to discuss possible Internship sites. The student and Internship Coordinator will work together to identify Internship placement sites, supervisors, and schedules.

Colleges and employers look favorably on the inclusion of the Internship program as part of the high school learning experience. Performance evaluations and letters of recommendation will be made available upon successful completion of each Internship program.

## **RESOURCE ROOM**

**81000**

The Resource Room (RR) primarily provides support for students classified by the Committee on Special Education who participate in regular education classes who require supplementary instruction and strategies to maintain or improve academic performance. The focus of the Resource Room is to reinforce, review, and encourage skills necessary to study, organize, problem solve, reason, read, write, compute, and communicate. Students participate in activities that help determine appropriate post-secondary options by evaluating their general interests and future goals. The Resource Room promotes self-advocacy, enhances self-reliance, fosters independent learning, and guides students to plan for their transition from high school to post-high school choices.

Students with a variety of disabilities are supported by their RR teachers and staff. These services are tailored to individual student needs and may include services and programs from community agencies in addition to their BHS special education services.

## **COUNSELING CENTER PROGRAM**

As part of the Career Development Program at Brighton High School, the Counseling Department will meet with all students in small groups to discuss the topics listed below. Throughout these programs, we will stress the importance of decision-making and getting started with post high school planning. This program will help students obtain information and skills needed to start with this important process. The overall program is called “Decision-Making for Education and Career Planning.”

### 9th Grade Counseling Seminar (TAG)

Role of the counselors and other Pupil Services staff  
Help with academic, social and emotional adjustment to high school life  
Program planning for sophomore year

### 10<sup>th</sup> Grade Counseling Seminar

Importance of self-assessment for career planning  
Career interest inventory  
Process of researching an occupation and career  
Resources available at the Counseling Center  
Decision-Making  
Program planning

### 11<sup>th</sup> Grade Counseling Seminar

Review of graduation requirements, credits, and examinations  
Discuss junior-senior cumulative report  
Post high school options - school or work, two and four year colleges, military



### 12<sup>th</sup> Grade Counseling Seminar

Graduation requirements and transcript check

Application procedure for job or college

Resources available for decision-making

Transition to college or job

### **COUNSELING DEPARTMENT/PARENT MEETINGS**

Parent Meetings are held in the fall for grades 9, 10, 12 and in the WINTER for grade 11. At these meetings, counselors review the programs outlined above so that parents will have a better understanding of the program. There is a “Financial Aid” meeting in November for parents. These meetings will also provide the opportunity to get better acquainted and for parents to ask questions or raise concerns that they may have.

### **ACADEMIC INTERVENTION SERVICES**

Academic Intervention Services are designed to help students achieve the learning standards in English Language Arts, Mathematics, Social Studies, and Science. Students failing a course that has implications for failing a state assessment required for graduation will be given academic intervention services. Students who fail a state assessment required for graduation will also receive services. Some examples of academic intervention services are as follows:

- Social Studies basic level courses
- AIS Math Labs
- Skills Development Lab
- Academic Study Hall
- Counseling Support Group

## **BUSINESS DEPARTMENT**

The Brighton High School Business Curriculum is designed for those seeking a general understanding of the business world. We provide a sampling of business courses to students who wish to pursue a business-related college major in Accounting, Business Management, Economics, or Marketing. In addition, many of our students participate in national and state award-winning student leadership programs such as Future Business Leaders of America (FBLA) and Distributive Education Club of America (DECA). Students must be enrolled in a business course to be a member of DECA.

*We suggest students in 9th grade enroll in the introductory courses of Personal Keyboarding, Microsoft Office or Personal Finance and Careers. We believe this would set the foundation for the other courses. Then we would suggest the following clusters for those students who wish to pursue a program of study in a particular area of interest: (a)*

### Marketing

1. Personal Keyboarding
2. Microsoft Office
3. Personal Finance and Careers
4. Marketing
5. Sports and Entertainment Marketing
6. Marketing Management
7. International Business
8. Business and Personal Law (b)

### Accounting

1. Personal Keyboarding
2. Microsoft Office
3. Personal Finance and Careers
4. Accounting I ( c )
5. Accounting II
6. International Business
7. Business and Personal Law (b)
8. Marketing

### General Business

1. Personal Keyboarding
  2. Microsoft Office
  3. Personal Finance and Careers
  4. International Business
  5. Entrepreneurship
  6. Business and Personal Law (b)
  7. Accounting I ( c )
  8. Marketing
- (a) All business courses can be chosen as an elective
- (b) Students may sit for the college CLEP examination in June to earn College Credit.

- (c) Dual credit courses in which student will receive college credit from Monroe Community College and credit can be used for graduation requirements. See Business Department leader for additional Dual credit Courses.

**ACCOUNTING I** **50350** **Level 1-4**

Accounting is sometimes called “The Language of Business.” This introductory course will emphasize learning by application. It will provide much of the financial and some managerial data necessary for the successful operation of a business. Double-entry bookkeeping and the Accounting Cycle will be covered. Several hands-on activities will be presented in the computer lab using Accounting software.

Grade: 9-12 Length: One semester Credit: ½  
Prerequisite: None

**ACCOUNTING II** **50370** **Level 1-4**

This is a continuation of Accounting I. Financial Accounting Standard Board principles will be emphasized. Special Journals and Internal Controls of Accounting will be covered. Specialized areas of Tax Accounting, Partnership Accounting, and Corporation Accounting will be introduced. Accounting Concepts will be stressed throughout the course as well. Students who qualify may take a college level examination offered through Monroe Community College for college credit with the completion of both Accounting I and Accounting II.

Grade: 9-12 Length: One semester Credit: ½  
Prerequisite: Accounting I

**BUSINESS AND PERSONAL LAW** **50500** **Level 1-4**

This course satisfies 1/2 of credit for the fifth unit of social studies. Business law involves the application of legal principles to business transactions used in everyday life. Emphasis is placed on the law of contracts, sales contracts, insurance, negotiable instruments, bailment, real estate issues, landlord-tenant relationships, wills and inheritance, partnership law, and corporation law. The course is designed to develop a respect for business ethics. Business Law challenges able students and should be considered as an academic elective. Students may sit for the college CLEP examination in June to earn college credit.

Grade: 10-12 Length: One Semester Credit: ½  
Prerequisite: None

**ENTREPRENEURSHIP                      50100                      Level 1-4**

Entrepreneurship (formerly called Business Organization) introduces the students to the world of business and serves as a background for economics and other business courses. Entrepreneurship is an exciting and challenging computer-based course designed to help you explore, apply, and monitor financial investments in a stock market simulation. You will learn how to use financial software and on-line services as a decision-making tool to understand and take advantage of the investment world. Investments will include stocks, bonds, and mutual funds. This course will require students to write a business plan as part of their final project. All forms of multi-media will be encouraged in order to ensure an effective final project presentation.

Grade: 9-12    Length: One Semester    Credit: ½  
Prerequisite: None

**INTERNATIONAL BUSINESS                      53650                      Level 2-4**

International business is everywhere. Consumers use products and services imported from countries around the world every day and U.S. companies manufacture and send American products as well as provide services to other countries regularly. The Internet makes global business possible 24 hours a day, 7 days a week. This means that many jobs now and in the future will involve international business. Students will be introduced to typical phrases used in business along with translations in many different languages. Current and emerging applications of technology and the Internet will be discussed. Ethical issues in global business that are influenced by cultural, legal, and ethical practices will be presented. Students will learn about solutions and strategies for succeeding in the growing international workplace.

Grade: 10 -12    Length: One Semester    Credit: ½  
Prerequisite: None

**MICROSOFT OFFICE                      53600                      Level 1-4**

You probably use cell phones, e-mail, instant messaging, and other technology to stay in touch with friends and family. Many students arrive at the high school with some keyboarding skill. Whether they plan to become an architect, a photographer, or the CEO of a corporation, they will be expected to have some *basic* computer skills. This computer course will allow you to improve your academic and communication skills quickly and easily through Microsoft Word processing, Microsoft Excel, Microsoft Access database, Microsoft PowerPoint, and Microsoft Publisher. Become a Microsoft Office Specialist. This one-semester *elective* will be offered to all students nine through twelve.

Grade: 9-12    Length: One Semester    Credit: ½  
Prerequisite: None

**MARKETING****51300****Level 1-4**

This course provides a base of knowledge in the exciting field of marketing, marketing research, sales, and e-commerce. The course provides “hands-on” instruction in preparing printed advertising, developing promotional campaigns, and making presentations. Many role-play and teamwork activities are used to lay the foundation for marketing principles and practices. Most students in our Marketing program choose to join the DECA club. Marketing is recommended for all students who will be pursuing marketing or a college marketing program after graduation.

Grade: 9-12

Length: One Semester

Credit: ½

Prerequisite: None

**MARKETING MANAGEMENT 51400****Level 2-4**

Marketing Management expands the knowledge and skills covered in Marketing by increasing the fundamental marketing vocabulary that will help you keep up with the news and make informed business decisions. You will look at management from the eyes of a manager as well as an employee. You will explore the challenges that companies face as they establish, manage, and grow their businesses. You will learn about managing employees, embracing diversity, and the effects of ethical and social responsibilities on marketing. The management skills learned in the course can be used in any career field from the doctor’s office to the retail store.

Grade: 9-12

Length: One Semester

Credit: ½

Prerequisite: Marketing

**PERSONAL FINANCE AND CAREERS****53300****Level 1-4**

This is a practical one-semester business course that introduces students to the realities of the working world through career exploration and teaches concepts in personal finance. Topics to be covered include self-assessment, job searching, cover letters, resume writing, interview techniques, income tax preparation, budgeting and saving, checking accounts, retirement plans, credit and insurance. Students will use the Microsoft Office Suite in the business computer lab to enhance curriculum. A shadow opportunity is also provided for this course.

Grade: 9-12

Length: One Semester

Credit: ½

Prerequisite: None

**PERSONAL KEYBOARDING 50800 Level 1-4**

This one semester course is designed for students to learn and improve keyboarding skills. Students will learn to use touch method on the keyboard as well as manipulation of the computer. Students will develop the knowledge and skills needed to prepare term papers, reports, outlines, and business letters. This course will serve the needs of the college-bound student by preparing them for manuscript preparation and personal use. Instruction will be given in the PC Lab using a software program.

Grade: 9-12

Length: One Semester

Credit: ½

Prerequisite: None

**SPORTS AND ENTERTAINMENT MARKETING 53500 Level 2-4**

Did you know that fans and companies spend billions of dollars each year on sports and entertainment? Did you know that sports and entertainment is one of the largest exports from the United States to the rest of the world? The sports and entertainment course will help introduce students to basic marketing functions as they apply to these industries. Students will also explore the exciting and wide variety of careers available in sports and entertainment marketing. The use of computer technology will support and enrich the curriculum.

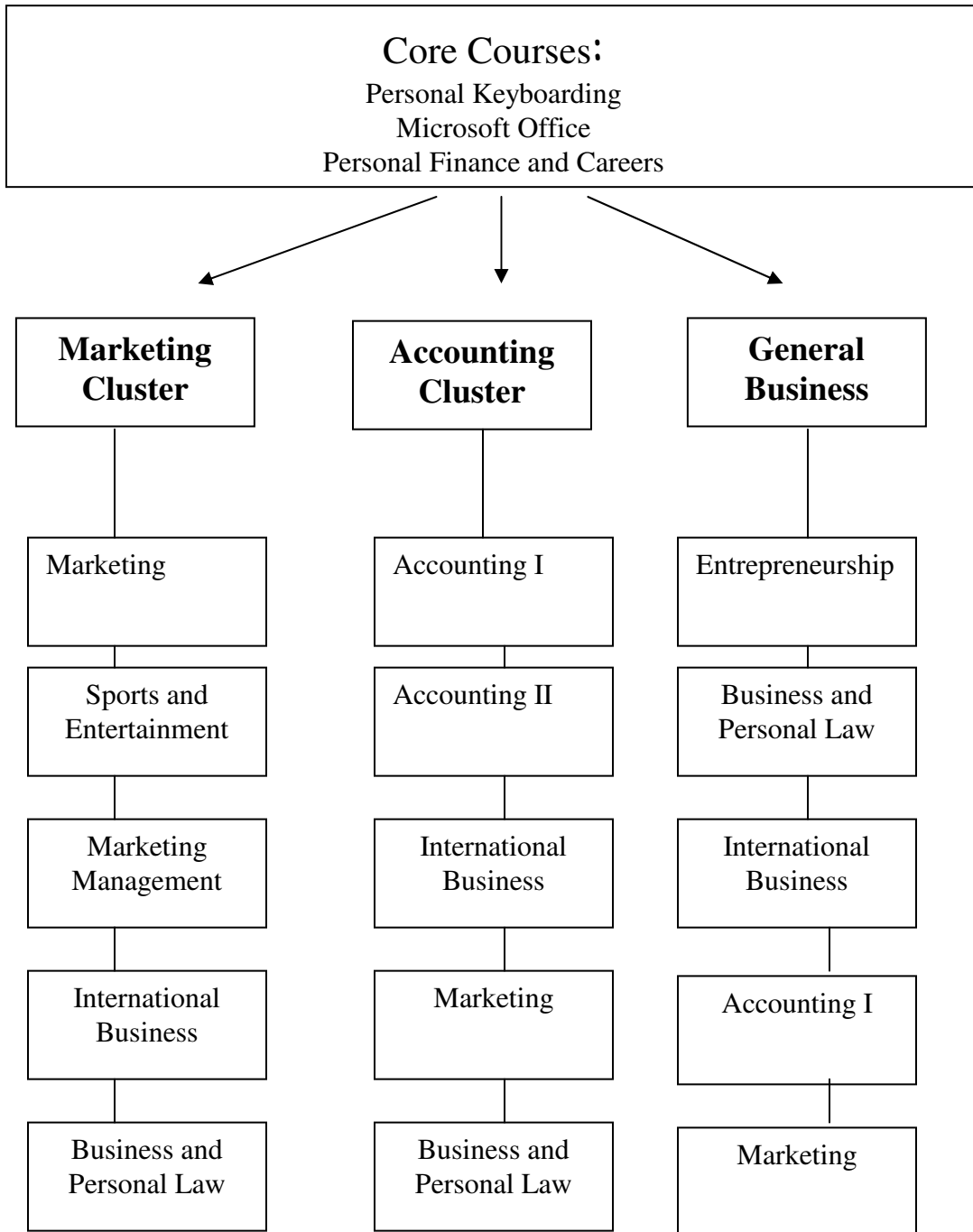
Grade: 10-12

Length: One Semester

Credit: ½

Prerequisite: None (Marketing is recommended)

# Business Department



- ❖ All courses are one semester.
- ❖ Students must be enrolled in a business course to be a member of DECA.

## **COMPUTER SCIENCE DEPARTMENT**

Two courses in computer science are offered. (These may not be used as part of a mathematics sequence.) Computer Programming and Advanced Placement Computer Science give the student a chance to learn a programming language in a problem solving setting.

The choice of a language for a high school programming course is largely influenced by the selection of the language for the Advanced Placement Course. Under the sponsorship of The College Board, the AP Computer Science Development Committee has established that Java is the language required for the AP Computer Science exam.

### **COMPUTER PROGRAMMING                      39600                      Level 3-4**

This course introduces students to computer programming. Students will be introduced to graphical programming using Alice, interpreted programming using Ruby and/or Python, and compiled programming using Java. Topics include input/output, conditionals, loops, arrays, functions, parameter passing, objects, inheritance, and recursion. The use of projects and examples containing algebra topics requires the student to be comfortable with mathematics. Local final exam.

Grade: 9-12    Length: One Semester    Credits: ½  
Prerequisite: Passing of 8<sup>th</sup> Grade Mathematics and Concurrent Enrollment in Algebra I or  
Passing of Algebra I

### **ADVANCED PLACEMENT COMPUTER SCIENCE   39400                      Level 4**

Using the Java language, the major emphasis in this demanding course is on programming methodology, algorithms, and data structures. Object-oriented programming is introduced and studied thoroughly in a large program known as a case study. Some questions on the AP exam are based on knowledge of this case study. All students must take the Advanced Placement exam in May. All students are expected to complete a project after the AP exam. No final exam.

Grade: 10-12    Length: Full Year    Credit: 1  
Prerequisite: Successful completion of Computer Programming



## **ENGLISH DEPARTMENT**

### ***GENERAL OVERVIEW***

In order to graduate from Brighton High School, students must complete 4 units of credit in English. During the freshman, sophomore, and junior years, students are required to take a full year course in English. In the senior year, students must take two semester courses, one of which must be a literature course. The full year AP course will fulfill this requirement.

#### **General Guidelines:**

It is important for you to keep the following guidelines in mind so that you plan your program wisely:

- A. You are expected to be enrolled in an English class each semester you are in high school.
- B. You are expected to complete a minimum of four units of English. Listed below are courses needed to fulfill your English requirements.
  - 1. English 9
  - 2. English 10
  - 3. English 11
  - 4. One semester literature course during the senior year
  - 5. One additional semester course during the senior year
- C. Students wishing to pursue Advanced Placement English should follow the sequence below:
  - 1. English 9 at 9th grade
  - 2. English 10 at 10th grade
  - 3. English teacher's recommendation
  - 4. English 11 or AP Language and Composition at 11th grade
  - 5. English teacher's recommendation
  - 6. AP English Literature and Composition

#### **Examination Requirements:**

In order to receive a diploma, all students must pass the eleventh grade English Regents examination. A student may write the English Regents examination any time after successfully completing the required freshman, sophomore, and junior courses.

## **ENGLISH DEPARTMENT FULL YEAR COURSES**

English 9, 10, and 11 form a three year comprehensive program that assists students in developing the listening, speaking, reading, research, writing, and viewing skills necessary for college and career readiness.

Students experience a variety of literary genres in order to promote their growth as critical readers and thinkers. Practice with numerous modes of writing develops students' abilities to express themselves clearly, confidently, and creatively. Class discussion, formal and informal presentations, and group projects help students become articulate speakers and active listeners who can communicate effectively with their peers.

