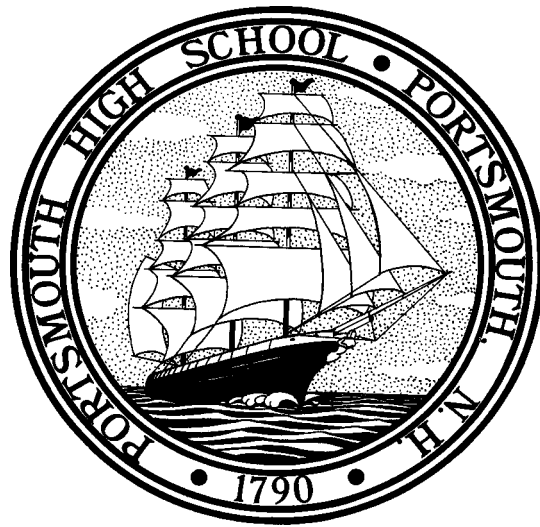
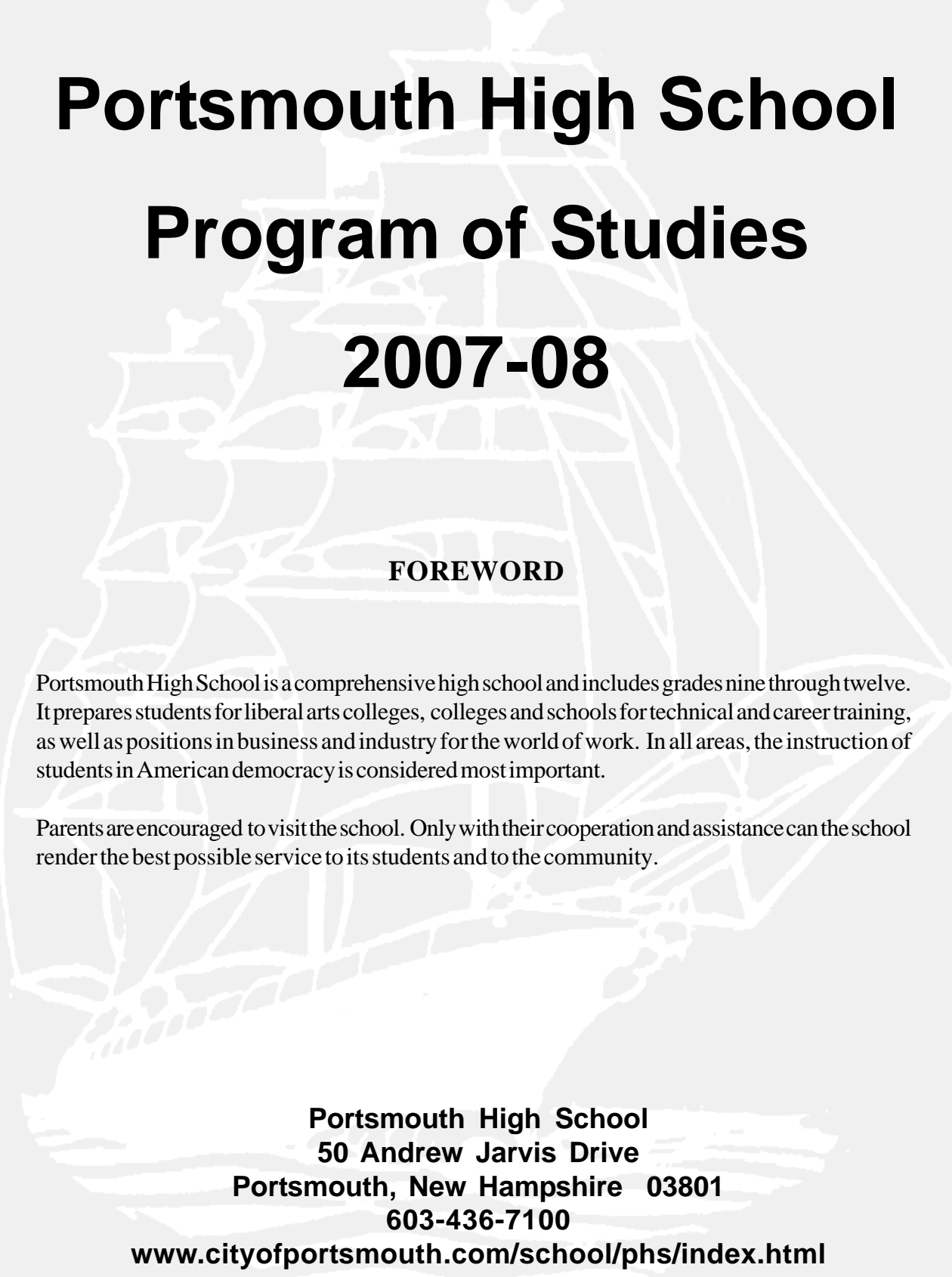


# *Program of Studies*



**Portsmouth High School**  
**2007-2008**





# **Portsmouth High School**

## **Program of Studies**

### **2007-08**

#### **FOREWORD**

Portsmouth High School is a comprehensive high school and includes grades nine through twelve. It prepares students for liberal arts colleges, colleges and schools for technical and career training, as well as positions in business and industry for the world of work. In all areas, the instruction of students in American democracy is considered most important.

Parents are encouraged to visit the school. Only with their cooperation and assistance can the school render the best possible service to its students and to the community.

**Portsmouth High School**  
**50 Andrew Jarvis Drive**  
**Portsmouth, New Hampshire 03801**  
**603-436-7100**  
**[www.cityofportsmouth.com/school/phs/index.html](http://www.cityofportsmouth.com/school/phs/index.html)**

## 2007-08 PROGRAM OF STUDIES

### **ACCREDITATION STATEMENT**

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

Accreditation of an institution by the New England Association indicates that it meets or exceeds criteria for the assessment of institutional quality periodically applied through a peer group review process. An accredited school or college is one which has available the necessary resources to achieve its stated purposes through appropriate educational programs, is substantially doing so, and gives reasonable evidence that it will continue to do so in the foreseeable future. Institutional integrity is also addressed through accreditation.