Ongoing assessments lead to a required persuasive speech at the end of tenth grade and an argumentative research paper in grade eleven. Skill development throughout all three grade levels prepares students for the New York State Comprehensive English Regents exam at the end of eleventh grade.

### **ENGLISH 9** **03100** **Level 1-4**

English 9 is a full-year course for freshmen emphasizing the development of reading comprehension, interpretation, and writing skills. Students read and study works of fiction, nonfiction, drama and short stories primarily. Students are instructed in the process of developing essays with emphasis on reading, listening, note taking, and organizing information to support a thesis. Students also use these research skills to develop oral presentations. English 9 provides a foundation of skills needed to prepare the students for English 10 and 11 and for the Regents exam.

Grade: 9

Length: Full Year

Credit: 1

Prerequisite: None

### **MODERN READING** **03350** **Level 1**

Reading is essential to success in all fields, whatever career path you choose to pursue in life. This course is designed to assist struggling readers in their comprehension and manipulation of all kinds of texts. A wide range of reading strategies will be practiced and utilized on a variety of writing styles, from informative nonfiction (such as students would find in their Science, Social Studies, and Math classes) to literature and high interest young-adult fiction. This course is taken in addition to English 9, and while the skills overlap, the curriculum of Modern Reading does not directly complement that of English 9.

Grade: 9

Length: Full Year

Credit: 1

Prerequisite: Required for recommended students



**ADVANCED PLACEMENT ENGLISH LITERATURE 04000 Level 4**

This course is designed for the student who is committed to the rigorous analysis of literature. Students will prepare themselves independently in order to engage actively in class discussions. They will make oral presentations and write literary essays to demonstrate mastery of language, form, structure and meaning. Students will take the Advanced Placement English Literature exam. This course includes required summer reading. Reading lists become available in June.

Grade: 12

Length: Full Year

Credit: 1

Prerequisite: English 11 teacher recommendation

**GRADE 12 ENGLISH PROGRAM**

Students in their senior year select their program from a slate of semester courses (with the exception of those enrolled in AP Literature, a full year course). Each course is worth ½ unit of credit. One of the selected courses must be a literature course.

**Message to Students:**

The Grade 12 English Program at Brighton High School enables you to design your English course of study to match your interests and abilities. Your success in this program depends on your ability to make wise decisions about your academic needs and goals. Although the English faculty will recommend appropriate courses for you to consider, and your counselors and parents are always ready to offer suggestions and information, ultimately you decide which courses will best help you reach the goals you set for yourself.

Read the course descriptions carefully. It is your responsibility to understand thoroughly the nature of the courses you select. Remember to observe the levels. Select two courses. **At least one of the courses must be a literature course.**

**LITERATURE COURSES \***

**GREAT BOOKS 04100 Level 3-4**

This course will explore the enduring values present in great works of literature from the 12th century through the 21<sup>st</sup> century. Students will examine excerpts and full length works of some of the greatest writers of Western Literature in order to develop their skills in reading, discussion, research, and writing.

Grade: 12

Length: One Semester

Credit: ½

Prerequisite: None

*\* Semester will be determined by student registration and teacher schedules.*

**LITERATURE OF SOCIAL CRITICISM                      04200                      Level 3-4**

This course will explore authors' responses to a changing world through the study of fiction, nonfiction, drama, and poetry. Issues may include war, women's rights, civil rights, and politics. Students will read works independently and demonstrate their understanding by means of a variety of assessments, including literary essays and oral presentations.

Grade: 12

Length: One Semester

Credit: ½

Prerequisite: None

**MYTH AND THE MODERN INDIVIDUAL                      04700                      Level 3-4**

Students in this course study the origins and interpretations of myth in western culture. Students will analyze the role of mythic archetypes and allusions in selections of world literature and will consider the connection between myth and the modern world. **STUDENTS WHO TAKE THIS COURSE ARE NOT ELIGIBLE TO TAKE MYTHS, LEGENDS AND FOLKLORE.**

Grade: 12

Length: One Semester

Credit: ½

Prerequisite: None

**MULTICULTURAL LITERATURE                      04800                      Level 2-3**

In this course the teacher will guide the student through a variety of authors and writings representing both Eastern and Western cultures from ancient to contemporary times. Emphasis will be on building skills in listening, note taking, and analysis. Students will develop literary essays using the composition and revision process.

Grade: 12

Length: One Semester

Credit: ½

Prerequisite: None

**MODERN DRAMA                      04300                      Level 2-3**

This course covers great plays, both tragedies and comedies, from the late nineteenth century to the present. Readings will be selected from the works of such playwrights as Henrik Ibsen, Oscar Wilde, Eugene O'Neill, Tennessee Williams, Lillian Hellman, Arthur Miller, Edward Albee, Eugene Ionesco, Lorraine Hansberry, David Mamet, and others. Emphasis is placed on written analysis as well as the literary elements used to create the modern dramatic art form.

Grade: 12

Length: One Semester

Credit: ½

Prerequisite: None

**NONFICTION LITERATURE****04400****Level 2-3**

The literature most of us read everyday is nonfiction: Newspapers, magazines, articles about real people and real events offer true stories that can be just as appealing as fiction. This course examines the array of nonfiction available to today's readers and viewers: biography, memoir, true-adventure, journals, letters, documentaries, online information sources, essays, articles, among others. Students will practice specific strategies for effective reading, analyzing, and writing nonfiction.

Grade: 12

Length: One Semester

Credit: ½

Prerequisite: None

**THE SHORT STORY****05100****Level 1-2**

This course is a study of the short story as a literary form. Students will become thoroughly acquainted with such terms as plot, character, setting, protagonist, point of view, style, irony, symbolism, theme, foreshadowing, and climax. They will read, discuss and evaluate a number of fascinating and challenging short stories. In addition, they will write an original short story and several short essays. Occasional film versions of short stories are presented for comparative study.

Grade: 12

Length: One Semester

Credit: ½

Prerequisite: None

**MYTHS, LEGENDS AND FOLKLORE****05500****Level 1-2**

This course will encourage the student to examine how ancient civilizations used their imagination to face the cruelty, indifference, and mystery of this world. Students will read myths both in class and independently and write essays about them. A class project may be completed by the end of the semester. Readings may include selections from Greek, Roman, Norse, African, and Native American mythology. **STUDENTS WHO TAKE THIS COURSE ARE NOT ELIGIBLE TO TAKE MYTH AND MODERN MAN.**

Grade: 12

Length: One Semester

Credit: ½

Prerequisite: None



**LEADERSHIP SEMINAR****05800****Level 3-4**

The Leadership Seminar is an English course designed to provide an understanding of effective leadership through individual and collaborative learning, practical application of skills, and reflection. The goal of this course is to foster the intellectual, social, moral, and emotional development of student leaders and potential student leaders. Core content includes study of famous leaders and leadership philosophy and a student led leadership project. A final portfolio assignment is also required. Students are expected to prepare thoroughly to maximize group and individual reflection and analysis, participate vigorously in group activities, personally maintain and base decisions on high ethical standards, and bring a positive attitude to class. For students who choose to pay a reduced 3 credit hour rate, dual credit will be available for Leadership Seminar through Monroe Community College.

Grade: 11-12

Length: One Semester

Credit: ½

Prerequisite: English 10 or 11



## **ENGLISH TO SPEAKERS OF OTHER LANGUAGES (ESOL)**

It is the intent of the ESOL program to provide a course of study for students in Brighton whose native or home language is one other than English. The emphasis of this program is for students to communicate freely in the spoken and written modes of English within and outside of their school environment. In addition, students will be introduced to the culture of the school and community as well as the social structures of the United States. ESOL students may also participate in mainstream English courses with the ESOL teacher's recommendation and achievement of the Advanced level on the New York State English as a Second Language Achievement Test (NYSESLAT). Admission to the ESOL program is through New York State mandated testing and ESOL teacher recommendation. Exiting criteria is attained only through a proficient score on both the listening/speaking and reading/writing portions of the NYSESLAT.

### **ESOL ENGLISH - BEGINNERS** **06000** **Level 1-4**

Daily classes focus upon acquiring basic listening, speaking, reading, and writing skills in the English language while learning cultural concepts necessary for functioning in school, local community, and American society.

Grade: 9-12                                      Length: Full Year                                      Credit: ½ per semester  
Prerequisite: Recommendation by ESOL Teacher & mandated NYS testing

### **ESOL ENGLISH - INTERMEDIATE** **06200** **Level 1-4**

This is a continuation of building receptive and expressive vocabulary with increasing focus upon reading comprehension and detailed use of the writing process.

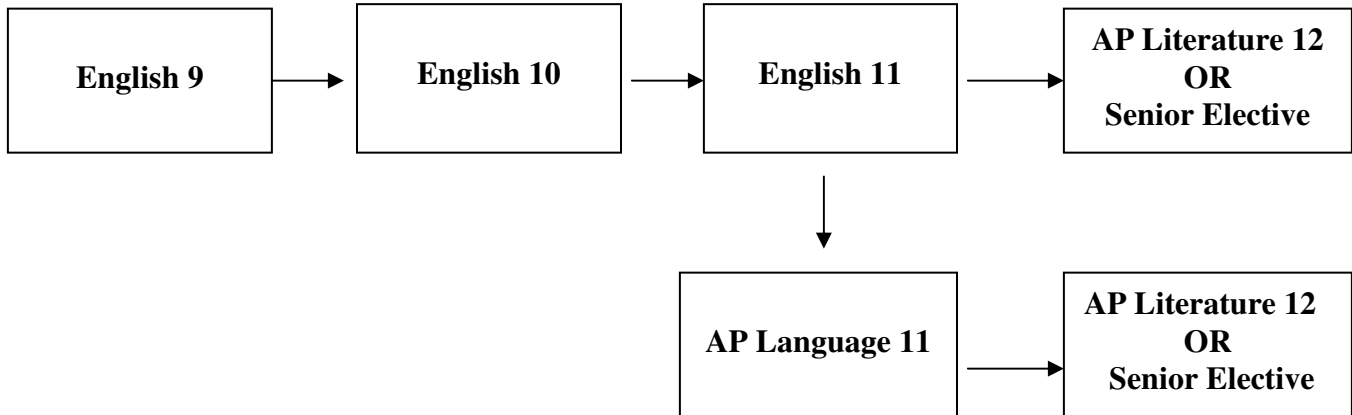
Grade: 9-12                                      Length: Full Year                                      Credit: ½ per semester  
Prerequisite: Recommendation by ESOL Teacher & mandated NYS testing

### **ESOL ENGLISH - ADVANCED** **06400** **Level 1-4**

Complexities of writing styles, English grammar, idiomatic expressions, and advanced vocabulary are examined through in-class reading of short stories, poetry and novels. Developing strong reading and writing skills and strategies will be stressed. This class will assist students in exceeding New York State's proficiency scores in receptive and productive language that are mandated to exit the ESOL program and to successfully pass the Reading and Writing Regents Competency Test.

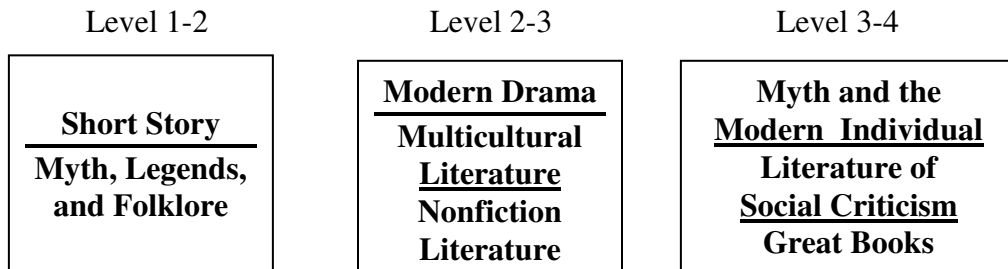
Grade: 9-12                                      Length: Full Year                                      Credit: ½ per semester  
Prerequisite: Recommendation by ESOL Teacher & mandated NYS testing

## English Department

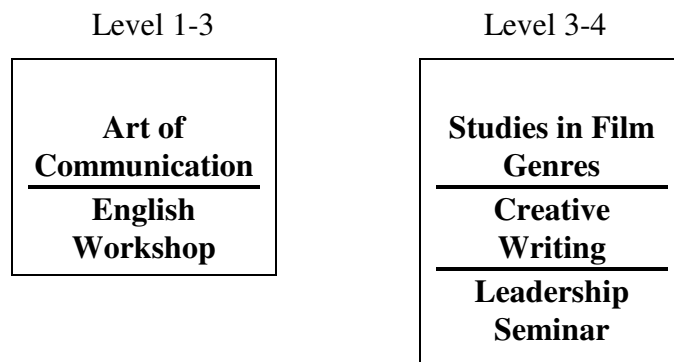


### Half- year Senior Courses

#### Literature Courses



#### General Courses



## **EXTENDED STUDIES**

### **EXTENDED STUDIES SEMINAR**

**91800**

**Level 1**

The seminar meets one class period in each six-day cycle. Along with whole class experiences, this enrichment opportunity allows for student-directed projects based on interests that have included web design, movie making, and community service projects. Students may also focus on process learning such as developing skills in communication or research. Many of these opportunities connect to other subject areas and extend beyond the class meeting times.

Grade: 9-12

Length: Full Year

Credit: 1

Prerequisite: Prior participation in the program

## **FOREIGN LANGUAGE DEPARTMENT**

Brighton High School offers a choice of French, German, and Spanish for students who have completed grades 6, 7, and 8 in the middle school and successfully pass the assessment given at the end of 8<sup>th</sup> grade. These students are then enrolled in levels 2 or 2 Enriched Section French, German or Spanish. Students usually continue into levels 3, 3 Enriched Section, Intermediate, and Advanced Placement courses as they progress through the high school and advance their abilities in all four components of language learning: speaking, listening, reading and writing. Advanced Placement courses are college courses taught to high school students who may gain either college credit or advanced college standing, or both, while enrolled in high school. Some colleges and universities grant sophomore standing to successful Advanced Placement students.

The French, German, and Spanish courses are excellent preparation for students who are preparing themselves for careers in mathematics, music, science, business, travel, teaching, international law, interpreting, and almost any other career.

BHS also offers Latin 1 as an excellent preparation for students who are interested in classical civilization and who wish to prepare themselves for nursing, medical, legal, religious, teaching and scientific careers.

Mandarin Chinese 1 is the latest course offering for grades 10-12, which serves as an introduction to this complex language.

Students are encouraged to study more than one foreign language at the high school level to broaden their abilities in communication and understanding of foreign cultures. All students continuing to study a language require the recommendation of the teacher of the previous year's course.

DVD's and CD's, foreign films, foreign magazines and newspapers, and supplementary readers at all levels introduce the students to other cultures. Technology is an important aspect of the programs and is enhanced by use of the Humanities Computer Lab. Field trips and active language clubs reinforce and extend the cultural aspects of language study. Teachers and native language teacher assistants help students of French, German, and Spanish with reading, writing skills, oral reports, dramatic presentations and culture projects.

Students are prepared for New York State Comprehensive Examinations, College Entrance Board Achievement and Proficiency Tests, Advanced Placement Examinations, national foreign language contests, Student Foreign Exchange programs, and for general success in using language skills in the world of work and travel. Student Exchange Programs are available in two modern languages. Students of these languages can participate in school-to-school programs by hosting a foreign student or visiting the partner school.

**FRENCH 1** **20000** **Level 2-3**

Learn to understand, speak, read and write French using situations of normal student activities. Find yourself in a French restaurant, at an airport, in a school, and with a family. Communication in both spoken and written forms provide a solid basis for the beginning level student. Learn about France and French customs with introductions to real people in each chapter.

Grade: 9-12 Length: Full Year Credit: 1  
Prerequisite: None

**FRENCH 2** **20400** **Level 2-3**

Enhance the skills begun in level one with similar communicative activities. Speak French with your friends in class and with the French assistant. Study French culture and learn about French-speaking countries around the world through cultural readings, realia, and videos. Enhance your reading, writing, and listening skills in French. Practice your French through the use of songs and projects that we do. Vive le français!

Grade: 9-12 Length: Full Year Credit: 1  
Prerequisite: French 1

**FRENCH 2 ES** **20600** **Level 3-4**

Develop speaking and writing skills to a higher degree, as a highly motivated student. You will participate actively in oral dialogues and in a variety of writing assignments. Use technology as you prepare in-class projects. Study French culture and learn about French speaking countries around the world through cultural readings, realia, and videos.

Grade: 9-12 Length: Full Year Credit: 1  
Prerequisite: French 1 teacher recommendation

**FRENCH 3** **20800** **Level 2-3**

Expand and reinforce your language development and cultural awareness through communicative activities, videos, and authentic materials. Students gain confidence and competence by actively using French in everyday situations, in dialogue writing, and small conversation groups. You will enrich your reading and composition skills.

Grade: 10-12 Length: Full Year Credit: 1  
Prerequisite: French 2 or 2ES

**FRENCH 3ES** **21000** **Level 3-4**

Offers more enrichment of materials and moves at a faster pace than Level 3; studies selections from French prose and poetry; develops skill in use of spoken everyday vocabulary.

Grade: 10-12 Length: Full Year Credit: 1  
Prerequisite: French 2ES



**GERMAN 1** **22000** **Level 2-3**

Travel through Germany and find yourself in a train station, at a university, meeting German teenagers, and living with a German family. You'll learn oral and written communication skills needed to get along in these everyday life situations. This course also introduces students to the geography, culture and recent history of the four main German-speaking countries. Learn why English and German are so similar.

Grade: 9-12

Length: Full Year

Credit: 1

Prerequisite: None

**GERMAN 2** **22400** **Level 2-4**

Continue to grow in your language skills of speaking, listening, reading and writing while you view films and materials from Germany on recent sports, social, economic and political events. Emphasis is placed on active participation in communicative activities such as dialogue writing, directed conversations, and role playing. Learn more about the cultures of the German speaking countries and compare them to American culture. Experience Germany from its castles and skiing regions in the south to the quaint medieval trading cities in the north.