Accreditation by the New England Association is not partial but applies to the institution as a whole. As such, it is not a guarantee of the quality of every course or program offered, or the competence of individual graduates. Rather, it provides reasonable assurance about the quality of opportunities available to students who attend the institution.

Inquiries regarding the status of an institution's accreditation by the New England Association should be directed to the administrative staff of the school or college. Individuals may also contact the Association:

New England Association of Schools and Colleges  
209 Burlington Road  
Bedford, Massachusetts 01730-1433  
(617) 271-0022 • FAX (617) 271-0950

### **STATEMENT OF NONDISCRIMINATION AND NOTIFICATION OF GRIEVANCE PROCEDURES**

#### **TITLE IX**

The Portsmouth School System does not discriminate on the basis of race, color, creed, religion, sex, ancestry, national origin, or social or economic status, as required under Civil Rights Act of 1964. There is an official policy to that effect and a grievance procedure for the handling of sex discrimination complaints.

The Title IX Coordinator is:

Paulette Hoeflich  
Central Office, Little Harbour School  
Clough Drive  
Portsmouth, New Hampshire 03801  
(603) 431-5080

#### **SECTION 504**

It is the policy of the Portsmouth School district not to discriminate on the basis of handicap as required under Section 504 of the Rehabilitation Act of 1973 in the admission of students to programs or any educational services or in the employment of personnel. The Coordinator for 504 services is Paulette Hoeflich, Director of Student Services, Central Office, Little Harbour School, Clough Drive, Portsmouth, New Hampshire 03801. The telephone number is 431-5080. Inquiries may be directed to the Coordinator or the Regional Office for Civil Rights, 140 Federal Street, Boston, Massachusetts 02110.

Grievance procedures are available which provide for the prompt and equitable resolution of complaints alleging violations of Section 504. These may be obtained at the office of the Coordinator.

*What's Inside . . .*

Foreword . . . . .	i
Accreditation Statement . . . . .	ii
Affirmative Action/Handicap Statements . . . . .	ii
Table of Contents . . . . .	iii
Mission Statement . . . . .	1
Expectations for Student Learning . . . . .	1
Guidance and Counseling Services . . . . .	2
General Information . . . . .	3
Policy on Course Selections and Class Changes . . . . .	3
Grading System . . . . .	4
Honor Roll . . . . .	4
Athletic Eligibility . . . . .	4
Course Levels . . . . .	5
Class Rank and Placement . . . . .	6
Honors and Advanced Placement . . . . .	6
Independent Studies . . . . .	7
Out-of-School Credit . . . . .	7
Cooperative Education . . . . .	8
Work Education . . . . .	8
Driver Education . . . . .	8
Career/Technical Education Resource Center . . . . .	8
College Entrance Exams . . . . .	8
College Admissions Requirements . . . . .	9
Financial Aid Information . . . . .	9
Graduation Requirements . . . . .	10
Worksheet - Four Year Plan . . . . .	11
Worksheet - Sample Schedule for Highly Selective Colleges and Universities . . . . .	12
Worksheet - Sample Schedule for Four Year Colleges and Universities . . . . .	13
Worksheet - Sample Schedule for Technical Institutes and Colleges . . . . .	14
Worksheet - Sample Schedule for Career Entry . . . . .	15

Course Descriptions:

Architecture . . . . .	17
Automotive Technology . . . . .	18
Computer Science . . . . .	19
Construction/Wood Technologies . . . . .	21
Culinary Arts . . . . .	22
Drafting . . . . .	22
Driver Education . . . . .	8
Early Education . . . . .	23
Electricity/Electronics . . . . .	24
English . . . . .	25
English for Speakers of Other Languages . . . . .	30
Health Education . . . . .	30
Interdisciplinary Studies/Electives . . . . .	31
International Languages . . . . .	32
Mathematics . . . . .	35
Performing Arts - Music . . . . .	38
Performing Arts - Theater . . . . .	39
Physical Education . . . . .	40
Science . . . . .	42
Service Learning . . . . .	31
Social Studies . . . . .	46
Student Academic Services . . . . .	51
TV Production . . . . .	52
Visual Arts . . . . .	53
Welding . . . . .	55



**MISSION STATEMENT**

**Portsmouth Schools' Mission Statement:** "The purpose of the Portsmouth Schools is to educate all students by challenging them to become thinking, responsible, contributing citizens who continue to learn throughout their lives."

**Portsmouth High School** concurs with our district's statement and expands this mission to include the following:

Each student is capable of achieving his or her full potential while learning in a positive school environment. All facets of life at Portsmouth High School promote high academic achievement for every student. To accomplish our goals, we must:

- provide for diverse learning styles and needs;
- employ a variety of teaching styles, strategies, and methodologies;
- supply facilities, equipment, and materials that meet the present and future needs of our students and staff;
- incorporate technology into all classrooms.

We recognize that education is humanized through a variety of school experiences. PHS promotes a healthy and safe atmosphere to create a greater sense of community and an enhanced desire to learn. Consequently, this positive school culture helps students feel valued and connected to staff, each other, and the community. The involvement of family members and the establishment of community partnerships support strong academic expectations and respect for individuals.

We cultivate the belief that family and school are priorities. We prepare students to become citizens in a democratic society by incorporating real life experiences into instruction and by teaching the skills for making responsible choices. We encourage co-curricular activities that allow students to expand special interests, discover talents, and develop skills in competitive and non-competitive educational programs.

We believe that in accomplishing the goals set forth in this mission, our students will become successful members of society.

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**EXPECTATIONS FOR STUDENT LEARNING**

Through the completion of a comprehensive education provided by Portsmouth High School, our graduates will have gained the knowledge, skills, and attitudes that foster an ability to:

**ACADEMIC**

- Demonstrate that in order to achieve one's full potential, a student must commit to lifelong learning.
- Apply critical thinking skills and evaluate options to reach appropriate solutions.
- Utilize technology as a tool.

- Investigate the arts, humanities, international languages, and literature and their relevance to everyday life.
- Implement strategies to improve and maintain physical and emotional well-being.
- Demonstrate an ability to communicate effectively.
- Acquire and apply scientific knowledge and methods.
- Use the knowledge and skills of the social sciences to address contemporary issues.
- Apply mathematical skills and competencies.
- Apply academic, work-based, and/or vocational competencies in preparing for future careers.

### SOCIAL

- Exhibit respect for self and others.
- Illustrate pride in work as a means of becoming a successful, contributing member of society.
- Create and maintain a healthy, safe, and positive environment.
- Establish one's own life priorities.

### CIVIC

- Describe the importance of the individual's role in the local community.
- Analyze and debate important issues using civil discourse.
- Exercise critical thinking and problem-solving skills through involvement and participation in civic issues.
- Practice respect for the rights and property of others.

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### GUIDANCE AND COUNSELING SERVICES

Through the services of the Guidance Department, Portsmouth High School offers to its students the opportunity to become better acquainted with themselves and their roles in today's world. They are aided in identifying, accepting, and using their unique capacities, and are encouraged to develop into mature individuals, capable of problem solving and assuming personal responsibility for their actions.



Through a developmental career planning model, counselors assist the students in their career, educational and social development. Academic strengths and weaknesses are analyzed, and abilities and interests are discussed as the basis for career and educational decision making. Standardized tests are interpreted to students, parents, and teachers. Educational and career informational materials are readily available. Counselors meet with students in classes, small groups, and individually. Personal and interpersonal as well as academic needs are considered of utmost importance.

Considerable emphasis is placed upon post-secondary planning. Early in the high school program, students are encouraged to investigate a variety of specific post-secondary educational opportunities consistent with their interests and aptitudes. Such investigation will allow all students to set realistic goals as a culmination of their four year plan.

Students and parents are invited to use the services offered by the Guidance Department at any time during the school year.

Inquiries relative to the information in this booklet can be made by contacting the Guidance Office at 436-7100.

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### **GENERAL INFORMATION**

The material contained in this booklet has been prepared to assist you in the selection of those subjects best suited to meet your needs and abilities. The program of each student is an individual matter to be planned by the home and the school. You and your parents are urged to consider carefully the information contained here.

The objective of the Program of Studies is to describe the content of individual course offerings and to provide assistance in planning a selection of these courses to meet the needs of each student.

Students are expected to consider carefully their academic background, interests, career and/or educational plans, and the recommendations of their parents, teachers, and guidance counselors as they choose their courses.

Course descriptions in this Program of Studies are organized alphabetically on a subject basis. Required subjects are listed on page 10. Subjects which are important for specific future plans, special interests, abilities or needs are offered as electives. Students should choose elective courses in keeping with their future plans, and should consult with parents, teachers, and guidance counselors to assist with this planning.

All courses offered at Portsmouth High School are available to both male and female students.

We hope that the description of subjects will answer your questions as to course content, that this pamphlet will prove helpful, and that you will make full use of the opportunities offered here.

Portsmouth High School operates on a 4 x 4 Block Schedule with some modified blocks during block 1.

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### **POLICY ON COURSE SELECTION AND CLASS CHANGES**

Careful planning by each student should result in an appropriate program for each school year. The course selection process requires that all students complete the course selection sheet with all required signatures.

## 2007-08 PROGRAM OF STUDIES

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For the remainder of the school year, students may make appointments to review their course selections with a guidance counselor. Any adjustments, whether based on second semester grades or on change of interests, should be made at this time. **Student initiated course changes will not be allowed after the beginning of any quarter.**

Course changes during any quarter will be made only upon the recommendation of a teacher or guidance counselor, and with phone contact or written approval of the parent.

Students may see their counselor to discuss adding or dropping a course prior to the start of that course. Any student initiated change requires a process involving the teacher, department head, parent, and counselor.

These procedures do not prevent school authorities from adjusting students' classes to produce an optimum learning environment.

---

### GRADING SYSTEM

With the exception of 45 minute courses, credits are earned by the term. A half credit course meets for 45 days in 90 minute classes. A full credit course meets for 90 days in 90 minute classes. Students who pass only one term of a full credit course will receive a half credit. A 45 minute class meets for 90 days for a half credit and 180 days for a full credit.

Report cards are issued after each term (four times during the year). Grades are recorded by letters which indicate the scholastic achievement of the student. The interpretation of these letters is as follows:

<b>A+</b> - 98-100%	<b>D</b> - 72-74%
<b>A</b> - 95-97%	<b>D-</b> - 70-71%
<b>A-</b> - 93-94%	<b>F</b> - 0-69%
<b>B+</b> - 91-92%	<b>AU</b> - Audit
<b>B</b> - 88-90%	<b>P</b> - Pass
<b>B-</b> - 85-87%	<b>WP</b> - Withdrew Pass
<b>C+</b> - 83-84%	<b>WF</b> - Withdrew Fail
<b>C</b> - 80-82%	<b>WM</b> - Withdrew Medical
<b>C-</b> - 77-79%	<b>TR</b> - Transferred within Department
<b>D+</b> - 75-76%	

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### HONOR ROLL

Highest Honors - All **A**'s, carrying at least three (1/2 credit) graded courses  
High Honors - **A**'s and **B**'s in any combination, carrying at least three (1/2 credit) graded courses (At least one "**A**".)  
Honors - All **B**'s, carrying at least three (1/2 credit) graded courses (A student may have one "**C**" if there is at least one "**A**" to balance it. Only one "**C**" is allowed.)  
Honor roll is determined by the term.

---

### ATHLETIC ELIGIBILITY

Students must be attending a minimum of three scheduled classes (90 minutes/day, 5 days/week) and must pass all classes and have no more than one "**D**"

grade in the previous quarter in order to be eligible to participate in athletics. In addition, they must continue to be enrolled in and attending three ninety minute scheduled classes. Independent studies do not count as one of the three scheduled classes.

Credits earned in summer school do not apply to eligibility. One modified block does not count as one of these three courses.

---

**COURSE LEVELS  
FOR ENGLISH,  
SOCIAL STUDIES**

In an effort to meet the individual needs of all students, required courses in English and Social Studies are grouped according to difficulty. Students are assigned to levels in English and Social Studies, grades 9-11, by assessment and/or teacher recommendation based on past performance. The honors levels and A.P. courses require an application process described under Honors and Advanced Placement courses.