Grade: 9-12

Length: Full Year

Credit: 1

Prerequisite: German 1

**GERMAN 3** **22800** **Level 2-4**

Expand and reinforce your language development and cultural awareness through communicative activities, videos, and authentic materials. Students gain confidence and competence by actively using German in everyday situations, in dialogue writing, and small conversation groups. You'll enrich your reading and composition skills. Cultural materials are used to introduce students to various customs and events such as Fasching, Oktoberfest, etc. A video project introduces the history of the Berlin Wall and recent historical events in Germany. At the end of this course, students may participate in our exchange program with Bremen, Germany.

Grade: 10-12

Length: Full Year

Credit: 1

Prerequisite: German 2

**INTERMEDIATE GERMAN** **23400** **Level 3-4**

This course is for students who wish to enrich and expand their conversational, reading, and writing skills. Students are introduced to a variety of topics including communication, slang, idioms, the senses, music, sports, generation gap, youth, humor, education, and cartoons. Students will read short stories, magazine articles, cartoons, a novel and see German TV commercials, video clips and films. Active student participation, group discussions, and directed compositions afford students the opportunity to express themselves freely in spoken

and written German. Learn to think and express your ideas in German. At the end of this course, students may participate in our exchange program with Bremen, Germany.

Grade: 11-12    Length: Full Year    Credit: 1  
Prerequisite: German 3

**ADVANCED PLACEMENT GERMAN 23600    Level 4**

This is a college level course for students who wish to further develop their vocabulary, the expression of their ideas via group discussions, compositions, and prepare for the Advanced Placement Examination in German. Students are introduced to a wide variety of themes including sports, humor, letter writing, music, German TV shows and films, fairy tales, etc. You will enjoy a full-length contemporary play, short stories, short essays, and see German films and videos to help promote fluent language acquisition. Oral presentations, compositions, and group discussions play a major role. Understanding and appreciation of the German culture, sports, music and people are emphasized.

Grade: 12    Length: Full Year    Credit: 1  
Prerequisite: Intermediate German

**LATIN 1    25000    Level 2-3**

Improve your vocabulary and raise your SAT scores! Impress your teachers and your friends! We offer power vocabulary building as part of the Latin curriculum. Also included during the year are studies in Roman culture, history, mythology, and Latin grammar. Come share a Latin experience with us.

Grade: 9-12    Length: Full Year    Credit: 1  
Prerequisite: None

**LATIN 2    25400    Level 2-3**

Continue your workout in vocabulary and derivative building. As your Latin vocabulary increases, so will your English vocabulary. Increase your reading skills in Latin and begin to read Latin authors in the original text. Step into the politics of the ancient world, especially during the late Republic and early Empire. The Latin experience will win you over.

Grade: 10, 11, 12    Length: Full Year    Credit: 1  
Prerequisite: Latin 1

**MANDARIN CHINESE 1    26950    Level 3-4**

This course is designed for enthusiastic foreign language learners who have minimal or no experience with Chinese (Mandarin). This entry level course introduces the Pin Yin phonetic system, Chinese radicals, character writing and literacy, while emphasizing listening





**SPANISH 3****27800****Level 2-3**

Continues to develop aural-oral skills together with a transition to more difficult readings and directed compositions. It increases the appreciation of Hispanic culture and knowledge of the language through readings, videos and internet activities.

Grade: 10-12

Length: Full Year

Credit: 1

Prerequisite: Spanish 2, 2ES

**SPANISH 3ES****28000****Level 3-4**

Offers more enrichment of materials and moves at a faster pace than Level 3; encourages independent projects based on culture; studies selections from Spanish prose and poetry; develops skill in use of spoken everyday vocabulary.

Grade: 10-12

Length: Full Year

Credit: 1

Prerequisite: Spanish 2ES

**SPANISH 4****28200****Level 2-3**

This course is designed for students who have successfully completed level 3 Spanish. Students build advanced vocabulary through thematic units and continue to practice fundamental skills of listening comprehension, speaking, reading and writing. Language structures are reviewed and expanded upon, however emphasis on grammar in application and function overshadows grammatical theory. Students' primary goal in this course is to speak and understand the language through a variety of skill-based activities, listening exercises, cultural units, and process writing. This course is not the preparatory course for the AP Spanish course; students should pursue level 4 ES for AP preparation.

Grade: 11-12

Length: Full Year

Credit: 1

Prerequisite: Spanish 3, 3ES

**SPANISH 4ES****28400****Level 3-4**

This course prepares students for Advanced Placement Spanish. Emphasis is given to higher level grammar, correct oral and written expression, and correct pronunciation. Contemporary issues in Spanish speaking countries are explored through units presented. These may include the workplace, sports, travel, music, poetry and art. Readings may include works (whole or in part) of famous Spanish and Latin American authors.

Grade: 11-12

Length: Full Year

Credit: 1

Prerequisite: Spanish 3ES

**SPANISH 5****28500****Level 3-4**

This is a full year course for students who wish to continue Spanish at the Senior level without taking the Advanced Placement Program. There will be units of study which will include reading, writing and discussion on a wide range of topics. This course will allow the students to improve their abilities in Spanish and bridge the year to college study.

Grade: 12

Length: Full Year

Credit: 1

Prerequisite: Spanish 4ES or 4

**ADVANCED PLACEMENT SPANISH 28600****Level 4**

A special advanced course for students who are especially strong in all four language skills. A variety of materials on cultural topics are used to encourage and improve speaking and writing skills. Most readings are taken from contemporary authors. Units on art, poetry, travel, current events and politics are typically included. Oral presentations are expected.

Grade: 12

Length: Full Year

Credit: 1

Prerequisite: Spanish 4 ES

## AMERICAN SIGN LANGUAGE

### AMERICAN SIGN LANGUAGE

**95000**

---

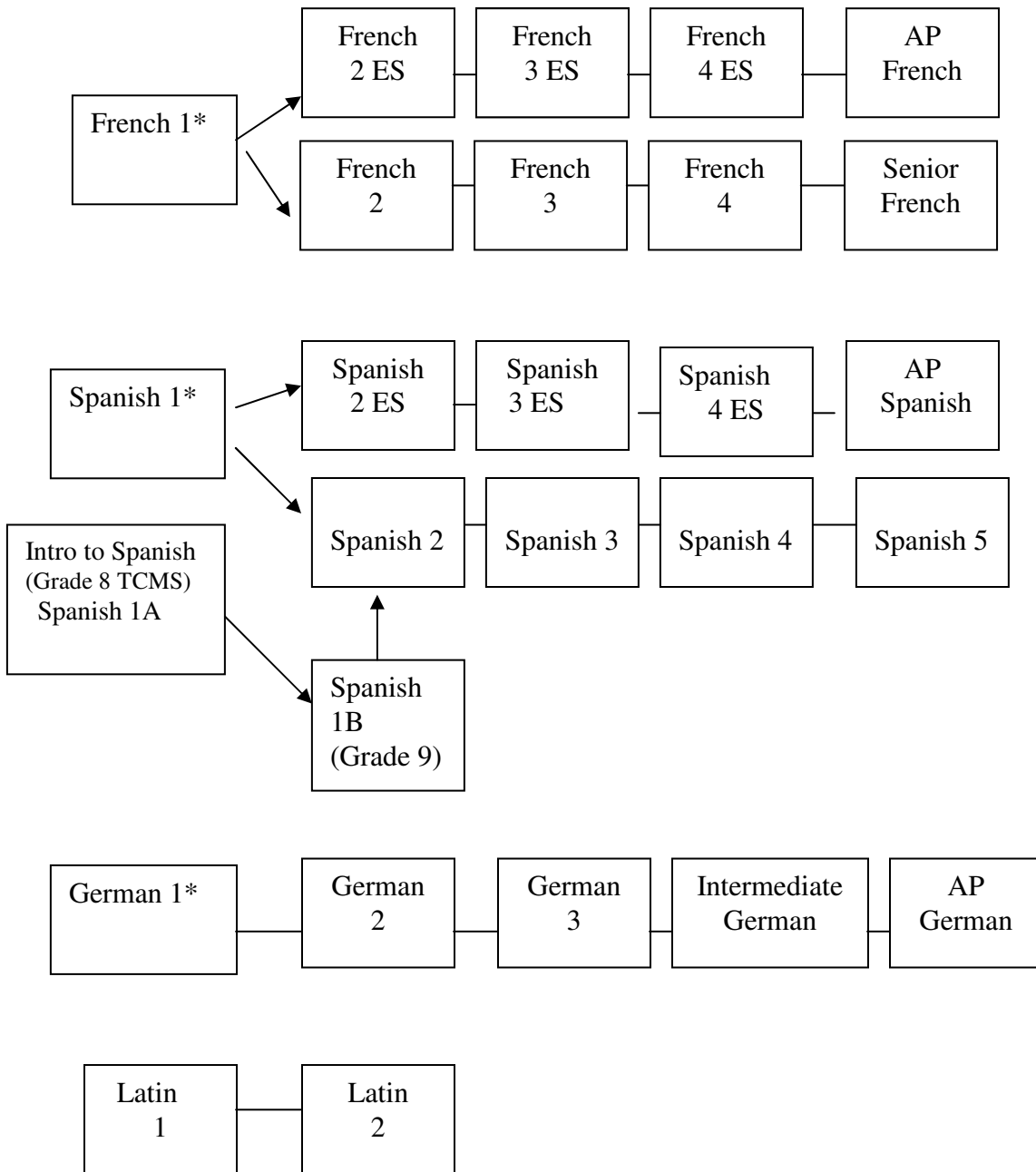
ASL is a one-year only elective at Brighton High School. It cannot be applied to a sequence for graduation. Teachers instruct students in the visual “language of the deaf”. ASL is a separate and distinct language from English, not only in modality but also with its own grammatical principles. The culture of the Deaf will be incorporated to include such things as heritage, history, and humor.

Grade: 9-12

Length: Full Year

Credit: 1

# Foreign Language Department



**\*French, Spanish, German 6-7-8 = Level I**

## HEALTH

HEALTH

55000

Level 1-4 (Grade 10-12)

---

### Required For Graduation

This half-year course examines topics that affect the health status of teens. The course uses the concepts used in the book The 7 Habits of Highly Effective Teens to help focus on what students can do to be more proactive. Six skill areas (communication, decision-making, planning and goal setting, self-management, stress management and advocacy) are included within the content areas of alcohol and other drug use and abuse and sexuality. In addition, each student will have the opportunity to become CPR certified by the American Red Cross.

There is a term project required for every student. This is a community service project consisting of a minimum of twenty hours of volunteer work for a community health provider. This community service must occur during the semester in which the course is completed.

There is a summer option for the term project. If a student wants to complete the volunteer experience during the summer prior to the year that they take Health, they may do so with prior approval of the health education teacher. This approval will occur in June prior to the end of the school year. The summer volunteer experience should include 30 hours of volunteer time instead of 20 hours. Journal entries need to be kept during this time on forms provided by the health teachers. The final project should be submitted within the first month of the semester that the student is enrolled in the course.

Grade: 10-12

Length: One Semester

Credit: ½

Prerequisite: None

## MATHEMATICS DEPARTMENT

The new core of the mathematics curriculum is the New York State Integrated Algebra / Geometry / Algebra 2 with Trigonometry curricula. Courses based on these new curricula are now being offered at various levels in order to provide each student, regardless of ability level, a viable course offering.

The New York State Mathematics program is designed to help students study mathematical situations from several perspectives. The program also represents a shift in emphasis that reflects technological changes such as increased calculator and computer utilization as well as an increase in the use of statistics. Due to changes in the New York State regulations, students enrolled in courses based on the new Integrated Algebra/Geometry/Algebra 2 with Trigonometry curricula are required to use a graphing calculator and are therefore expected to purchase one. See specific course descriptions for details.

### ALGEBRA 1 31900 Level 2-3

This is the first course of the New York State mandated Regents Math series. The course meets New York State curriculum standards and includes the following topics: linear, quadratic and exponential functions, systems of equations, probability and statistics and right triangle trigonometry. The final exam for this course will be the New York State Integrated Algebra Regents Exam. Passing this exam is required in order to earn a high school diploma in New York State. Students who successfully complete the Algebra 1 course will take the Geometry course the following year. Students are required to use a graphing calculator and must purchase one. Instruction will be based on the TI-84+.

Grade: 9 – 11    Length: Full Year    Credit: 1  
Prerequisite: Passing 8<sup>th</sup> Grade Mathematics

### GEOMETRY 32900 Level 2-3

This is the second course of the New York State mandated Regents Math series. The course meets New York State curriculum standards and includes the following topics: properties of geometric figures, triangle similarity and congruence, synthetic and analytic proofs, coordinate geometry and transformations and circle geometry. The final exam for this course will be the New York State Geometry Regents Exam. Passing this exam is a requirement to earning a New York State high school diploma with advanced designation. Students are required to use a graphing calculator and must purchase one. Instruction will be based on the TI-84+.

Grade: 9 – 12    Length: Full Year    Credit: 1  
Prerequisite: Passing Algebra 1

**GEOMETRY ES** **33400** **Level 4**

This course is an enriched section of the geometry curriculum. Geometry ES is offered to highly motivated and capable eighth, ninth and tenth graders. The ES program includes opportunities for more challenging problem solving. The final exam for this course will be the New York State Geometry Regents Exam. Passing this exam is a requirement to earning a New York State high school diploma with advanced designation. Students are required to use a graphing calculator and must purchase one. Instruction will be based on the TI-84+.

Grade: 9 – 10

Length: Full Year

Credit: 1

Prerequisite: Passing the Algebra 1/1ES final exam and course and teacher recommendation

**TOPICS OF ALGEBRA II & TRIGONOMETRY** **32700** **Level 1 - 2**

This course is designed to complete the three year New York State math sequence. It is for students who have difficulty learning mathematics and require additional assistance in developing math skills and concepts. This course will culminate in the Algebra 2 with Trigonometry Regents examination; passing this exam is a requirement to earning a New York State high school diploma with advanced designation. Students are required to use a graphing calculator and must purchase one. Instruction will be based on the TI-84+.

Grade: 11 – 12

Length: Full Year

Credit: 1

Prerequisite: Passing Geometry and teacher recommendation

**ALGEBRA II** **32200** **Level 3**

This course completes the three year New York State math sequence. The course meets New York State curriculum standards and includes the following topics: synthetic proofs, triangle similarity and congruence, statistics, binomial probability, quadratic functions, circle geometry, logarithms and trigonometric functions. This course will culminate in the Algebra 2 with Trigonometry Regents examination; passing this exam is a requirement to earning a New York State high school diploma with advanced designation. Students are required to use a graphing calculator and must purchase one. Instruction will be based on the TI-84+.

Grade: 10 – 12

Length: Full Year

Credit: 1

Prerequisite: Passing one of the Geometry courses

**ALGEBRA II-ES** **32300** **Level 4**

This course completes the three year New York State math sequence This is an enriched section of the Algebra II curriculum. Algebra II-ES is offered to highly motivated and capable students who have completed Geometry ES or to students who have demonstrated excellence in the Geometry regular program. The ES program includes opportunities for more challenging problem solving. This course will culminate in the Algebra 2 with Trigonometry Regents examination; passing this exam is a requirement to earning a New



York State high school diploma with advanced designation. Students are required to use a graphing calculator and must purchase one. Instruction will be based on the TI-84+.

Grade: 10 – 11

Length: Full Year

Credit: 1

Prerequisite: Passing the Geometry/Geometry ES final exam and course and teacher recommendation

### **INTRODUCTION TO COLLEGE MATH & STATISTICS**      **38200**      **Level 2-3**

This course is designed for students who plan on pursuing a college major that may not require the completion of a calculus course (history, communications, art, journalism, etc.) yet wish to continue their mathematical studies beyond the Algebra II curriculum. The course includes the following topics: modeling change, strategic thinking in everyday life, statistical analysis, spatial visualization, probability models and informatics. Students are required to use a graphing calculator and must purchase one. Instruction will be based on the TI-84+.

Grade: 12

Length: Full Year

Credit: 1

Prerequisite: Passing Algebra II or Topics of Algebra 2 and teacher recommendation

### **PRE-CALCULUS**      **38300**      **Level 3**

The purpose of this course is to provide the student experiences with topics not covered in the prior three years that are necessary for the study of higher mathematics. Some of the topics presented include sequences and series, vectors, parametric equations, mathematical induction, polynomial and rational functions, natural logarithms and an introduction to the derivative and integral. Students are required to use a graphing calculator and must purchase one. Instruction will be based on the TI-84+.

Grade: 11 - 12

Length: Full Year

Credit: 1

Prerequisite: Passing Algebra II and teacher recommendation

### **PRE-CALCULUS ES**      **38400**      **Level 4**

The purpose of this course is to provide the student experiences with topics not covered in the prior three years that are necessary for the study of higher mathematics, especially the Advanced Placement program.

Some of the topics presented include sequences and series, vectors, polar equations, mathematical induction, polynomial and rational functions, natural logarithms and extensive work with beginning concepts and skills of Calculus, such as limits, continuity, derivatives and integrals. Successful students in this course have a solid knowledge of all topics taught in Algebra II-ES.

Grade: 11 - 12

Length: Full Year

Credit: 1

Prerequisite: Passing Algebra II ES and teacher recommendation

**SUPA/PROBABILITY AND STATISTICS I AND II                      39700                      Level 3 - 4**

**SUPA Statistics is designed to meet the needs of the students planning to major in any of the following fields: psychology, sociology, business, health science, engineering, political science, mathematics, anthropology and many more.**

This is a full-year course consisting of two separate Syracuse University courses. The primary objective of the first semester course is to provide students with knowledge of elementary probability and statistics. Students will learn basic concepts of descriptive statistics, normal distributions, sampling theory, experimental design, probability and random variables. The primary objective of the second semester course is to continue exploring previous topics while providing opportunities to apply the course material to everyday life and the social sciences. Students will learn how to use statistics in many areas to make various decisions. New topics will include estimation, hypothesis testing, inferences involving two populations, Chi-Square tests, regression analysis and ANOVA.

Each semester is considered by Syracuse University to be a separate course with its own final exam and grade (Brighton High School considers this to be one course). A passing grade must be achieved for the first semester course in order to proceed to the next course. Successful completion of both courses will earn the student six Syracuse University credits (three credits/course) and one BHS credit.

Students will use graphing calculators (and computer software) to facilitate data analysis and therefore must purchase one. Instruction will be based on the TI-84+.

Students taking this course will be able to take the Advanced Placement exam in Statistics in May and are encouraged to do so.

Grade: 11 - 12

Length: Full Year

Credit:1 (BHS)

6 (Syracuse University)

Prerequisite: Passing Algebra II, teacher recommendation and passing Pre-Calculus or concurrent enrollment in Pre-Calculus. (Seniors only: Passing Algebra II and teacher recommendation in lieu of the Pre-Calculus requirement)

**ADVANCED PLACEMENT STATISTICS                      37200                      Level 3 – 4**

Advanced Placement Statistics is designed to meet the needs of students planning to major in any of the following fields: psychology, sociology, business, health science, engineering, political science, mathematics, anthropology and many more.

The AP course focuses on applied rather than highly specialized theoretical statistics. Students will be introduced to four major concepts: how to explore data, plan a study, anticipate patterns and draw statistical inferences. The course is equivalent to a large cross-section of introductory statistics courses at the college level. Students will use graphing calculators and computer software to facilitate data analysis and therefore must purchase one.

Instruction will be based on the TI-84+. Students will take the Advanced Placement exam in May. A culminating project will be presented in June. Students are responsible for the cost of the AP examination.

Grade: 11 - 12                                      Length: Full Year                                      Credit: 1  
Prerequisite: Passing Algebra II, teacher recommendation and passing Pre-Calculus or concurrent enrollment in Pre-Calculus. (Seniors only: Passing Algebra II and teacher recommendation in lieu of the Pre-Calculus requirement)

**DISCRETE MATHEMATICS                                      38500                                      Level 3-4**

This course is designed to extend students mathematical knowledge beyond the four-year sequence of Algebra I, Geometry, Algebra II and Pre-Calculus. Discrete mathematics is an essential tool in the social sciences, computer science, business and industry. The course includes topics such as graph theory, informatics, optimization, algorithmic problem solving, election theory, game theory and logic.

The course also includes opportunities to explore computer applications and other elective units such as inferential statistics and non-Euclidean geometry.

Grade: 11 – 12                                      Length: Full Year                                      Credit: 1  
Prerequisite: Successful completion of Algebra II/II ES and a passing grade on the Algebra 2 with Trigonometry Regents Exam

**ADVANCED PLACEMENT CALCULUS AB                                      37700                                      Level 4**

AP Calculus AB is a full-year college level course in the calculus of functions of one independent variable. This course emphasizes a multi-representational approach to calculus with concepts and problems being expressed numerically, analytically, graphically and verbally. Specifically, the course aligns with the College Entrance Examination Board's Advanced Placement syllabus and parallels the curriculum covered in the first semester and a half of calculus at most colleges. All students enrolled must take the Advanced Placement Examination offered in May. Students are responsible for the cost of the exam and will need to provide their own graphing calculator; the TI-84+ is appropriate. It is recommended that a student have a minimum score of 75 on both the Pre-Calculus final exam and the Algebra 2/Trigonometry Regents Exam in order to be successful in this course.

Grade: 11 - 12                                      Length: Full Year                                      Credit: 1  
Prerequisite: Passing Pre-Calculus or Pre-Calculus ES

**ADVANCED PLACEMENT CALCULUS BC                                      37600                                      Level 4**

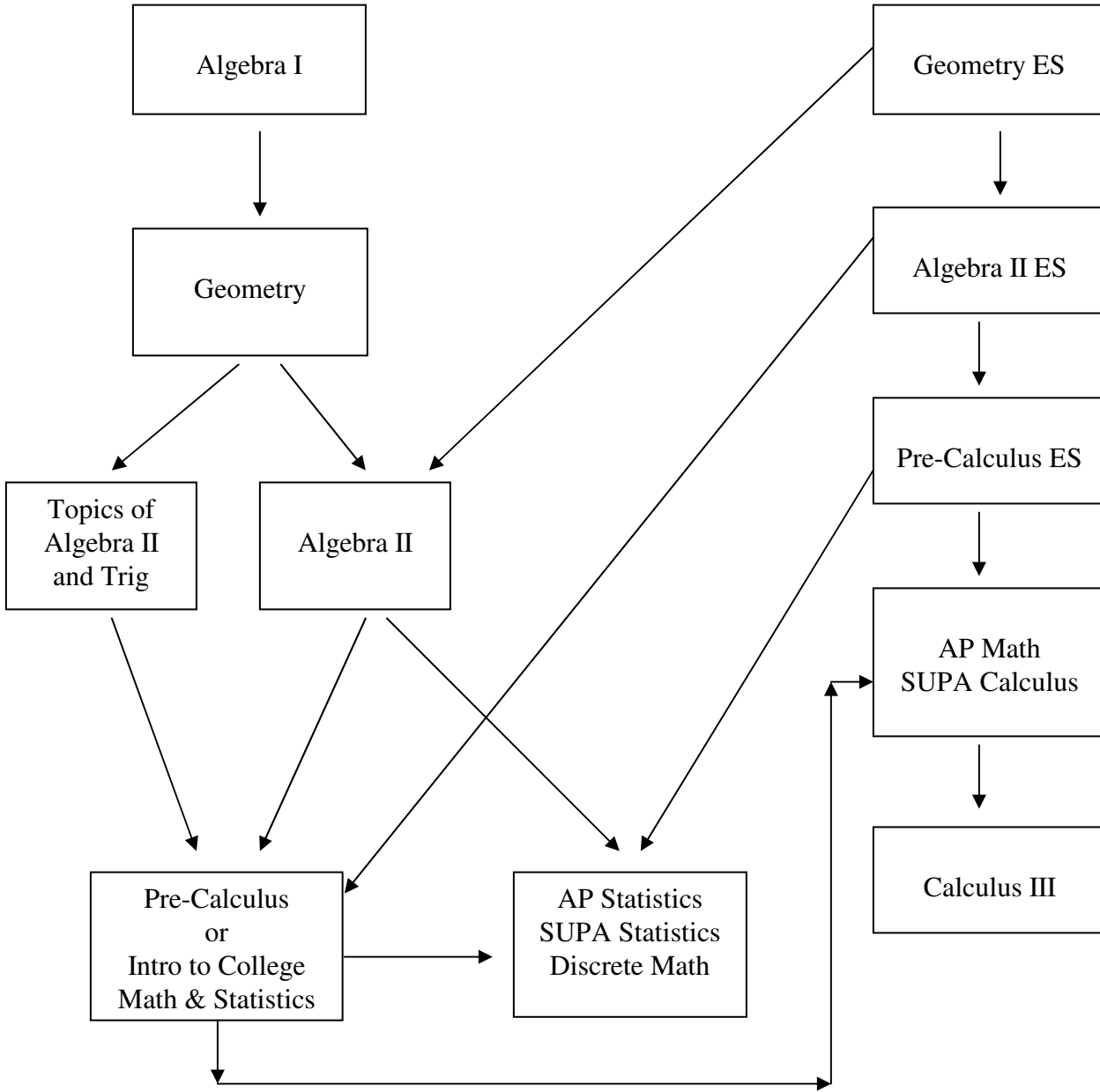
Calculus BC is considerably more extensive than Calculus AB. Additional topics include vectors, parametrics, advanced integration techniques, power series and an increased number of science applications. Students taking this course will be prepared to take the more rigorous “BC” version of the AP Calculus exam. The course parallels the curriculum covered



**Math Department**

**Regents Level**

**Accelerated Level**



## MOUNTAIN BOUND LEADERSHIP COURSE

83800

The Mountain Bound Program is designed to challenge a student both mentally and physically, focusing on cooperation and leadership abilities. These skills are accomplished through participation in both individual and group activities in which one must overcome obstacles while attempting to reach pre-determined goals. Mountain Bound encourages community action through required volunteer hours. These activities are held over four phases.

**Phase I:** The first phase of the course is participation in a five day camping trip in the Adirondack Mountains, held during the summer. Participants will rock climb, rappel, canoe, hike, cook, and take part in a variety of group games. Leadership will be developed by coordinating camp set-up, preparing and cooking meals, planning and successfully completing activities, and encouraging others to participate. All skill development and activities are supervised by teachers. After participating on a summer Mountain Bound trip, students can return as student leaders the next summer, becoming more involved with planning and running the activities.

Every few years the Mountain Bound program may change its camping location and activities to offer new challenges and experiences to participating students.

**Phase II:** Phase II requires participation as a leader in the Freshman Orientation Program. During this phase, students will utilize skills and abilities they learned on the summer trip. Participants will be working directly with the teachers and administrators coordinating the summer programs. Phase II is held mid to late August, after the Mountain Bound trip.

NOTE: Students who are unable to attend Freshmen Orientation may compensate by adding extra hours to Phase III.

**Phase III:** During this phase, students must be involved in a volunteer community project or projects. Guidance will be minimal except to confirm time commitments. Community volunteering can take place at any time during the year.

**Phase IV:** Upon successful completion of Phases I, II and III, students will present a typed summary of their total hours of volunteer work to the high school Mountain Bound coordinator. Along with this summary, the student must complete either:

- (1) A professional letter (1-2 pages) addressed to a local, state, or federal representative. This letter should briefly describe how the outdoor

activities performed on Mountain Bound benefited the student as well as petition the representative to conserve green and wild spaces. Students can see the high school coordinator for specific areas that need preservation.

- (2) An essay (2-3 pages) describing how the each of the phases of the Mountain Bound program has personally benefited them along with explaining how their volunteer work has benefited the community.

The four phases of the Mountain Bound program can be completed at any time throughout the student's time in the high school. Students can participate in the summer trip and assist with the Transition Program and Freshmen Orientation multiple times, starting with the summer after their freshman year up until the summer after their senior year.

**TIME REQUIREMENTS**

Phase I	Approximately 105 hours
Phase II	Approximately 25-35 hours total Transition Program: 30 hours Freshmen Orientation: 2-4 hours
Phase III	Approximately 70-100 hours Students must keep a record of between 70-100 hours of community service.

Grading:	This course must be taken Pass-Not Pass
Grade:	The program may be taken any year or over a course of years.
Credit:	1 -- Independent Study
Prerequisite:	None

## **PHYSICAL EDUCATION DEPARTMENT**

Each student is required to take physical education each semester in attendance. The student earns 1/4 credit per semester towards the New York State mandated requirement for graduation. The sequential physical education program includes a variety of activities with an emphasis on personal fitness but designed to promote growth in the psychomotor (motor skills), cognitive (knowledge, and understanding), and affective (attitude and appreciation) domains. Three periods of physical education are scheduled each cycle. Seniors participating on BHS interscholastic teams may be eligible for exempt status for up to one semester. The student must meet the criteria set by the physical education staff to qualify.

### **PHYSICAL EDUCATION 9-10** **Level 1-4**

1st Semester	701	711
2nd Semester	702	712

This course is designed to develop fitness and promote growth in knowledge, skills, and appreciation of the following: exercise, physiology, field hockey, soccer, football, volleyball, basketball, weight training, swimming, dance, gymnastics, powerball, ultimate frisbee, softball, racquet games, and cooperative games.

Grade: 9-10 Length: Full Year Credit: ¼ each semester  
Prerequisite: None

### **PHYSICAL EDUCATION 11-12** **Level 1-4**

1st Semester	721	731
2nd Semester	722	732

Juniors and seniors are given an opportunity to select activities from those offered during each interval. There is continued emphasis on wellness and growth in knowledge, skill, and appreciation of team sports and lifetime activities such as tennis, archery, golf, orienteering (GPS), mountain biking, rock climbing, kayaking, cooperative games, yoga, aerobics, square dance, self-defense, and badminton. Co-educational instruction is provided.

Grade: 11-12 Length: Full Year Credit: ¼ each semester  
Prerequisite: Completion 9-10 Program



## **ADAPTIVE PHYSICAL EDUCATION**

1 <sup>st</sup> Semester	735
2 <sup>nd</sup> Semester	736

Students with Individualized Educational Programs (IEP) that specify an Adaptive Physical Education Program have their needs met through a specialized program. Program modifications are made to the student's individual needs but attempt to mimic the regular Physical Education program as much as possible. Inclusion into the regular classes is made when possible either through parallel or integrated play.

Grade: 9-12                                      Length: 90 classes/45 minutes

Credit: As part of regular Physical Education Program

Prerequisite: Recommendation of physical education, school nurse and physician

# **SCIENCE DEPARTMENT**

## Mission Statement

The Brighton High School Science Department promotes the following scientific habits of mind. It is our goal that each Brighton student develops these shared values, attitudes, skills, and scientific knowledge.

### Scientific Knowledge

1. To develop a knowledge base in life and physical sciences through the study of Biology, Chemistry, Earth Science, and Physics; to appreciate the connections between these disciplines; and to demonstrate the ability to apply that knowledge to their everyday lives through a variety of opportunities to include extracurricular activities.

### Shared Values and Attitudes

2. To internalize values inherent in the practice of science and technology; to develop respect for the use of evidence and logical reasoning in making arguments; honesty, curiosity, and openness to new ideas; and skepticism in evaluating claims and arguments.
3. To develop informed, balanced beliefs about the social benefits of the scientific endeavors and beliefs based on the ways in which people use knowledge and technologies; to realize the need to continually pursue knowledge and develop new technologies.
4. To develop a positive attitude toward being able to understand science and mathematics, to be able to effectively review, summarize and critique scientific literature; to deal with quantitative matters, think critically, and use calculators and computers, to analyze and solve problems.
5. To develop a cooperative work ethic, to be an effective and valuable member of a team to accomplish the task at hand.

### Scientific Skills

6. To develop computational skills, including the ability to make certain mental calculations rapidly and accurately; to perform calculations using paper and pencil, calculators and computers; to estimate approximate answers when appropriate; to check on the reasonableness of other computations; to acquire the ability to use a computer spreadsheet to record, manipulate and graph data.
7. To develop skills to design valid experiments to test or discover fundamental relationships; to pose a reasonable hypothesis; to develop manipulation and observation skills, to use instruments to make accurate measurements; to be able to gather and organize information in tables and simple diagrams; to be able to use a

computer spreadsheet to record and manipulate and graph data; to be able to analyze simple graphs and draw valid meaning and conclusions from their data; and to realize uncertainties and error inherent with experimental design.

8. To develop communication skills, including the ability to express basic ideas, instructions, and information clearly both orally and in writing; to demonstrate their understanding through a variety of authentic assessments; to be able to gather information from a variety of sources including the Internet.
9. To develop critical response skills that prepare people to carefully judge the assertions made by advertisers, public figures, organizations, and the entertainment and news media; to subject their own claims to the same kind of scrutiny so as to become less bound by prejudice and rationalization.
10. To develop computer skills in a variety of applications including word processing, graphic design, spreadsheets, data acquisition, presentation software, simulation modeling, web page production, and Internet use.

\*\*\*\*\*

The Science Department offers a wide variety of courses to students of varying interest and ability levels. The Regents sequence consists of earth science, biology, chemistry, and physics, and is recommended for students with average or above average ability. General level courses in each subject area are available for students who have had difficulty in science. These general classes have smaller enrollments enabling the teacher to provide more individual assistance. Advanced Placement courses in biology, chemistry, and physics are also provided; thus, a student may earn college credit and/or advanced standing while still in high school.

### **LABORATORY WORK**

**All of the science courses involve laboratory work. Admission to the final examination is contingent upon the satisfactory completion of a required minimum number of these labs.**

**EARTH SCIENCE****40000****Level 3**

This Regents level course deals with how and why the environment of the earth changes, how the earth interacts in the solar system, the effect of solar radiation on the atmosphere, weather and climate, the dynamic nature of the earth's crust, the formation of various kinds of rocks. Students will also study the geological history of the earth as well as the effect that humans have had in the evolution of the earth's landscape. Satisfactory completion of extensive lab work is mandatory. The assessment will evaluate all areas of student performance including lab skills, communication skills, data analysis, and interpretation skills. Regents credit will be given for successful completion of the course.

Grade: 9-12

Length: Full Year

Credit: 1

Prerequisite: None

**BIOLOGY (LIVING ENVIRONMENT) COURSE DESCRIPTION**

The BHS Biology Program follows the New York State Living Environment curriculum. The Living Environment Program is designed to integrate the concepts and topics of modern biology relevant to today's world. Emphasis is placed on current issues such as the environment and technology in society. Topics include ecology, cells, biochemistry, genetics, evolution, and human physiology. Course projects and laboratory work will be a required component of the course. The course culminates with a New York State Living Environment final assessment. The assessment evaluates all areas of student performance including lab skills, communication skills, data analysis, and interpretation skills. Regents credit will be given for successful completion of the ES and regular courses.

**LIVING ENVIRONMENT****41700****Level 3**

Emphasis is placed on current issues such as the environment and the use of science and technology in society. Topics include ecology, cells, biochemistry, genetics, evolution, and human physiology.

Grade: 9-12

Length: Full Year

Credit: 1

Prerequisite: Earth Science and enrolled in Geometry.

**LIVING ENVIRONMENT ES****41800****Level 4**

Living Environment ES is designed to follow the prior Regents Biology curriculum which provides a good foundation for advanced biology classes. The course moves at a faster pace which allows motivated science students to utilize resources provided to maximize their individual learning. This project based course will focus on inquiry skills. Included in these skills is the development of a research based project and presentation as would be seen at a scientific conference.

Grade: 9-12

Length: Full Year

Credit: 1

Prerequisite: Regents Earth Science, Teacher recommendation; students should be enrolled in Geometry ES or Geometry.

**CHEMISTRY** **43000** **Level 3-4**

Regents Chemistry is the study of the structure and behavior of atoms and molecules. Considerable emphasis is placed on the general periodic relationships of the elements, their atoms, ions, and compounds. The course deals primarily with physical chemistry along with a brief introduction to organic and nuclear chemistry. The Regents final exam emphasizes both mathematical and written proficiency of concepts.