The levels of difficulty are defined as follows:

**HONORS** - This level is designed to offer a very challenging educational environment for students who have shown high academic achievement in this discipline in the past.

Placement at this level requires student application and acceptance by the faculty through a selective screening process. Honors and/or A.P. courses are offered in grades 9-12.

**ADVANCED** - This level is designed for students who have the ability and motivation necessary to develop advanced skills and understanding of complex concepts and themes.

Students read well above grade level and have good study habits. These students welcome challenges and are eager to maintain a high grade average.

Placement at this level is by teacher recommendation with parental approval.

**ACADEMIC** - This level is designed for students who are considering post-secondary education as an option.

Some students may display a range of academic success, but all share a desire to perform to the best of their ability.

Placement in this level is by teacher recommendation with parental approval.

**STANDARD** - This level is designed for students who wish to improve reading, writing, speaking, and listening skills. Students will have the opportunity to make themselves competitive for future career/educational choices. Regular homework assignments will reinforce class instruction.

**BASIC/INTRODUCTORY** - This level is designed to meet the needs of students who have not acquired the skills necessary for placement in the academic level.

## 2007-08 PROGRAM OF STUDIES

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The work and material for the course are practical in nature and emphasize basic skills. Instruction will include frequent practice and application with immediate feedback to the student.

Placement at this level requires teacher and counselor recommendation with parental approval.

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### CLASS RANK AND PLACEMENT

Students planning to go on to higher education should be aware that class rank may be a factor in college admission. Class rank is computed for each graduating class at the end of six and seven semesters and a final class rank is computed after the third quarter of the senior year.

The grade received in a class multiplied by the weight of that class equals the points earned toward class rank. Class rank is based on grades received in all subjects. **A+**=4.33 points, **A**=4 points, **A-**=3.67 points, **B+**=3.33, **B**=3 points, **B-**=2.67 points, **C+**=2.33 points, **C**=2 points, **C-**=1.67 points, **D+**=1.33 points **D**=1 point, **D-**=.67 points, **F**=0 points.

An unweighted Grade Point Average (G.P.A.) is also computed.

---

### HONORS AND ADVANCED PLACEMENT PROGRAMS

**Freshmen:** Students will submit a completed application form, two pieces of writing, a list of books read in the last year, a copy of the most recent report card, the writing prompt essay, and an essay explaining what they will contribute to the honors class. Prior to the deadline date, the eighth grade teacher will send a recommendation to the department chair at the high school. The high school English and science departments will coordinate directly with sending schools.

**Continuing honors students applying for sophomore or junior honors classes, or AP classes:** If the student has a grade of B+ or higher at the end of the course, the student will be accepted into the next grade level honors class. The student must submit page one of the application form with identifying information. The student will sign a contract explaining his/her responsibilities.

If the student in an honors class has less than a B+ average, he/she must reapply, submitting all necessary elements to the application. If the student is accepted into the program, he/she will sign a contract explaining his/her responsibilities.

**All science honors/AP students will be required to complete the entire application - no automatic enrollment!**

**Students applying for the first time to sophomore, junior or AP classes:** Students will submit a completed application form; these are available in the Guidance Office. In addition, English Honors or AP class applications require two pieces of writing and a list of books read in the last year, a copy of the most recent report card, and an essay explaining what they will contribute to the honors class. Prior to the deadline date, the current teacher will send a recommendation to the department chair at the high school.

**Summer assignments:** Honors and A.P. English, Social Studies, Science, Spanish, French, and Calculus classes require summer assignments.

**Notification of acceptance/non-acceptance:** All students will receive a letter of acceptance or non-acceptance within one month of the deadline for admission.

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**Appeal process for all students who are not accepted into the program\*\*:** The student must appeal in writing requesting an appointment with the Appeals Committee by the stated deadline. Students will be notified in writing of the day and time of the appointment. At the meeting after school, the student will present his/her reasons and additional evidence to justify acceptance into the program. The student must arrange to have a teacher submit a letter of recommendation to the committee prior to the appointment. If the student is then accepted into the honors level class, he/she will sign a contract explaining his/her responsibilities. \*\*You are encouraged to discuss the appeals process with your guidance counselor.

Advanced College Prep classes will receive a weight of 4. Grades 9, 10, 11 Honors and A.P. classes will receive a weight of 5. All students in A.P. classes must take the A.P. exam to receive a weight of 5. For students who do not take the A.P. exam, the AP class will have a weight of 4.

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## INDEPENDENT STUDIES

In order to request an independent study, a student must:

1. Have completed the highest level of study offered at PHS in that subject.
2. Meet with a teacher who agrees to be the advisor for the study.
3. Submit a description/course outline of the area to be studied to that teacher.
4. Follow through with the paperwork (Independent Study Form) which is available in guidance and which requires the signatures of the teacher, the department head, the principal, your parent and your guidance counselor.

The paperwork then goes to the student's counselor, who notes on the student's schedule the period during which the independent study will take place, including Period "5," meaning outside of the school day. All of these steps must be completed in order for an independent study to take place and receive credit.

**All independent studies receive 1/4 credit and are not included in the student's GPA or class rank. No credit will be awarded retroactively.**

**A student involved in athletics must have at least three regular classes in addition to an independent study. An independent study does not count as one of the three courses towards athletic eligibility.**

---

## OUT-OF-SCHOOL CREDIT

In order to receive credit for an educational program not directly affiliated with Portsmouth High School, the following requirements must be met:

1. The request for credit must be made and approved BEFORE the program is begun.
2. The program must have a formal description including the number of hours, the syllabus, the assessment procedures and a contact person.
3. Portsmouth High School will award a minimum of 1/4 credit and a maximum of one credit regardless of the credit being awarded by the program.
4. No credit will be awarded until the student produces a formal assessment document at the completion of the program.

No credit taken before the student is registered at Portsmouth High School will be considered. The course will not be included in the student's GPA or class rank.