Grade: 10-12 Length: Full Year Credit: 1

Prerequisite: Earth Science, Living Environment (or concurrent), and enrolled in Geometry ES or Algebra II

**GENERAL CHEMISTRY** **43500** **Level 1-2**

General Chemistry is the study of the structure and behavior of atoms and molecules. Considerable emphasis is placed on the general periodic relationships of the elements, their atoms, ions, and compounds. The course deals with physical chemistry and includes a brief introduction to organic and nuclear chemistry. Topics dealt with in the course are similar to those in Regents Chemistry, but there is less emphasis on mathematical development of many concepts. General Chemistry is an ideal course for those students who do not have math proficiency.

Grade: 10-12 Length: Full Year Credit: 1

Prerequisite: One year of high school science and one year of high school math.

**GENERAL PHYSICS** **44000** **Level 1-2**

General Physics is the study of matter and energy, emphasizing everyday applications of motion, forces, electricity, magnetism, and optics. Although topics are introduced conceptually, a background of basic geometry and trigonometry is needed for the course.

Grade: 10-12 Length: Full Year Credit: 1

Prerequisite: One year of high school science and Geometry

**PHYSICS** **44600** **Level 3**

Regents Physics is the study of the behavior of matter and energy. The course is organized into five core areas: 1) mechanics, 2) energy, 3) electricity and magnetism, 4) wave phenomena and 5) modern physics. The optional areas chosen for additional study are motion in a plane, electromagnetic applications and geometrical optics. Because these topics are treated mathematically, a good background in algebra, geometry and trigonometry is highly desirable.

Grade: 10-12 Length: Full Year Credit: 1

Prerequisite: Earth Science, Living Environment, Regents Chemistry (or co-requisite), Passing Geometry and enrolled in Algebra II

**ENERGY AND SUSTAINABILITY      583500      Level 2-4**

Learn what you can do to be more “Green” and make a difference in decisions about energy use. This course will allow students to explore energy and sustainability with a focus on new developments in energy efficiency and renewable energy technologies including fuel cells, wind power, modern nuclear power, geothermal, photovoltaic and solar power. Additional course work will include world energy, energy and the environment, energy and sustainable development, energy storage, and emerging energy technologies. This is a laboratory based course which also includes lectures, demonstrations, and site visits. Students must have completed or be currently enrollment in Geometry. This course is not a substitute for Chemistry or Physics in the science sequence; it can be taken after completion of the four main science disciplines or taken as an elective concurrently with either of them.

Grade: 10-12

Length: Full Year

Credit: 1

Prerequisite: Geometry (or currently enrolled), Earth Science, Living Environment (or currently enrolled)

## **AP SCIENCE COURSES**

The Science Department strongly recommends that students obtain a broad Science background by taking an introductory level course in each Science discipline (Earth Science, Biology, Chemistry, and Physics) before enrolling in our AP level program, although AP Physics may be taken as an introductory course with a teacher recommendation. All students enrolled in AP courses will take the AP exam in the spring.

**ADVANCED PLACEMENT PHYSICS B      46100      Level 4**

AP Physics B is a comprehensive, non-calculus based, first-year physics course that provides an introduction to the fundamental principles of physics. Topics include mechanics, thermodynamics, waves, optics, electromagnetism, fluid dynamics, and quantum mechanics. Problem-solving skills and techniques are emphasized. A sound knowledge of algebra, trigonometry, and vectors is required for the course. Basic principles of calculus may be introduced in conjunction with fundamental concepts. Students will use computers to model and simulate natural systems, to gather and analyze data, to produce presentations, and to create a web page. All students must take the Advanced Placement examination in May. Following the AP exam, students are involved in a final project in lieu of a final local exam.

Grade: 11-12

Length: Full Year

Credit: 1

Prerequisite: Regents Earth Science, Regents or ES Living Environment, Regents Chemistry, Algebra II (or concurrent)

**ADVANCED PLACEMENT BIOLOGY 46600 Level 4**

Advanced Placement Biology is a college level biology course designed to promote an understanding of the major themes of biology. Three broad areas provide the main focus for study: Molecules and Cells, Genetics and Evolution, and Organisms and Populations. Topics include ecology, plant and animal kingdoms, biochemistry, cytology, genetics, evolution, molecular biology, and human body systems. All students must take the Advanced Placement examination in May. College credit may be awarded based on AP exam score. There is a focus on laboratory work which is scheduled weekly.

Grade: 12                                      Length: Full Year                                      Credit: 1  
Prerequisite: Earth Science, Regents or ES Living Environment, Chemistry and Physics; or concurrent enrollment in any prerequisite course not completed.

**ADVANCED PLACEMENT CHEMISTRY 47000 Level 4**

This is a college-level first year chemistry course whose objective is the development of a conceptual understanding of the basic fundamentals of physical chemistry and their quantitative implementation. Some of the basic concepts studied will include equilibrium, thermodynamics, kinetics, bonding, acid-base theory, reactions and chemical cells. All students should possess strong math skills and must take the Advanced Placement examination in May. Following the AP exam, students are involved in qualitative analysis labs and a final project in lieu of a final local exam.

Grade: 11-12                                      Length: Full Year                                      Credit: 1  
Prerequisite: Earth Science, Regents or ES Living Environment, Chemistry and Physics; Algebra II, Pre Calc or concurrent enrollment in any prerequisite course not completed.

**ADVANCED PLACEMENT ENVIRONMENTAL SCIENCE 47300 Level 4**

Advanced Placement Environmental Science is a college level laboratory-based science course designed to provide students with the scientific basis for understanding interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving and preventing environmental problems. Topics covered include local ecosystems, earth systems, and human impacts on local and global systems – habitat loss and extinction; air, water, soil, and groundwater pollution; energy and other renewable and nonrenewable resource use and depletion; global warming; and ozone depletion. All students must take the Advanced Placement examination in May. College credit may be awarded based on AP exam score. Laboratory work is required and scheduled weekly.

Grade: 11-12                                      Length: Full Year                                      Credit: 1  
Prerequisite: Earth Science, Biology, Chemistry, Physics or concurrent enrollment in Physics, enrollment in Algebra II

**ADVANCED PLACEMENT PHYSICS C 45600****Level 4**

Advanced Placement Physics C is a second year, calculus based physics course. The curriculum is divided into two equal components, Newtonian Mechanics and Electricity & Magnetism. Methods of calculus will be used wherever appropriate in formulating physical principles and applying them to solving problems. Therefore, students should have a basic understanding of derivatives and integrals. Previous or concurrent enrollment in some level of calculus is required. The AP-C exam is divided into two distinct parts, each receiving a separate score: Mechanics and Electricity and Magnetism. All students must take both parts of the AP examination in May. Following the AP exam, students are involved in a final project in lieu of a final local exam.

Grade: 12

Length: Full Year

Credit: 1

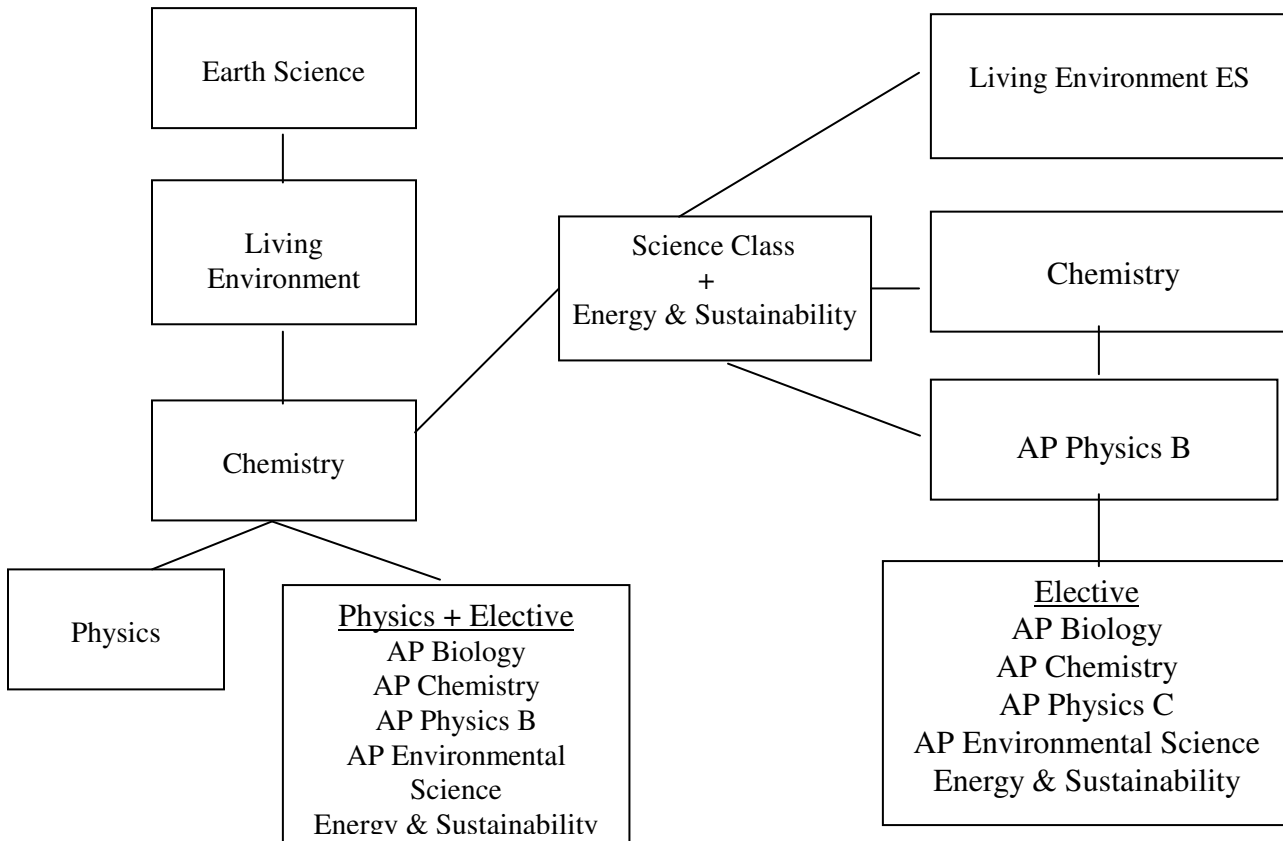
Prerequisite: Regents Earth Science, Regents or ES Living Environment, Regents Chemistry, AP Physics B, and AP Calculus (or concurrent enrollment in a calculus course).



# SCIENCE DEPARTMENT

## Regents Level

## Accelerated Program



## **SOCIAL STUDIES DEPARTMENT**

### **GENERAL OVERVIEW**

New York State mandates four units of social studies for high school graduation. These credits are divided into the following sequence:

Ninth Grade:	Global History and Geography I
Tenth Grade:	Global History and Geography II
Eleventh Grade:	U. S. History and Government
Twelfth Grade:	Economics, Law and Government

The Social Studies courses stress the development of basic understandings. These understandings are built into generalizations whose implications are broadened when encountered at successive levels in the curriculum. The approach is interdisciplinary, drawing upon anthropology, sociology, geography, economics and political science, as well as history. Skill development, student participation, critical thinking, analyzing, comparing and contrasting, and research are all stressed as part of the Social Studies curriculum.

### **NINTH GRADE**

Students take Social Studies 9. The ninth grade course is the first part of a two-year Global History and Geography course. At the end of tenth grade, students will take the New York State Regents Exam in Global History and Geography. They must pass this exam in order to graduate from high school.

#### **SOCIAL STUDIES 9** **10000** **Level 3-4**

In the ninth grade, students will study the history and culture of the following regions/nations: China, Japan, Southeast Asia, Africa, South Asia, Korea, and Latin America. Students will study each region from its earliest civilizations to the present day. The histories of each region/nation will be interrelated to conform to the New York State guidelines. The skills and knowledge needed to pass the Regents exam will be emphasized.

Grade: 9

Length: Full Year

Credit: 1

Prerequisite: None

### **TENTH GRADE**

Students take either Social Studies 10 or Social Studies 10ES for the full year. All tenth graders must take the Global History and Geography Regents examination at the end of the year. They must pass this exam to graduate from high school.

**SOCIAL STUDIES 10****10300****Level 3**

This is the second half of the Global History and Geography course mandated by the New York State Education Department. In the tenth grade, students will study the history of Europe and the Middle East from ancient civilizations to the present. At the end of the year, they will take a Regents exam that will test document interpretation and critical thinking skills as well as knowledge of world history. Students will be given the opportunity to take the World History Advanced Placement exam offered by the College Board. High achievement on that exam may result in college credit, advanced placement in college courses, or both.

Grade: 10

Length: Full Year

Credit: 1

Prerequisite: Social Studies 9 or teacher recommendation

**SOCIAL STUDIES 10 ES****10600****Level 4**

In the tenth grade, students will study the history of Europe, Russia, and the Middle East from ancient civilization to the present. Students will be taught critical thinking and document interpretation skills necessary to pass the New York State Regents Exam in World History. Students will be given the opportunity to take the World History Advanced Placement exam offered by College Board. High achievement on that exam may result in college credit, advanced placement in college courses, or both. This is an advanced level of Global History and Geography course mandated by the New York State Education Department.

Grade: 10

Length: Full Year

Credit: 1

Prerequisite: Social Studies 9 and teacher recommendation

**ELEVENTH GRADE**

Students must take Social Studies 11 or Enhanced Social Studies 11. With the recommendation of the tenth grade Social Studies teacher, their counselor, and their parents, students may take Advanced Placement United States History. All eleventh grade students must take the Regents examination in United States History and Government.

**SOCIAL STUDIES 11****11000****Level 3****United States History and Government**

This course is a chronological history of the United States with the primary focus from the Civil War to the present. The emphasis is on the Constitution, development of the United States as an industrial nation, and international involvement. In June, students will take the New York State Regents examination in United States History and Government.

Grade: 11

Length: Full Year

Credit: 1

Prerequisite: Social Studies 10 and/or teacher recommendation

**ADVANCED PLACEMENT UNITED STATES HISTORY 11900 Level 4**

AP U.S. History is a course designed to be as difficult as a college level introductory survey course. The textbook, THE NATIONAL EXPERIENCE, has been used for several decades at the college level. Students are expected to develop a thorough background in American history so that they can think critically, quickly, and accurately when writing about historical issues. In May, students take the Advanced Placement examination offered by the College Board. High achievement on that examination can result in college credit, advanced placement in college courses, or both. At the end of the year, students will take the New York State Regents Examination in U.S. History and Government.

Grade: 11

Length: Full Year

Credit: 1

Prerequisite: Social Studies 10 or Social Studies 10ES, appropriate recommendations

**TWELFTH GRADE**

A fourth year of Social Studies is mandated by New York State for high school graduation. Students must take one semester of Economics and one semester of Law and Government. Also, students may choose to take additional Social Studies electives as part of a five-year sequence or simply out of interest in a particular subject.

Note: Students may choose to take an exam in the areas of economics and/or government in January of their junior year. Successful achievement on either or both exams will allow a student to substitute another elective or electives in place of Economics and Law and Government. Details about these procedures are available from your Social Studies teacher, your counselor, or the Social Studies Coordinator.

**ECONOMICS 12000 Level 2-3**

This course will introduce basic economic concepts such as supply, demand, scarcity and opportunity cost. Students will apply these concepts to their current and future roles as producers and consumer in our society, thus obtaining an understanding of how the market system developed and how this system compares to other economic systems. Some time will be devoted to such contemporary economic issues as inflation, labor-management strife, and the impact of international relations upon economic affairs. Students will have the opportunity to investigate the stock market and career opportunities and will be required to produce an economics research paper.

Grade: 10-12

Length: One Semester

Credit: ½

Prerequisite: None

**PRINCIPLES OF ECONOMICS                      13100                      Level 1-2**

Students will study economic principles such as supply and demand, competition, the roles of small business, big business, labor unions, taxation, stocks, bonds, and the role of the government. Students will also learn basic economic principles such as consumer economics, checkbook balancing, budgeting, and borrowing.

Grade: 12    Length: One Semester    Credit: ½  
Prerequisite: Teacher recommendation

**LAW & GOVERNMENT    12300    Level 1-4**

This course provides students the opportunity to examine how public policy is determined at the local, state, and national levels regarding a variety of legal issues. Students examine criminal and civil law, constitutional law, the language of law, crime in America, the courts system, trial procedures, and the penal system.

Grade: 12    Length: One Semester    Credit: ½  
Prerequisite: None

**GENERAL ELECTIVES**

Electives may be taken in Grades 10, 11, or 12 as additional courses. They do not count as part of the four mandated units unless a student has successfully tested out of Economics and/or Law and Government.

**ADVANCED PLACEMENT UNITED STATES HISTORY    11900    Level 4**

AP U.S. History is a course designed to be as difficult as a college level introductory survey course. The textbook, THE NATIONAL EXPERIENCE, has been used for several decades at the college level. Students are expected to develop a thorough background in American history so that they can think critically, quickly and accurately when writing about historical issues. In May, students take the Advanced Placement Examination offered by the College Board. High achievement on that examination can result in college credit, advanced placement in college courses, or both. At the end of the year, students will take the New York State Regents Examination in U.S. History and Government.

Grade: 11    Length: Full Year    Credit: 1  
Prerequisite: Teacher recommendation

**ADVANCED PLACEMENT EUROPEAN HISTORY    12400    Level 4**

This is a college-level course in European History (1500–Present) for seniors who have had a high scholastic record in previous Social Studies courses and are self-motivated. The course requires extensive reading of both primary and secondary sources. Writing is a key component of the course. In May, students will take the AP Exam offered by the College Board.

Grade: 12    Length: Full Year    Credit: 1  
Prerequisite: Teacher recommendation

**ADVANCED PLACEMENT GOVERNMENT AND POLITICS**

**(UNITED STATES, COMPARATIVE)**

**13000**

**Level 4**

For the United States part of this course, there is an emphasis on the general concepts used to interpret U.S. politics and the analysis of specific case studies. It also requires familiarity with the various institutions, interest groups, beliefs, and ideas that constitute U. S. political reality. The comparative component of this course encompasses the study both of specific countries and of general concepts used to interpret the key political relationships found in virtually all national policies. Countries studied are Great Britain, France, Russia, China, and one developing nation. High achievement on the AP examination can result in college credit, advanced placement in college courses, or both. In May, students will take the AP Exam offered by the College Board.

Grade: 12

Length: Full Year

Credit: 1

Prerequisite: Social Studies 11 or AP US History and teacher recommendation

**SOCIOLOGY**

**12700**

**Level 1-4**

This is an introductory course dealing with human behavior from a social perspective. Examples of specific units are socialization, or the way in which people learn from others; institutions such as family, education, religion, and medicine. We also examine social stratification by race, gender, ethnicity and social class, both cross-culturally and in the United States. As part of an extensive unit on collective behavior and social movements, we focus on civil rights, anti-war, and women's movements of the sixties analyzed through varied lenses of media (music, films, and documentary footage). Students are expected to complete a research project drawing on library materials or original field work.

Grade: 10-12

Length: One Semester

Credit: ½

Prerequisite: None

**PSYCHOLOGY**

**12600**

**Level 1-4**

Have you ever wondered why people act as they do? Psychology offers four different answers to this question. People influence each other through social processes. Our childhood and constant development determine our actions. One's personality has important effects. Lastly, the brain and nervous system determines our actions. This course examines all four answers by employing lectures, readings, videos, hands-on activities, and discussions. A research project fosters skills in using psychological literature.

Grade: 10-12

Length: One Semester

Credit: ½

Prerequisite: None

**COMPARATIVE RELIGIONS****11500****Level 1-4**

This course introduces students to the world's major religions, including, but not limited to, Buddhism, Christianity, Hinduism, Islam, and Judaism. The impact of contemporary issues on these religions will also be studied. This experienced-based course includes field trips to religious sites, guest speakers, and multi-media learning activities to complement the course objectives and assigned readings. To successfully complete this course, students will be required to complete a final project that includes an argumentative research essay and an oral presentation about some aspect of religion.

Grade: 10-12

Length: One Semester

Credit: ½

Prerequisite: None

**SUPA ECONOMICS****13210****Level 4**

This course will follow the curriculum of the SUPA Economics 203 taught at Syracuse University. This portion of the course will provide concurrent BHS and Syracuse University credit. This course is an introduction to mainstream economic thought designed for students with a liberal arts interest. The course will introduce students to the basic framework that economists have built to illustrate the modern western economic system. The course takes students from the microeconomic to macroeconomic level of study. Students will examine the benefits as well as the problems inherent in a market-oriented economy. Students will also be required to produce a college level economics research paper. Upon successful completion of this portion of the course, students will earn three Syracuse University credits.

NOTE: Students must purchase the Economics 203 textbook. Students will also be responsible for the cost of three SUPA Syracuse credit hours (currently \$110 per credit hour).

Grade: 11-12

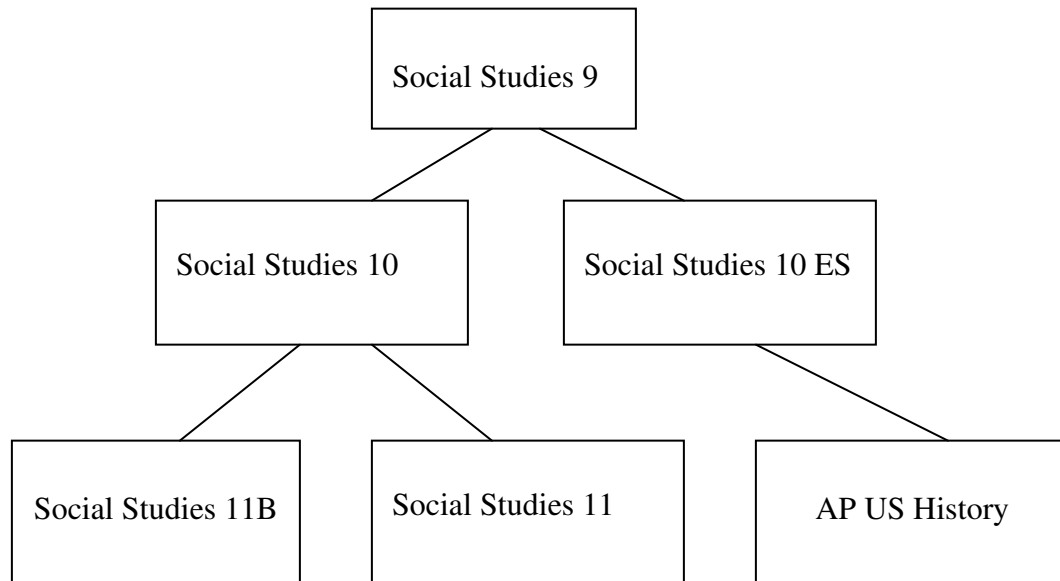
Length: One Semester

Credit: 1 (BHS)

4 (Syracuse University)

Prerequisite: Teacher Recommendation

# Social Studies Department



Law & Government  
(1 semester)

---

Economics  
or  
Principals of  
Economics

## Senior Electives

AP European History  
SUPA Economics  
AP Government & Politics  
Sociology  
Psychology  
Comparative Religions



## TECHNOLOGY DEPARTMENT

Technology courses are designed to accommodate students of widely varying interests and academic abilities. Students may elect to take courses such as Technical Drawing, Advanced CAD, Video Communication, Communication Systems, Architectural Design, Principles of Engineering, Desktop Publishing or Electronics/Robotics. All technology courses are taught in part if not entirely in the Technology Computer Lab. All technology classes are designed to be at least 75% hands-on. Students leave technology courses with knowledge and transferable skills learned on industry standard software and equipment.

Two technology courses may be combined to fulfill a unit of credit in math or science. In addition, many technology classes fulfill the art/music requirement, and all may be chosen as an elective or used as part of a sequence in technology.

### COMMUNICATION SYSTEMS 58400 Level 1-4

This course is about communicating. How we as humans communicate using visual and auditory senses and very often a combination of the two. Emphasis is given to hands-on learning through a variety of activities consisting of, but not limited to the following; analysis of communication systems, digital imaging through photography and video, manipulation and editing of digital imagery, graphic communication, desktop publishing and development of web site/pages. Computer use is an integral part of this course. This course may fulfill ½ of the art/music credit needed for graduation and is the same course offered in the Middle School for High School credit.

Grades: 9-12

Length: One Semester

Credit: ½

Prerequisite: None

### TECHNICAL DRAWING/COMPUTER AIDED DESIGN 58300 Level 1-4

This course challenges students to use drafting to generate solutions to design problems. Students will use **AutoCAD**, a professional 2-dimensional productivity tool, to learn the language of Technical Drawing and communicate their ideas through exact mechanical drawings. Those students interested in any *technical related career* are recommended to take Technical Drawing. This course may fulfill ½ of the art/music credit needed for graduation, and it is a ***prerequisite for the courses Advanced Technical Drawing and Architectural Drafting and Design.***

Students may elect to earn three college credits through our MCC dual credit program while taking this course. (MET 101)

Grades: 9-12

Length: One Semester

Credit: ½

Prerequisite: None

**ADVANCED COMPUTER AIDED DESIGN AND DRAFTING 58600 Level 1-4**

This course is designed to build upon the basic principles of Technical Drawing: orthographic projections, surface developments, pictorial drawings and sectional views. There is an emphasis on the **3D component** of drafting. Designing and the production of models are major aspects of this course. Students will be introduced to 3-D solid modeling through the design, itemization, and drafting of details, necessary to manufacture and construct a project. This course may fulfill ½ of the art/music credit needed for graduation, and has ***Technical Drawing as a prerequisite.***

Grades: 9-12

Length: One Semester

Credit: ½

Prerequisite: Technical Drawing

**ARCHITECTURAL DESIGN AND DRAFTING 58800 Level 1-4**

This is an exploratory course in architectural design and drafting. Its emphasis on history, ergonomics, structures, materials, environmental and cultural views will give students an overview of the architectural world. The course challenges students to use CAD as a tool to draw solutions to diverse architectural design problems. Students will conceptualize, draw, and plot a *complete set of drawings* of a single-family residential unit. This course may be used to fulfill ½ of the art/music credit needed for graduation, and has ***Technical Drawing as a prerequisite.***

Grade: 9-12

Length: One Semester

Credit: ½

Prerequisite: Technical Drawing or approval of instructor

**DESKTOP PUBLISHING AND WEB PAGE DEVELOPMENT 58500 Level 1-4**

This course will use the computer as a tool for layout and design of electronic and graphic media. Students will use digital cameras, scanners, and computers to capture and manipulate digital images. Software that the students will be using includes Adobe (CS3), Internet Explorer, Sea Monkey, Notepad for HTML, and Microsoft Office Professional. Emphasis will be placed on layout and design as well as seeking out clients for specific group and individual projects. This course may be used to fulfill ½ of the art/music credit needed for graduation.

Grade: 9-12

Length: One Semester

Credit: ½

Prerequisite: None

**ELECTRONICS/ROBOTICS 59200 Level 1-4**

This course will introduce students to electronic theory and how it links to the complex world of computers and robotics. Topics covered range from series and parallel circuits to robot classifications. Students will learn robotic fundamentals using the GEARS robotics equipment. Each student will participate in individual and group projects. Computer

simulations and activities are integrated throughout the course. Extensive hands-on lab work is an essential component of this course.

Grade: 9-12 Length: One Semester Credit: ½  
Prerequisite: None

**VIDEO COMMUNICATIONS 59400 Level 1-4**

Students will produce a variety of video projects using digital cameras and non-linear computer based editing. Course work includes planning, scripting, camcorder and studio camera use, editing, computer graphics, animation and class viewing. Students will have studio as well as “on location” shooting experiences. This course may be used to fulfill ½ of the art/music requirement needed for graduation. Although not a prerequisite, this course is a further exploration of the concepts taught in Communication Systems.

Grade: 9-12 Length: One Semester Credit: ½  
Prerequisite: None

**PRINCIPLES OF ENGINEERING 59600 Level 1-4**

This course is an integration hands-on laboratory based set of case studies that convey the concepts, principles, skills, techniques and attitudes associated with the field of engineering. Students looking for a challenging half-year course and who enjoy designing and constructing are encouraged to enroll. Large and small group projects will be developed in a technology lab setting. This class is geared for innovative and creative thinkers with original ideas and/or solutions to existing or future problems.

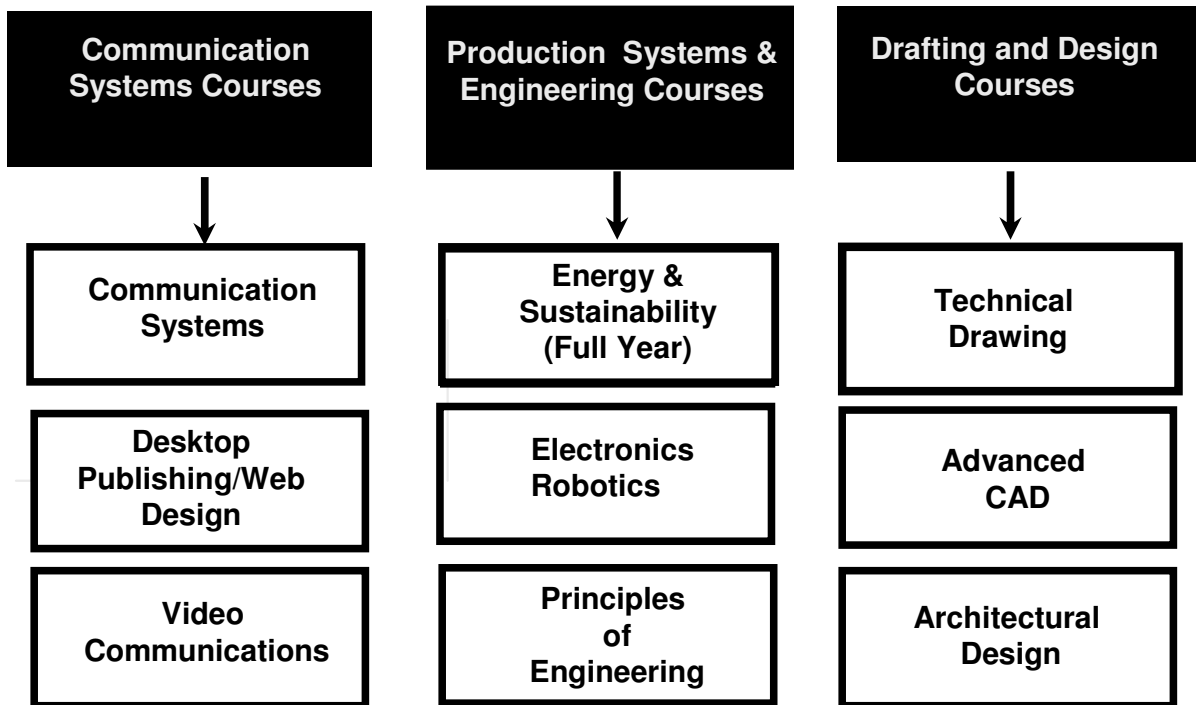
Grade: 9-12 Length: One Semester Credit: ½  
Prerequisite: None

**ENERGY AND SUSTAINABILITY 58350 Level 1-4**

Learn what you can do to be more “Green” and make a difference in decisions about energy use. This course will allow students to explore energy and sustainability with a focus on new developments in energy efficiency and renewable energy technologies including fuel cells, wind power, modern nuclear power, geothermal, photovoltaic and solar power. Additional course work will include world energy, energy and the environment, energy and sustainable development, energy storage, and emerging energy technologies. This is a laboratory based course which also includes lectures, demonstrations, and site visits. Students must have completed or be currently enrollment in Geometry. This course is not a substitute for Chemistry or Physics in the science sequence; it can be taken after completion of the four main science disciplines or taken as an elective concurrently with either of them.

Grade: 9-12 Length: Full Year Credit: 1  
Prerequisite: Geometry (or currently enrolled),  
Earth Science, Living Environment (or currently enrolled)

# Technology Education Recommended Sequence



- All technology courses are 1/2 credit, except for the Energy and Sustainability course, which is a full year and is a math, science, technology integration model of teaching (MST).

- Any two Technology courses may be used to replace a third year of mathematics or science.

- A sequence in Technology Education (5 credits) plus one (1) credit in any Foreign Language may be used to replace a *Foreign Language sequence*.

## VISUAL AND PERFORMING ARTS

All students are required to elect one year of art and/or music as part of their graduation requirements. The art, music, and drama for-credit courses listed in this booklet may be used to fulfill this requirement. See the Visual and Performing Arts office or your counselor for more information. For students interested in pursuing more than one credit of art, it is recommended that they take Studio Art first.

### VISUAL ARTS

#### **VISUAL ARTS SEQUENCE:**

Students interested in completing a graduation sequence in Visual Arts are required to complete one of the following options according to the New York State Department of Education:

#### 3 Credit Sequence

½ credit      Studio Art I  
½ credit      Studio Art II  
2 credits     4 Courses chosen from all  
   Art offerings

#### 5 Credit Sequence

½ credit      Studio Art I  
½ credit      Studio Art II  
4 credits     8 Courses chosen from all  
   Art offerings

#### **STUDIO ART I**

**60200**

**Level 1-4**

This course is an art studio survey course designed to build a student's perceptual abilities, artistic skills, and creative expression. Students will manipulate a variety of media to create unified two-dimensional works of art. Major art movements and the language of design will be addressed in order to redefine a student's understanding, appreciation, and production of art. Investigation of art history and specific artists will reinforce concepts and ideas explored during studio projects. Requirements for the course include some outside drawing and research. Students are expected to participate in critiques of their work.

Grade: 9-12

Length: One Semester

Credit: ½

Prerequisite: None

#### **CERAMICS I**

**61200**

**Level 1-4**

In this introductory course, imaginative solutions for functional and non-functional ceramics are emphasized in a variety of techniques for clay. Students will engage in an exploration of the following hand-building techniques: strip, drape, hard slab and layered slab. Glazing, unconventional color application, and surface texturing are introduced to extend the clay experience. Instruction on the potter's wheel will take place in Ceramics II. Requirements for this course may include some outside research. Students are expected to participate in oral critiques of their work.

Grade: 9-12

Length: One Semester

Credit: ½

Prerequisite: None

**JEWELRY MAKING****61400****Level 1-4**

This course emphasizes design through production, criticism, aesthetics, and art history with a mixed media approach to jewelry making. Students will work with such materials as paper, wood, clay, and metal to create a variety of body adornments. Students may need to purchase a modest amount of supplies. Requirements for this course may include some outside drawing and research. Students are expected to participate in critiques of their work.

Grade: 9-12

Length: One Semester

Credits: ½

Prerequisite: None

**SCULPTURE****61100****Level 1-4**

In this course, students are introduced to three-dimensional work by manipulating (hammer, sand, pour, chisel, build and bend) the raw materials and objects in the world around them. Students learn about the properties of stone, wood, clay, plaster, and metal and how to work with these and other materials to create sculptural forms. Art history, design principles, and production are all important elements of this course. Requirements include some outside research and maintaining a sketchbook of ideas and research. Students are expected to participate in critiques of their work.

Grade: 9-12

Length: One Semester

Credit: ½

Prerequisite: None

**PHOTOGRAPHY I****61600****Level 1-4**

This course is an introduction to the camera, the studio and basic photographic techniques. The history and nature of photography will be explored as well as criticism of photo composition (e.g. discussion of the elements and principals of design). Students will develop skills and appreciation for photography as an art form. Digital image capture, computer manipulation, storage and retrieval, and printing will be explored. Students will use digital cameras and Photoshop software to generate electronic images. Students are expected to be prepared to spend time outside of class for homework and research assignments.

A digital camera is not required for this course but is helpful.

Three college credits may be available through MCC dual credit.

Grade: 9-12

Length: One Semester

Credit: ½

Prerequisite: None

**STUDIO ART II****60400****Level 1-4**

This course is the second half of the Studio Art experience. Like Studio Art I, this course is an opportunity for students to explore several units of study helping them to discover what areas interest them. It is designed to pick up where Studio Art I finishes and to build on the skills acquired. Emphasis will be placed on multi media techniques, the language of design and composition and historical trends. The curriculum is designed to help the students begin to discover their own unique style. Requirements for the course include some outside drawing and research. Students are also expected to participate in critiques of their work.