## 2007-08 PROGRAM OF STUDIES

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### **COOPERATIVE EDUCATION**

The Cooperative Education Program provides on-the-job experience that is supplemental to classroom and laboratory instruction. To be eligible, a student must be enrolled in one of the following Technical/Career Programs:

- Architecture
- Automotive Technology
- Business Education
- Construction Trades
- Culinary Arts
- Drafting
- Early Education
- Electronics
- Media
- Welding

Cooperative education focuses on the transitional activities between school and work. If performance is acceptable to the employer and coordinator, the student will earn 1/4 credit toward graduation for each nine weeks of successful work experience.

---

### **WORK EDUCATION**

The Work Education Program is designed for any student who requests credit for part-time employment and is not eligible for Cooperative Education credit. This experience is monitored and evaluated by school staff and employers. If performance is acceptable to the employer and the coordinator, the student will earn 1/4 credit toward graduation for each nine weeks of successful work experience.

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### **DRIVER EDUCATION**

Driver Education is designed to teach basic driving skills, a knowledge of New Hampshire rules and regulations and a defensive driving attitude. Heavy emphasis is placed on seat belt use and drug and alcohol awareness.

Driver Education is offered after school or evenings. Summer classes are in the morning. During specific times during the year, students may register in the main office. The course is state approved and 1/4 credit is given upon successful completion.

Students must be 16 years of age by the completion of class. Students are selected by grade and age for the class. The class is taught by an outside of school company. There is a fee for the class.

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### **CAREER/TECHNICAL EDUCATION RESOURCE CENTER**

The Resource Center offers services to Career/Technical Education students to support their being successful in Career/Tech Education programs and in their career planning. The Resource Center is open during the school day.

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### **COLLEGE ENTRANCE EXAMINATIONS**

Most colleges require that students take the Scholastic Aptitude Test (SAT Reasoning Test) or the ACT. Some colleges require that students take SAT Subject Tests as well. SAT Reasoning Tests and SAT Subject Tests are

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administered seven times a year (three at Portsmouth High School/others at neighboring schools). SAT's are usually taken in May or June of the junior year, and again in October or November of the senior year. SAT Subject Tests, if required, must usually be taken by December of the senior year.

Registration material for the SAT Reasoning Test, SAT Subject Tests and ACT are available in the Guidance Office. Students may obtain additional information from their guidance counselor or from the College Center.

---

## ADMISSION TO COLLEGE

During the year, college representatives from many schools and colleges visit Portsmouth High School. The dates of these visits are posted in Guidance and in the College Center and are announced in advance. Interested students are encouraged to sign up in Guidance.

College requirements vary, and each student is advised to check the catalogs of the colleges in which he or she is interested for their admissions requirements.

Students planning to attend college should consult with their counselors and teachers for assistance in selecting courses which will help them achieve the desired requirements.

The following information can be used as a guide to the student who is interested in planning for post-secondary education.

*Guidelines for most four year colleges include a minimum of:*

- 4 credits of English
- 3 or more credits of Social Studies
- 4 or more credits of Mathematics
- 3 or more credits of Science, including Biology and Chemistry
- 4 or more credits of a Foreign Language (Level III)

*Guidelines for technical institutes and colleges:*

- 4 credits of English
- 3 or more credits of Mathematics
- 3 or more credits of Science
- (2 credits in Technical/Career Education recommended)

Beginning on page 11 are example schedules fulfilling the above requirements. Specific courses, especially electives, will vary for each student.

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## FINANCIAL AID INFORMATION

Financial aid information is addressed at numerous Guidance evening programs and may also be obtained in the Guidance Office at the appropriate time - usually during the fall of the senior year. Students have the opportunity to apply for local scholarships as well as college-based financial aid. A local scholarship book is published each year and provided to seniors. It is the student's responsibility to seek appropriate information and meet required deadlines.

## 2007-08 PROGRAM OF STUDIES

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### GRADUATION REQUIREMENTS

26 CREDITS ARE REQUIRED FOR GRADUATION

English	4	credits
Social Studies	3	credits
Mathematics	3	credits
Science	3	credits
Physical Education	1	credit
Computer Course		1/2 credit
Fine Arts Education (Drama, Music, Visual Arts Architecture, or Media)		1/2 credit
Health Education		1/2 credit
Electives	10	1/2 credits
Minimum to Graduate	26	

In addition to the above requirements, students must successfully earn the following minimum number of credits in order to achieve the status and privileges of the next grade:

a minimum of **6 Credits** to be a **Sophomore**

a minimum of **12 Credits** to be a **Junior**

a minimum of **18 Credits** to be a **Senior**

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### FOUR YEAR PLAN

Use the sheets on pages 11-15 to plan a tentative four year program that will help you meet your educational and/or vocational objectives. Courses that are required during particular grades are written in for you. Remember, however, that you should include other requirements that are not required in specific grades.



**Portsmouth High School Four-Year Education Plan**

Name \_\_\_\_\_ Student ID# \_\_\_\_\_  
 Last First Middle

**\*FRESHMAN**

PERIOD	QUARTER 1	QUARTER 2	QUARTER 3	QUARTER 4
1	Possible Modified (45 min.) Courses	Possible Modified (45 min.) Courses	Earth Science	
2	Geography			
3	Physical Science	Math		
4	English 9	Physical Education		

**\*SOPHOMORE**

PERIOD	QUARTER 1	QUARTER 2	QUARTER 3	QUARTER 4
1	Possible Modified (45 min.) Courses	Possible Modified (45 min.) Courses		
2	Math	Ecology	Health	
3	Biology			
4	English 10	American Studies I		

**\*JUNIOR**

PERIOD	QUARTER 1	QUARTER 2	QUARTER 3	QUARTER 4
1	Possible Modified (45 min.) Courses	Possible Modified (45 min.) Courses	Science	
2	Math			
3	English 11	American Studies II Survey or Mini-courses		
4				

**\*SENIOR**

PERIOD	QUARTER 1	QUARTER 2	QUARTER 3	QUARTER 4
1	Possible Modified (45 min.) Courses	Possible Modified (45 min.) Courses		
2	English 12	Social Studies Elective		
3				
4				

\*Courses will not necessarily be scheduled where they are written in on this page. One square = 1/2 credit.

Portsmouth High School Four-Year Education Plan

Name \_\_\_\_\_ Last \_\_\_\_\_ First \_\_\_\_\_ Middle \_\_\_\_\_ Student ID# \_\_\_\_\_

**EXAMPLE: Schedule for Highly Selective Colleges and Universities**

**\*FRESHMAN**

PERIOD	QUARTER 1	QUARTER 2	QUARTER 3	QUARTER 4
1	English 9 Honors		Physical Education	
2	Algebra IX		Formal Geometry Fr.	
3	Physical Science Honors		Earth Science Honors	Geography
4	Adv. International Language I		International Language I	International Language II

**\*SOPHOMORE**

PERIOD	QUARTER 1	QUARTER 2	QUARTER 3	QUARTER 4
1	English 10 Honors		American Studies I Honors	
2	Algebra II Honors		Algebra III Honors	
3	Biology Honors		Ecology Honors	Health
4	International Language III		International Language III	International Language IV

**\*JUNIOR**

PERIOD	QUARTER 1	QUARTER 2	QUARTER 3	QUARTER 4
1	English 11 Honors		Academic Elective or International Language V	
2	Chemistry Honors		Precalculus Honors	
3	Advanced Placement American History		American History	Academic Elective
4	Computer Science	Elective	Fine Arts	Elective

**\*SENIOR**

PERIOD	QUARTER 1	QUARTER 2	QUARTER 3	QUARTER 4
1	Advanced Placement Course			Academic Elective
2	Advanced Placement Course			Elective
3	Advanced Placement Course			Elective
4	International Language V		Service Learning	

\*Courses will not necessarily be scheduled where they are written in on this page. One square = 1/2 credit.

**Portsmouth High School Four-Year Education Plan**

Name \_\_\_\_\_ Student ID# \_\_\_\_\_

\_\_\_\_\_ Middle

\_\_\_\_\_ First

\_\_\_\_\_ Last

**EXAMPLE: Schedule for Four Year Colleges and Universities**

**\*FRESHMAN**

PERIOD	QUARTER 1	QUARTER 2	QUARTER 3	QUARTER 4
1		International Language I		
		Possible Modified (45 min.) Courses		
2	Geography	Computer Course	Algebra I	
3	Physical Science		Earth Science	Elective
4	English 9		Physical Education	

**\*SOPHOMORE**

PERIOD	QUARTER 1	QUARTER 2	QUARTER 3	QUARTER 4
1		Possible Modified (45 min.) Courses		
		Possible Modified (45 min.) Courses		
2	Formal Geometry		Ecology	Health
3	Biology		English 10	
4	Adv. International Language I		American Studies I	

**\*JUNIOR**

PERIOD	QUARTER 1	QUARTER 2	QUARTER 3	QUARTER 4
1	Algebra II		Algebra III	
2	Elective		Chemistry	
3	International Language II		International Language III	
4	English 11		American Studies II Survey or Mini-courses	

**\*SENIOR**

PERIOD	QUARTER 1	QUARTER 2	QUARTER 3	QUARTER 4
1		Possible Modified (45 min.) Courses		
		Possible Modified (45 min.) Courses		
2	Precalculus		Elective	
3	International Language IV or Service Learning		Social Studies Elective	Elective
4	English 12		Physics	

\*Courses will not necessarily be scheduled where they are written in on this page. One square = 1/2 credit.

Portsmouth High School Four-Year Education Plan

Name \_\_\_\_\_ Student ID# \_\_\_\_\_  
 Last First Middle

**EXAMPLE: Schedule for Technical Institutes and Colleges**

**\*FRESHMAN**

PERIOD	QUARTER1	QUARTER2	QUARTER3	QUARTER4
1	English 9	Physical Education		
2	Geography	Elective	Algebra I	
3	Physical Science		Earth Science	Study Skills
4	Tech/Career Elective	Electricity	Computer Elective	Electronics

**\*SOPHOMORE**

PERIOD	QUARTER1	QUARTER2	QUARTER3	QUARTER4
1	English 10	American Studies I		
2	Informal Geometry	Fine Arts Elective		Ecology
3	Biology	Health		Elective
4	Tech Elective	Tech Elective	International Language I	

**\*JUNIOR**

PERIOD	QUARTER1	QUARTER2	QUARTER3	QUARTER4
1	English 11	American Studies II Survey or Mini-courses		
2	Applied Algebra II	Chemistry		
3		Technical/Career Program		
4	Advanced International Language I	International Language II		

**\*SENIOR**

PERIOD	QUARTER1	QUARTER2	QUARTER3	QUARTER4
1	English 12	Applied Physics		
2	Tech/Career Elective	Tech/Career Elective		
3		Technical/Career Program		
4	Social Studies Elective	Elective	Elective	Elective

\*Courses will not necessarily be scheduled where they are written in on this page. One square = 1/2 credit.

Portsmouth High School Four-Year Education Plan

Name \_\_\_\_\_ Last \_\_\_\_\_ First \_\_\_\_\_ Middle \_\_\_\_\_ Student ID# \_\_\_\_\_

**EXAMPLE: Schedule for Career Entry**

**\*FRESHMAN**

PERIOD	QUARTER 1	QUARTER 2	QUARTER 3	QUARTER 4
1	English 9	Physical Education		
2	Geography	Computer Elective	Math	
3	Physical Science		International Language I	
4	Elective	Elective	Tech/Career Elective	Earth Science

**\*SOPHOMORE**

PERIOD	QUARTER 1	QUARTER 2	QUARTER 3	QUARTER 4
1	English 10		American Studies I	
2	Math		Ecology	Health
3	Advanced International Language I		International Language II	
4	Biology		Tech/Career Elective	Tech/Career Elective

**\*JUNIOR**

PERIOD	QUARTER 1	QUARTER 2	QUARTER 3	QUARTER 4
1	Possible Modified (45 min.) Courses ----- Possible Modified (45 min.) Courses			
2	Math		Science	
3		Technical/Career Program		
4	American Studies II or Mini-courses		English 11	

**\*SENIOR**

PERIOD	QUARTER 1	QUARTER 2	QUARTER 3	QUARTER 4
1	English 12		Math/Science	
2		Technical/Career Program		
3	Social Studies Elective	Elective	Fine Arts Elective	Computer Elective
4	Elective	Elective	Elective	Elective

\*Courses will not necessarily be scheduled where they are written in on this page. One square = 1/2 credit.