Grade: 9-12

Length: One Semester

Credit: ½

Prerequisite: Studio Art I

**CERAMICS II****61300****Level 1-4**

This course builds on the foundation of Ceramics I. Advanced skills in each of the hand-building techniques will be explored as well as instruction in throwing on the potter's wheel. Ceramic art in other cultures both past and present, as well as contemporary artists, will be covered. Some of the projects will be self generated. Students are required to maintain a sketchbook for ideas and research. Students are expected to participate in critiques of their work.

Grade: 9-12

Length: One Semester

Credit: ½

Prerequisite: Ceramics I

**PHOTOGRAPHY II****61800****Level 1-4**

This course is a continuation of Photography I which explores, in greater depth, various procedures in lighting, composition, concept development, photo manipulation and printing. Digital image capture, computer manipulation, storage and retrieval, and printing will be explored in greater depth. Student growth in critical thinking with regard to the image and creative expression are characteristic of Photography II. Students are expected to be prepared to spend time outside of class for homework and research assignments.

A digital camera is not required for this course but is helpful.

Three college credits may be available through MCC dual credit.

Grade: 9-12

Length: One Semester

Credit: ½

Prerequisite: Photography I





**AP ART HISTORY****61900****Level 3-4**

The AP Art History course engages students at the same level as an introductory college art history survey course. The course emphasizes understanding works of art within their historical context by examining issues such as politics, religion, patronage, gender, function and ethnicity. Students gain knowledge of architecture, sculpture, painting, and other art forms within diverse historical and cultural contexts. An examination and critical analysis of major forms of artistic expression from the past and present are the basis of this course. Students should be willing to make a commitment to academic work and the purposes of a program designed to meet college standards. The course prepares students for the AP Art History exam. The course is recommended for juniors and seniors who are willing to commit themselves to a rigorous academic program. Many colleges award credit or advanced placement on the basis of the exam result. Approximately 20 hours of summer work including reading, writing and museum visits are required.

Grade: 11-12

Length: One full year

Credit: 1

Prerequisite: None

**AP STUDIO ART****61950****Level 3-4**

The AP Studio Art course is designed for students who are seriously interested in the practical experience of art. With guidance from the instructor, students will develop a concentrated focus in one of three areas: Studio in Drawing, Studio in 2-d design or Studio in 3-d design. Students will develop their body of work with the following three major concerns: quality, breadth and concentration. This course parallels curriculums and programs at the college level. There is no written AP exam, but rather each student submits their portfolio of 22-27 completed projects to the College Board for evaluation in May. Many colleges award credit or advanced placement on the basis of this portfolio review. Four required works of art are to be completed over the summer prior to the start of school.

Grade: 11-12

Length: One full year

Credit: 1

Prerequisite: Studio Art I and Studio Art II, Ceramics I and Ceramics II, and an informal portfolio review with the art department instructors. This course is not meant to be taken in the same year as Portfolio Preparation.

# BRIGHTON HIGH SCHOOL VISUAL ARTS

**FALL AND SPRING ART COURSE OPPORTUNITIES FOR INCOMING FRESHMAN**

*Studio Art 1 & 2*

*Photo 1 & 2*

*Ceramics 1 & 2*

*Sculpture*

*Jewelry Making*

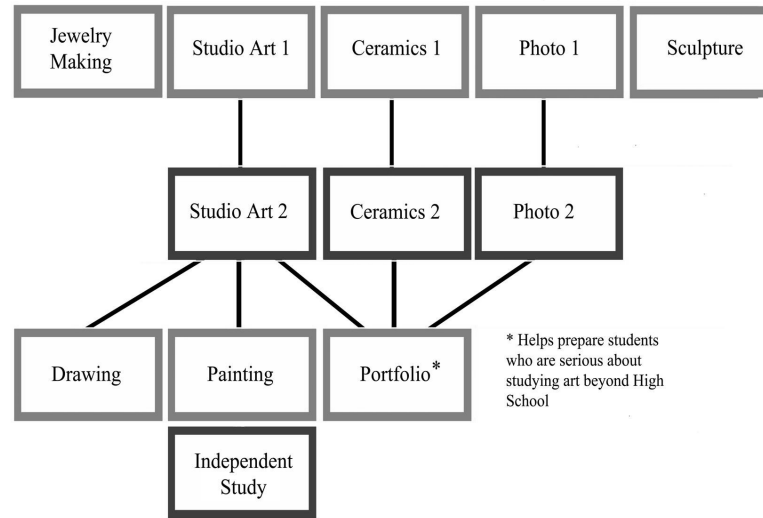
*(Half year each / one semester)*

**Listing of all Visual Arts classes at Brighton High School (half year each):**

- Studio Art 1
- Studio Art 2 (Studio Art 1 Required)
- Ceramics 1
- Ceramics 2 (Ceramics 1 Required)
- Sculpture
- Jewelry Making
- Drawing (Studio Art 1 & 2 Required)
- Painting (Studio Art 1 & 2 Required)
- Portfolio (Prerequisites: See flow chart)

## COURSE OFFERINGS IN THE VISUAL ARTS

Top Row Courses are Entry level



\* Helps prepare students who are serious about studying art beyond High School

The courses above are 1 semester each / half year. The combination of any 2 art courses equals one credit toward graduation requirements at Brighton High School. A three credit sequence is created by taking six art electives, which can be applied to a Regents Diploma.

## CONTACT INFORMATION

Brighton Central School District website: [www.bcsd.org](http://www.bcsd.org)  
 Visual & Performing Arts office: 242-5047  
 High School Art Department voice mail: 242-5038

## **MUSIC**

### **MUSIC SEQUENCE**

Students interested in completing a graduation sequence in Music are required to complete one of the following options according to the New York State Department of Education:

#### 3 Credit Sequence

1 credit      Music Theory  
2 credits     Major Performing Groups

#### 5 Credit Sequence

1 credit      Music Theory  
1 credit      AP Music Theory  
3 credits     Major Performing Groups

### **MUSIC THEORY/COMPOSITION                                  68200                                  Level 1-4**

Music Theory is a year-long course surveying the elements of music including harmony, composition, melody, rhythm, and form. Experience is provided in original music composition and the exploration of established composers' works. This course is a required part of the 3 or 5 credit music sequence.

Grade: 9-12                                  Length: Full Year                                  Credit: 1  
Prerequisite: None; open to all interested students

### **ADVANCED PLACEMENT MUSIC THEORY                                  68400                                  Level 4**

This course is a continuation of Music Theory I. It explores the elements of theory, harmony, counterpoint, sight singing, and conducting through a variety of musical literature of the past and the present. It is intended to offer students the opportunity to perceive the interworkings of the various elements of music encountered in musical works of the past and present. The emphasis in the course will be on the development of aural-visual skills, compositional skills, and intellectual concepts simultaneously leading to further theory and music history study at the college level. *Students will take the Advanced Placement Music Examination at the conclusion of the course.*

Grade: 9-12                                  Length: Full Year                                  Credit: 1  
Prerequisite: Music Theory or permission of instructor

## INSTRUMENTAL MUSIC

<b><u>FRESHMAN ORCHESTRA</u></b>	<b><u>65900</u></b>	<b><u>Level 1-4</u></b>
----------------------------------	---------------------	-------------------------

Any student in ninth grade who plays violin, viola, cello, or string bass will be enrolled in the Freshman Orchestra. Students will continue to develop their technique on the instruments, as well as learn the basics of music theory, composition, and improvisation. Literature for the group will include a variety of styles from classical to jazz. Four concerts are scheduled during the year as well as a chamber music concert for those interested in participating. Other performance opportunities are available as interest indicates. One lesson per cycle during a free period is required.

<b><u>STRING ORCHESTRA I</u></b>	<b><u>65125</u></b>	<b><u>Level 2-4</u></b>
<b><u>STRING ORCHESTRA II</u></b>	<b><u>65150</u></b>	<b><u>Level 2-4</u></b>

All violin, viola, cello, and string bass players in tenth, eleventh, and twelfth grade will be enrolled in this course. Repertoire includes music from string orchestra and full orchestra literature in a variety of styles. Students will continue to develop technique on the instrument. The study of basic music theory, history, composition, and improvisation are continued. Chamber music groups are formed, and many students perform in a chamber music concert. Four other concerts are scheduled during the year. Other performance opportunities are available as interest indicates. One lesson per cycle during a free period is required.

Grade: 10-12	Length: Full Year	Credit: 1
Prerequisite: Audition or permission of instructor		

<b><u>CONCERT BAND I</u></b>	<b><u>65300</u></b>	<b><u>Level 1-4</u></b>
<b><u>CONCERT BAND II</u></b>	<b><u>65400</u></b>	<b><u>Level 1-4</u></b>

This course is designed for students playing at the BCSD performance levels of four and five as described in the instrumental music curriculum. Emphasis is placed on the study and performance of band literature at the intermediate level. Experience in this group will help prepare students for admission to the Symphonic Band and Wind Ensemble. One small group lesson per cycle is scheduled during open time.

Grade: 9-12	Length: Full Year	Credit: 1
Prerequisite: Audition or permission of instructor		

**SYMPHONIC BAND** **65700** **Level 2-4**

This course is designed for advanced woodwind, brass and percussion students playing at the BCSD performance levels of five and six as described in the instrumental music curriculum. Emphasis is placed on the study and performance of the finest band literature available for wind band. Participation prepares the students for membership in college and community bands. One small group lesson per cycle is scheduled during open time.

Grade: 9-12 Length: Full Year Credit: 1

Prerequisite: Audition or permission of instructor

**WIND ENSEMBLE** **65200** **Level 2-4**

This course is designed for advanced woodwind, brass, and percussion students playing at the BCSD performance levels five and six as described in the instrumental music curriculum. Emphasis is placed on study and performance of the finest band literature available for wind band. Participation prepares the students for membership in college and community bands. One small group lesson per cycle is scheduled during open time.

Grade: 9-12 Length: Full Year Credit: 1

Prerequisite: Audition or permission of instructor

**JAZZ ENSEMBLE/JAZZ BAND** **65600** **Level 1-4**

Jazz Ensemble/Jazz Band members receive training in the performing techniques of improvisation and jazz style. Admission to these groups is by audition or permission of instructor. Students must be concurrently enrolled in a Major Performing Ensemble (Concert Band, Symphonic Band, Wind Ensemble, String Orchestra, Chorale, or Concert Choir). *This group does not fulfill the one year of music and/or art graduation requirement.*

Grade: 9-12 Length: Full Year Credit: ½

Prerequisite: Audition or permission of instructor and concurrent enrollment in a major ensemble.

The Performing Arts Department considers the Jazz Ensemble/Jazz Band as a lab experience where students may practice skills learned in orchestra, choir, or bands. The Jazz Ensemble/Jazz Band is a supplementary program and does not take the place of major performing groups. Exceptions to the concurrent enrollment policy will be made if the Jazz Ensemble/Jazz Band instrument is not commonly used in major performing ensemble (e.g., electric guitar or piano).

## CHORAL/VOCAL MUSIC

### CHORALE 67600 Level 1-4

The Chorale develops a firm foundation in singing for all ninth grade students desiring to perform great choral music and develop their musicianship. The Chorale gives several concerts and special performances throughout the year. There will be a minimum of three concerts each year. Attendance and performance in all concerts is a required part of the course grade. This class will meet every other day. One small group/private voice lesson per cycle is scheduled during open time.

Grade: 9                      Length: Full Year                      Credit: 1  
Prerequisite: None; open to all interested students

### CONCERT CHOIR:

#### WOMEN'S CONCERT CHOIR                      67900                      Level 1-4

#### MIXED CONCERT CHOIR                      68600                      Level 1-4

Concert Choir allows students (grades 10-12) to continue to develop a firm foundation in singing for the experienced singer as well as the beginner. Students will learn the fundamentals of healthy vocal technique and will develop their musicianship through the performance of a wide variety of choral styles. Emphasis is placed on the study and performance of challenging choral literature. There will be a minimum of three concerts each year. Attendance and performance in all concerts is a required part of the course grade. This class will meet every other day. One small group/private voice lesson per cycle is scheduled during open time. Concert Choir enrollment is divided into two sections of equal ability level: Mixed Concert Choir and Women's Concert Choir.

Grade: 10-12                      Length: Full Year                      Credit: 1  
Prerequisite: Permission of instructor

### CO-CURRICULAR VOICE ENSEMBLES Level 3-4

A number of ensembles are open to all Brighton High School students. These groups perform at school concerts throughout the year and for many audiences in the Rochester area. *Co-curricular voice ensembles do not fulfill the one year of music and/or art graduation requirement.* These groups include:

- Vocal Jazz Ensemble (by audition)
- Select Women's Ensemble (by audition)
- Crazy Pitches (by audition)
- MaCapella (by audition)
- Baronettes (by audition)
- A Choired Taste (by audition)

Afternoon or evening rehearsals are required.

# BRIGHTON HIGH SCHOOL MUSIC

FALL AND SPRING MUSIC COURSE OPPORTUNITIES FOR INCOMING FRESHMAN (FULL YEAR COURSES ARE ONE CREDIT)

*Music Theory/Composition*

*Freshman Orchestra*

*Concert Band*

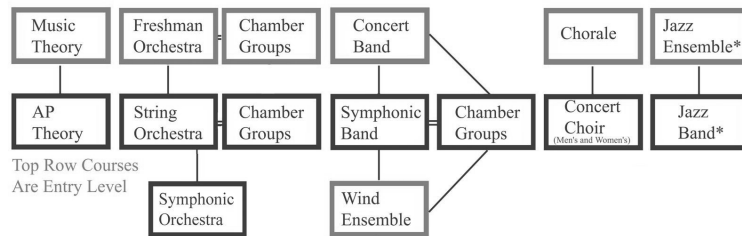
*Jazz Ensemble*

*Chorale*

**Listing of all Music classes at Brighton High School (all full year):**

- Music Theory/Composition
- Advanced Placement Music Theory
- Freshman Orchestra
- String Orchestra
- Symphonic Orchestra
- Concert Band
- Wind Ensemble
- Jazz Ensemble\*
- Jazz Band\*
- Symphonic Band
- Chorale
- Concert Choir (Mixed & Women's)

## COURSE OFFERINGS IN MUSIC



The courses above are one full year in length. Any one of these music courses (except Jazz Ensemble\*/Jazz Band\*) equals one credit toward graduation requirements at Brighton High School. A three credit sequence is created by taking Music Theory and two additional music courses, which can be applied to a Regents Diploma. A five credit sequence is created by taking Music Theory, AP Theory, and three additional music courses.

\* must be enrolled in a major ensemble ( band, chorus, or orchestra). Does not fulfill the one credit of music and/ or art toward graduation requirements at Brighton High School

Co-Curricular Ensembles have an audition pre-requisite and auditions are open to all 9-12 graders.

- Chamber Strings\*
- Vocal Jazz\*
- Select Women's Choir\*
- Crazy Pitches
- MaCappella
- Baronettes
- A Choired Taste

## CONTACT INFORMATION

Brighton Central School District website: [www.bcsd.org](http://www.bcsd.org)  
 Visual & Performing Arts office: 242-5047

## **THEATER ARTS**

All for-credit Theater Arts courses may be used to fulfill the one year music and/or art graduation requirement.

### **ART OF ACTING I** **69000** **Level 1-4**

Art of Acting emphasizes the art and skill of stage acting. It is both a theory and performance class; therefore, written and performance assessments will be used to evaluate students. The class uses various exercises for improvisation, theatre games, team building, and scene work. Instruction and practice is given in movement, physicality, interpretation, technique, voice, and other skills related to acting performance. Students will also work individually on monologues and with small groups for scene work. The “final exam” is the presentation of a stage performance in front of an invited audience. Students are encouraged to observe professional and amateur actors in school and community productions, as well as in films. Auditioning for a school production is not required, but is encouraged. This course is recommended for any students looking to enhance their public speaking skills and presence in front of a large audience.

Grade: 9-12

Length: 1/2 Year

Credit: 1/2

Prerequisite: None

### **ACTING II** **69100** **Level 1-4**

This course is designed for students with some acting training and/or experience who want to further develop their skills. Students are provided the opportunity to go beyond the fundamentals of today’s complex theater. Emphasis will be placed on various techniques and styles of acting and performance, including (but not limited to) Shakespearean voice, traditional and modern acting styles, importance of blocking, and using the body for communication. Students will explore the life and work of the professional stage/film/TV/commercial actor. They will create actors’ resumes to understand the submission process, and learn auditioning techniques for an active career in the entertainment industry. Students need not be considering a career as an actor. This course will further enhance one’s ability to speak in front of large crowds, such as may be needed by the lawyer, politician, or business CEO.

Grade: 9-12

Length: 1/2 Year

Credit: 1/2

Prerequisite: Art of Acting I or permission of instructor

### **ART OF DIRECTING** **69200** **Level 1-4**

Art of Directing emphasizes the art and skill of directing in its many facets. Students will be given opportunities to learn through acting in small scenes, looking at aspects of group dynamics and communication, movement, and reviewing various directing techniques through films and live productions. Course work will also include some study in basic scene



design, costume design and make-up technique. The class will host various professionals from the world of technical theater to gain insight into the connection between tech and directing. Students may also tour a professional scene shop as well as attend an outside production. Written and performance assessment will be used for evaluation of students.

Grade: 9-12

Length: 1/2 Year

Credit: 1/2

Prerequisite: Art of Acting I & II or permission of instructor

### **CO-CURRICULAR DRAMA OPPORTUNITIES**

Numerous activities in the theater arts are available to all students in all grades. These activities are non-credit and do not fulfill the one year music and/or art graduation requirement. Many activities are by audition only and take place outside the school day.

Activities include the Brighton High School Drama Club, the improv group, dramatic productions, musicals, and 24-Hour Plays. The drama productions are open to all interested high school students. Activities include acting, singing, playing in the pit orchestra, and dancing. In addition to the above activities (for which some have auditions), students may become involved in other production aspects which include: costumes, make-up, stage crew, lighting, sound, properties, and publicity. After school, evening, and/or weekend rehearsals are a requirement of these co-curricular activities.

Credit: None

Meets for varying amounts of time prior to each production date.