# *Notes*

# *Course Descriptions...*





# Architecture

Architecture combines the disciplines of Art and Engineering. While computer design has begun to permeate the architecture profession, the ability to quickly convey design ideas, manual drawing and sketching remains the cornerstone of all design oriented careers.

The Architectural - Design and Drafting program is a series of courses that combine manual drawing skills with high-tech computer design skills in an attempt to prepare students for life in an ever-changing technological society. All students enrolled in the architecture program may not choose to become architects. Therefore, it is our goal to provide students with the transferrable skills necessary to be successful in any career while maintaining the highest quality instruction and experiences specific to the study of architecture.

All courses in Architectural Design and Drafting may be taken to satisfy the Fine Arts Education requirement. Students may take all of the courses offered to earn a two-year completer certificate.

**INTRODUCTION  
TO ARCHITECTURE** *Grades 9, 10, 11, 12*  
*Course No. 881, 1/4 Year .50 Cr*

Introduction to Architecture explores the concepts and techniques of architectural drafting and design. Students will learn about architectural styles, residential design, computer aided drafting, and architectural modeling. **Students will utilize both manual drawing and sketching and DataCad 11 - 3D architectural design software to design, model and create presentation drawings for their designs.**

**3D ARCHITECTURAL DESIGN** *Grades 9, 10, 11, 12*  
*Course No. 882, 1/4 Year .50 Cr*

Prerequisite: Introduction to Architecture

3D Architectural Design is a computer based course that provides students the opportunity to utilize a variety of 3D design and presentation software packages. Students will create computer models of home design projects that provide photo-realistic 3D visualizations. **Students will use their architectural designs to create design portfolios, slide presentations and marketing advertisements.**

**ARCHITECTURAL DRAWING  
AND SKETCHING** *Grades 9, 10, 11, 12*  
*Course No. 883, 1/4 Year .50 Cr*

Prerequisite: Introduction to Architecture

Architectural Drawing and Sketching provides students the opportunity to develop manual drawing skills. The ability to produce both 2-dimensional and 3-dimensional drawings is an essential skill utilized by Architects, Designers and Engineers. Whether it be used to quickly and clearly convey design ideas or to create pictorial drawings and renderings for product presentation, manual drawing and sketching remains the cornerstone of all design oriented careers.

**RESIDENTIAL  
DESIGN & DRAFTING** *Grades 10, 11, 12*  
*Course No. 886, 1/2 Year 1.00 Cr*

Prerequisite: 3D Architectural Design

Residential Design & Drafting is designed for the student interested in pursuing a career in Architecture, Engineering or Construction technology. Students will use **DataCad 11** architectural software to design a traditionally styled single family residence. Once the design is finalized students will create a computer model of their house from which they will produce the elevations, perspective drawings, building sections, and construction details for their design.

**ARCHITECTURAL MODELING** *Grades 10, 11, 12*  
*Course No. 887, 1/4 Year .50 Cr*

Prerequisite: Residential Design & Drafting

Architectural modeling is a hands on course that will teach students the basic techniques for building a variety of scaled 3D architectural models. Students will utilize the house plans they designed in Residential Design & Drafting as a basis for their modeling activities. Student projects will include: structural models, interior design models, and presentation models.

**ADVANCED  
ARCHITECTURAL DESIGN** *Grades 10, 11, 12*  
*Course No. 888, 1/2 Year 1.00 Cr*

Prerequisite: Residential Design & Drafting

Students in Advanced Architectural Design will work on both individual and group projects exploring advanced concepts in architectural design and 3D computer modeling. Projects will include energy efficient residential design, commercial design, and community planning and development.

# Automotive Technology

The automotive industry is actively conducting a recruiting campaign for students electing a career path leading to Automotive Technician. The industry provides multiple opportunities for advancement in a hi-tech environment.

The curriculum features a set of coordinated activities beginning at the 11th grade with completion at a NH Technical College and an Associate's Degree in Automotive Technology. The program is generally referred to as a 2 + 2 program and is an option for a student majoring in Automotive Technology. The automotive industry also requires a large number of people at dealerships and retail stores in a variety of support occupations. The automotive curriculum is designed to provide basic skills for entry level employment and for continuing education. It is accessible to male and female students in keeping with automotive tech job competencies, emphasis is placed on both diagnostics and repair. The school recommends that students participate in Cooperative Education activities and become active members of related student organizations. It is also required that appropriate clothing be worn. It is advised that students supplement their major area of study with two years of formal mathematics (algebra, geometry) a minimum of one year in Applied Physics and a communications course that features report writing. Students will receive a two-year completer certificate at the end of the program and may choose to enter the world of work or continue Automotive Technology Studies at the post-secondary level. All automotive courses are taught by an AYES (Auto Youth Education System) certified teacher.

**AUTOMOTIVE PRINCIPLES**      **Grades 9, 10, 11, 12**  
**Course No. 906, 1/4 Year**      **.50 Cr**

An introduction is provided in the fundamental principles of automotive systems. Hydraulic, pneumatic, electric, and mechanical systems will be explored as they relate to automotive operations. Students will learn what service and maintenance a modern vehicle requires through related theory and laboratory experience with emphasis on shop manuals, safety and tools. This course is recommended prior to taking Automotive Technology I.