# BRIGHTON HIGH SCHOOL THEATRE ARTS

FALL AND SPRING THEATRE COURSE OPPORTUNITIES FOR INCOMING FRESHMAN

*Art of Acting 1*  
*Art of Acting 2*  
*Art of Directing*  
*Musical Theatre & the Voice*

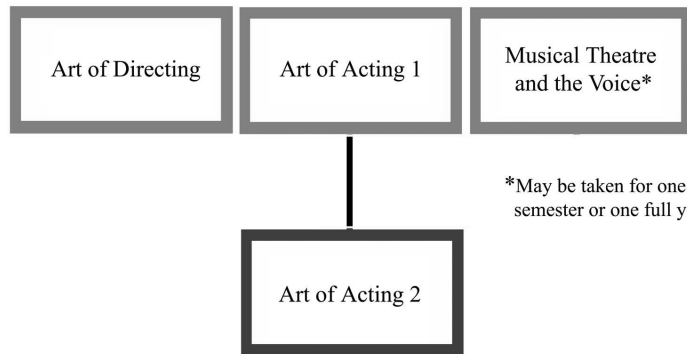
**Listing of all Theatre Arts classes at Brighton High School:**

- Art of Acting 1
- Art of Acting 2 (Art of Acting 1 required)
- Art of Directing
- Musical Theatre and the Voice ( When offered, this course may be taken for one semester or for a full year)

**Listing of all Theatre Arts co-curricular Drama Opportunities at Brighton High School (non-credit, do not fulfill the one credit music and/or art graduation requirement, some require auditions):**

- Drama Club
- Dramatic Productions
- Musicals
- Musical Theatre
- 24 Hours Plays

## COURSE OFFERINGS IN THE THEATRE ARTS



\*May be taken for one semester or one full year

*Students at Brighton High School have opportunities for acting, singing, dancing, and playing in the all-student pit orchestra (by audition only).*

*Also: costumes, make-up, stage crew, lighting, sound, properties, and publicity roles are available*

## CONTACT INFORMATION

Brighton Central School District website: [www.bcsd.org](http://www.bcsd.org)  
Visual & Performing Arts office: 242-5047

**Eastern Monroe Career Center  
Career and Technical Education Programs**

**2011-2012**

**1. Auto Services: Two-Year Course**

Students learn to repair and maintain a variety of vehicles. They learn to locate mechanical, electronic and computer problems through careful diagnosis and perform the necessary repairs using state-of-the-art equipment. Units of study are delivered in four 20-week modules aligned to the standards of the National Automotive Technician's Education Foundation (NATEF) and the Automotive Service Excellence (ASE) requirements. Instruction is provided in a high-tech, computer-based classroom. Hands-on experience is attained by servicing actual vehicles in a realistic, state-of-the-art "shop" environment.

*Employment opportunities upon completion:* Entry-level auto service positions

*Further educational opportunities:* Post-secondary programs in automotive technology and related mechanical trades (machining, diesel mechanics etc.)

*Industry-based exams:* National Automotive Technicians Education Foundation (NATEF)

*Industry certifications:* NATEF; application of coursework toward the National Institute for Automotive Service Excellence (ASE) certification

**2. Cisco Networking Academy: One-Year Course**

Students learn skills in the areas of basic network cabling, network security, wireless implementation and advanced routing and design. Students will work independently as they acquire the skills necessary to become CISCO certified. Students will need to develop and demonstrate strong personal time-management skills and problem-solving skills.

*Employment opportunities upon completion:* Entry-level positions such as help-desk technician, computer repair specialist, and telecommunications technician

*Further educational opportunities:* Post-secondary programs in computer science, programming, and network technology

*Industry-based exams:* National Occupational Competency Testing Institute (NOCTI) exam - Computer Networking Fundamentals

*Industry certifications:* Preparation for CompTIA Network+, Cisco Certified Entry Networking Technician and Cisco Certified Network Associate exams

### **3. Collision Repair Technology: Two-Year Course**

Students learn to repair and refinish collision-damaged vehicles. In addition, they learn the fundamentals of metal straightening, MIG-welding, detailing, painting, refinishing and customizing, working with plastic fillers, and gaining experience in flexible bumper repair, major collision repair, hardware repair and service. Students will study and demonstrate competency in writing collision estimates, managing customer paperwork, and tracking jobs. Interactive and professional communication skills are developed. The industry standard I-CAR curriculum serves as the foundation for this course. Students are taught in a technology-based classroom and service vehicles in a state-of-the-art lab.

***Employment opportunities upon completion:*** Entry-level positions in the automotive field (detail shops, collision repair facilities, auto refinishing supply industry)

***Further educational opportunities:*** Post-secondary programs in automotive and collision technology, engineering, and business management

***Industry-based exams:*** National Occupational Competency Testing Institute (NOCTI) exam - Collision Repair/Refinishing Technology

***Industry certifications:*** Preparation for I-CAR and ASE certification; eligibility for Lean Six-Sigma-Yellow Belt training and certification

### **4. Construction Trades (formerly Carpentry): Two-Year Course**

Students learn the fundamentals of commercial and residential carpentry. First-year students learn the fundamental principles and theoretical concepts of wall, floor, and roof framing, and exterior finishes including windows, doors, siding and roofing. Second-year students focus on dry wall, kitchens and baths, trim and painting, and form-building for concrete structures. Training in commercial framing is included with practical applications on site. Students work on other related projects including furniture, sheds, and decks.

***Employment opportunities upon completion:*** Entry-level positions in residential and commercial construction, retail industries, roofing, siding, finishing, and cabinet making

***Further educational opportunities:*** Post-secondary programs in construction trades, woodworking, architecture, management, and apprenticeships via the local carpenters' union

***Industry-based exams:*** National Center for Construction Education and Research (NCCER) Core Certification and the "Green Credential." Occupational Safety and Health Administration (OSHA) 10-hour certification. Building Performance Institute's (BPI) HEAT Exam

***Industry certifications:*** NCCER, OSHA

## **5. Cosmetology: Two-Year Course**

Students learn the latest techniques in hair cutting, styling, and chemical services, as well as nail and skin care. Students practice cuts and styles on mannequins and then move to clients in the school-sponsored salon. Students also participate in student-to-student clinics, as models and operators and are given the opportunity to develop skills in the areas of communication, organization, following written and verbal directions, and time management. Upon accumulating 1000 hours of practice, theory and clinic students are eligible to sit for the NYS Cosmetology Licensing Examination.

***Employment opportunities upon completion:*** Entry-level positions in cosmetology fields (upon successful completion of NYS board exam): hairstylist, nail technician, platform artist, make-up artist, and esthetician (skin and spa services)

***Further educational opportunities:*** Esthetician, massage, and business programs

***Industry-based exams:*** National Occupational Competency Testing Institute (NOCTI) exam - Cosmetology

***Industry certifications:*** Preparation for the NYS Cosmetology licensing exam

## **6. Criminal Justice: Two-Year Course**

Through a blending of rigorous academics and experiential activities, students explore the history of law enforcement and develop an understanding of civil and criminal law. Students review court cases and outcomes as they relate to law enforcement at the local, state and national level. Students use forensic science as a means to investigate simulated crime scenes. Guest speakers from the criminal justice field and visits to numerous agencies deepen the student's understanding of this career field.

***Employment opportunities upon graduation:*** Entry-level human service positions, security guard

***Further educational opportunities:*** Post-secondary programs in criminal justice, corrections administration, psychology, criminology, and political science

***Industry-based exams:*** National Occupational Competency Testing Institute (NOCTI) exam – Criminal Justice/Law Enforcement; NYS Security Guard certification exam

***Industry certifications:*** American Red Cross CPR and First Aid certification; NYS Security Guard certification

## **7. Culinary Arts: Two-Year Course**

Students learn about the fast-paced careers of the restaurant industry. Students gain experience in both front- and back-of-the-house operations. Students begin by developing their knife skills and using appropriate cooking methods for different foods. Opportunity is provided for students to learn safe methods of food handling and storage through the ServSafe program. Initial food production is small scale. Students graduate to planning and

production for a class-run restaurant, Three Seasons. Internships with other professionals in the field extend student's learning experience. Students develop both individual and team culinary skills.

***Employment opportunities upon completion:*** Entry-level positions in the food service industry

***Further educational opportunities:*** Post-secondary programs in culinary arts, nutrition, hotel and restaurant management, hospitality, etc.

***Industry-based exams:*** National Occupational Competency Testing Institute (NOCTI) exam - Culinary Arts Cook Level-2; Pro-Start exam

***Industry certifications:*** Pro-Start, ServSafe

### **8. Early Childhood Education: Two-Year Course**

Students explore multiple theories and stages of child development. Cognitive, social, and physical developmental milestones of toddlers and young children are identified. Students conduct observations of staff and children as they visit different early childhood education sites in and outside of Monroe #1 BOCES. The opportunity for practical application is provided at "Teens-N-Tots" Nursery School, operated at the Eastern Monroe Career Center.

***Employment opportunities upon completion:*** Entry-level positions in day care, after-school, or recreational programs

***Further educational opportunities:*** Post-secondary programs in human services, elementary education, early childhood education, and liberal arts

***Industry-based exams:*** National Occupational Competency Testing Institute (NOCTI) exam - Early Childhood Education

***Industry certifications:*** Coursework may be applied toward National Child Development Associate (CDA) credential

### **9. Emergency Services: Two-Year Course**

This program provides students the opportunity to develop knowledge and skills in fire protection technology, fire safety, emergency medical care, and radio dispatch. Students explore these professions through a variety of guest lecturers and site visitations. In the first year, students earn CPR certification and take the NYS exam for Certified First Responder. Second-year students participate in an eight-week field internship and take the NYS EMT-Basic certification exam. Students learn to follow medical direction to provide direct patient care. Students must meet NYS age requirements to work in this field.

***Employment opportunities upon completion:*** EMT, emergency dispatcher, patient care technician

**Further educational opportunities:** Post-secondary programs in nursing, fire science, paramedic, respiratory therapy, physical therapy, and mortuary science

**Industry-based exams:** NYS Department of Health (NYSDOH) Certified First Responder; NYS Emergency Medical Technician-Basic

**Industry certification:** CPR/AED, Certified First Responder, NYS EMT-Basic Certification

### **10. NEW! Laboratory Technology: Two-Year Course**

The Laboratory Technology program prepares students for entry level employment as laboratory technicians and/or post-secondary education. Laboratory technicians are employed in hospitals, veterinarian and physicians' offices, forensic laboratories, environmental agencies, research laboratories, pharmaceutical companies, and national or regional labs. Lab technicians work under supervision while performing tasks in processing or preparing laboratory specimens and materials. Second year students will participate in internships.

**Employment opportunities upon completion:** Forensic scientist, cytotechnologist, chemical technician, medical technologist, research associate

**Further educational opportunities:** Biochemistry, biotechnology, environmental science, vet technician

**Industry-based exams/certification:** Certified Medical Laboratory Assistant (National Healthcare Association)

### **11. NEW! Vision Medical Careers: One-Year Course (Seniors Only)**

This one-year course allows high school seniors to explore careers in health care through partnerships with Rochester General Hospital and St. Ann's Community. Students participate in a rigorous academic program with hands-on experience in medical careers. Students participate in four 10-week rotations in different medical departments of the health care facility. This placement provides the student with an in-depth look at the responsibilities of patient care.

**Employment opportunities upon completion:** Entry-level positions in the health care field such as pharmacy technician, patient care technician, personal care aide

**Further educational opportunities:** Post-secondary program in nursing, pre-medicine, social work, pharmacy, speech pathology, occupational therapy, and physical therapy

**Industry-based certifications:** American Heart Association for Health Care providers CPR/AED; Six Sigma Yellow Belt Certification; SAVE certification; NYS certification in the identification and reporting of child abuse and maltreatment

## **12. PC Repair & Network Cabling: One-Year Course**

Students who participate in this course perform live customer work through a student-operated computer repair simulated business. This program gives students the knowledge, abilities, and customer relations skills needed for entry-level employment in the field. Students develop individual and team skills as they troubleshoot and solve networking issues. Course expectations require online participation. Networking experience prior to program admission would benefit students.

***Employment opportunities upon completion:*** Entry-level position as help desk technician, computer repair specialist, system analyst trainee

***Further educational opportunities:*** Post-secondary programs in computer science, programming, and computer repair technology

***Industry-based exams:*** National Occupational Competency Testing Institute (NOCTI) exam - Computer Repair Technology

***Industry certifications:*** Preparation for CompTIA A+ and CompTIA Network+ exams

## **13. Photography & Imaging: Two-Year Course**

Students learn the fundamentals of photography through the use of traditional and digital media. Students will develop the skills to work in a project-based, deadline driven, creative environment. Students will accept and offer criticism through the critique process, as they learn to generate multiple creative solutions to communicate a message or idea. The Adobe Creative Suite curriculum is integrated throughout.

***Employment opportunities upon completion:*** Entry-level positions such as photo lab technician, photographer's assistant, commercial portrait studio photographer, gallery assistant

***Further educational opportunities:*** Post-secondary programs in photography and new media

***Industry-based exams:*** National Occupational Competency Testing Institute (NOCTI) exam - Advertising and Design; Adobe Certified Associate in Photoshop CS4

***Industry certifications:*** Adobe Certified Associate in Photoshop CS3

## **14. Precision Manufacturing Technology: Two-Year Course**

Students enrolled in this course will learn to manufacture parts and tools using metal stock as raw material. Students learn to read, design, and utilize blueprints. Students learn to operate lathes, horizontal and vertical mills, surface grinders, drill presses, computer numerical control (CNC) and CAD-CAM (Computer Aided Design-Computer Aided Manufacturing).

***Employment opportunities upon completion:*** Entry-level and apprenticeship positions in manufacturing and machining industries



**Further educational opportunities:** Post-secondary programs in applied technology, manufacturing and engineering

**Industry-based Exams:** National Occupational Competency Testing Institute (NOCTI) exam - Precision Machining

### **15. Professional Health Careers: Two-Year Course**

Students develop an appreciation of wellness throughout the life cycle while building professional communication, leadership, and management skills. Students learn and must follow infection control procedures and other health care industry standards (safety, hygiene, and ethical standards). Students are expected to perform hands-on skills in the classroom and apply them in clinical settings under the supervision of a registered nurse.

**Employment opportunities upon completion:** Entry-level positions in health care such as patient care technician, nursing assistant, and pharmacy assistant

**Further educational opportunities:** Post-secondary programs leading to LPN, RN, NP; various health services programs (i.e. Physical Therapy, Occupational Therapy)

**Industry-based exams:** National Occupational Competency Testing Institute (NOCTI) exam – Nursing Assisting; NYS Certified Nursing Assistant exam

**Industry-based certifications:** New York State Certified Nursing Assistant

### **16. Radio & Television Broadcasting: Two-Year Course**

This course of study will provide students with the opportunity to work in front of the camera and behind the scenes, programming radio spots and writing commercials. All students participate in internships at 90.5 FM WBER. Second-year students also complete a five-week internship at a broadcast and production facility. Students will develop writing skills in the areas of creative, technical, factual, and condensed writing. Students will practice listening skills, accept constructive feedback/criticism, organize/plan for large-scale projects, explore and apply creative ideas. Students develop individual and team skills as they see a project through from concept development to completion.

**Employment opportunities upon completion:** Entry-level positions in the communications industry such as video camera operator, advertising and sales, production and editing

**Further educational opportunities:** Post-secondary programs in communications, television and radio broadcasting, journalism

**Industry-based exams:** National Occupational Competency Testing Institute (NOCTI) exam - Television Broadcasting

### **17. Trade Electricity: Two-Year Course**

Students interested in becoming an electrician participate in this course to learn how to control the power source for much of modern technology. Students develop individual and team skills as they learn the basics of residential and commercial wiring. They learn to work within OSHA regulations, install switches to meet different power needs, troubleshoot issues faced by people at home or work, and investigate emerging power needs of consumers.

**Employment opportunities:** Entry-level positions as residential/industrial electrician, electrical inspector, electrician's helper

**Further educational opportunities:** Post-secondary programs in various related fields (electrical technician, electrical engineering, instrumentation technician etc.); training through ABC (Associated Builders and Contractors); apprenticeships through the local Electricians Union (IBEW)

**Industry-based exams:** National Center for Construction Education and Research (NCCER) Core Certification and the "Green Credential." Occupational Safety and Health Administration (OSHA) 10-hour certification. Building Performance Institute's (BPI) HEAT Exam

**Industry certifications:** NCCER, OSHA

### **18. Visual Communication: Two-Year Course**

This course of study prepares students for work in a deadline-driven environment. Students explore the process of design through traditional and digital media. Emphasis is on developing ideas for effective visual communication. Students will accept and offer constructive criticism through the critique process and generate creative solutions to client-driven products. Students with experience in studio art, drawing and painting, or advertising design courses are encouraged to pursue this program. Digital SLR Photography is integrated in the advanced course. The Adobe Creative Suite curriculum is integrated throughout.

**Employment opportunities upon completion:** Entry-level positions such as photography assistant, design intern, screen printing technician, sign-maker, gallery assistant

**Further educational opportunities:** Post-secondary programs in graphic design, digital imaging, illustration, animation, advertising design, photography and new media design.

**Industry-based exams:** National Occupational Competency Testing Institute (NOCTI) exam – Advertising and Design

**Industry certifications:** Adobe Certified Associate-Photoshop CS4

### **19. Welding & Fabrication: Two-Year Course**

Welding teaches the technology and art of joining metal by various methods, including gas tungsten arc welding (GTAW), gas metal arc welding (GMAW), shielded metal arc welding (SMAW) and oxy-acetylene welding (OAW). Students also learn gas and electric arc cutting, blueprint reading, electrode selection, joint design, and metallurgy. Students complete test plates to increase skill and accuracy. Students apply welding and cutting skills to fabrication

of metal objects. Students in Welding and Fabrication work on customer projects, fabricating, repairing parts/equipment, and performing maintenance.

***Employment opportunities upon completion:*** Entry-level positions as a welder/fabricator

***Further educational opportunities:*** Post-secondary programs in welding and applied technology; manufacturing and engineering; apprenticeship programs via local unions

***Industry-based exams:*** National Occupational Competency Testing Institute (NOCTI) exam - Welding

***Industry based certifications:*** OSHA