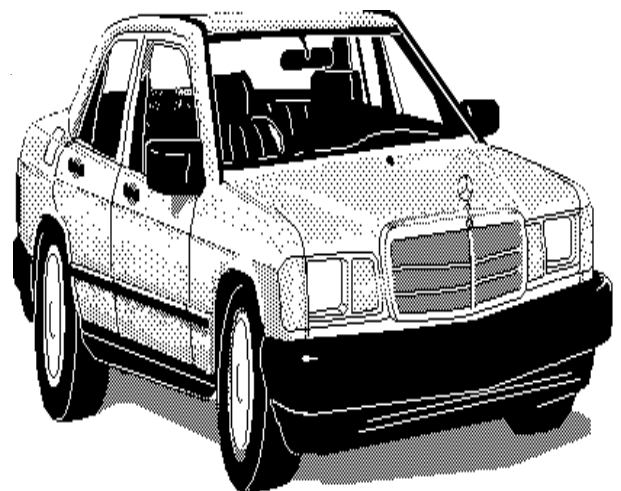
**AUTOMOTIVE TECHNOLOGY I**      **Grades 11, 12**  
**Course No. 907, All Year**      **2.00 Cr**

In the first year of the Automotive Program, students will learn the operations and servicing of automotive

components in the NATEF/ASE certified areas. Emphasis will be placed on safe working procedures, basic hand tools, power tools and special equipment. The Automotive laboratory provides working conditions similar to those encountered in the world of work. Open to grade 10 with permission of instructor based on an interview in June. Submit a brief essay with your course selection sheet stating why you wish to enroll in this two-year program.

**AUTOMOTIVE TECHNOLOGY II**      **Grade 12**  
**Course No. 908, All Year**      **2.00 Cr**

The second year of the Automotive Program emphasizes actual working conditions with tune-ups, and complicated repairs. Students will demonstrate acquired skills in several areas: engine performance, steering and suspension, brakes, cooling systems, drive train service, and job estimating. Open to grade 11 with permission of instructor.



# Computer Science

All students must successfully complete a minimum of one-half credit of computer science or computer-related coursework to graduate from PHS. A computer-related course is any course such as an Architecture course in which the student uses a computer at least half of the time.

**COMPUTER APPLICATIONS**      **Grades 9, 10, 11, 12**  
**Course No. 666, 1/4 Year**      **.50 Cr**

NOTE: This course is intended for students with some prior computer experience.

Computer Applications is designed to provide students with a review of the basic concepts and operations in Word®, Excel®, Access®, and PowerPoint®, and an introduction to the concepts and operations in desktop publishing (using InDesign®), Geographic Information Systems (GIS), Equivalent Open Source programs are introduced and examined.

**WEB PAGE DESIGN**      **Grades 9, 10, 11, 12**  
**Course No. 671, 1/4 Year**      **.50 Cr**

NOTE: This course is intended for students with some prior computer experience.

In this class, students will learn basic web page design. Topics such as content, layout, navigation, color, fonts, graphics and HTML tags will be presented. Students will create their own web page projects. Students are taught the correct way of referencing internet resources. Internet safety will be interspersed throughout the course. Students are required to keep a notebook of handouts and HTML code. The issue of plagiarism and its ramifications will be emphasized throughout the course.

**COMPUTER GRAPHICS**      **Grades 10, 11, 12**  
**Course No. 672, 1/4 Year**      **.50 Cr**

Prerequisite: Computer Applications or its equivalent

The course will provide students with experience in creating images and designs using computer graphics, design, and drawing programs. Topics will include graphic design, illustration, image manipulation, image processing, and 3D graphics. Students will combine these elements in a variety of projects to create original designs. This course is a prerequisite for Animation I.

**ADVANCED GRAPHICS  
AND WEB DESIGN**      **Grades 10, 11, 12**  
**Course No. 673, 1/4 Year**      **.50 Cr**

Prerequisite: Web Page Design and Computer Graphics

This course requires hands on completion of tutorials as well as development of a term project. Students will also complete several individual projects to reinforce the skills they have acquired in order to master the Dreamweaver software.

**PROGRAMMING I - Intro to Writing  
Interactive Graphic Applications I**      **Grades 9, 10, 11, 12**  
**Course No. 674, 1/4 Year**      **.50 Cr**

Prerequisite: Computer Applications or its equivalent. Algebra I taken prior to or concurrently with this course is recommended

This course will cover basic concepts of object oriented programming. Students are required to write programs that perform specified activities and/or behaviors that illustrate the effect of the instructions being studied. A final project dealing with the design and coding of an animated game-type problem will be part of the final student evaluation.

**PROGRAMMING II - Intro to Writing  
Interactive Graphic Applications II**      **Grades 9, 10, 11, 12**  
**Course No. 675, 1/4 Year**      **.50 Cr**

Prerequisite: A grade of B or better in Programming I. Algebra I taken prior to or concurrently with this course is recommended

Students will continue to develop skills learned in Programming I and will write short programs in Alice and Java. The final exam will include both languages covered in this course. It will consist of a text description of a simple behavior carried out by a simple object performing the defined behavior.

**COMPUTER ANIMATION I**      **Grades 10, 11, 12**  
**Course No. 676, 1/4 Year**      **.50 Cr**

Prerequisite: Computer Graphics and Fundamentals of Art

Animation I will provide students with the experience in creating 2D animation for the purpose of communicating

# Computer Science

an idea. The course will provide the students with an understanding of how animation is put together and the experience in producing animations. They will use a variety of animation software, including storyboards, timelines, sound tracks and imported graphics/photos. They will work in groups as well as create an individual animation, which will be required for the final. The student will create a final output (a movie) which will be saved into a portfolio.

**COMPUTER ANIMATION II** **Grades 10, 11, 12**  
**Course No. 677, 1/2 Year** **1.00 Cr**

Prerequisite: Computer Animation I

Animation II will provide students with continued experience in creating 2D animation and introduce 3D animation for the purpose of communicating an idea. In this course, students will produce a 3D animation which will be saved as a movie, recorded to CD or DVD, and saved into a portfolio.

**DESKTOP PUBLISHING** **Grades 10, 11, 12**  
**Course No. 678, 1/4 Year** **.5 Cr**

Prerequisite: Knowledge of graphics manipulation and digital graphics tools

This course will provide students with experience in creating a page structure, understanding type style for appropriateness for a publication, use of graphics, awareness of visual impact, and page-layout techniques. Students will learn how to design such items as brochures, newsletters, advertisements, programs, booklets and business cards. They will learn about the publishing industry and develop skills that can be transferred to future careers.

**INTRODUCTION TO MUSIC  
TECHNOLOGY USING  
APPLE'S "GARAGEBAND"** **Grades 11, 12**  
**Course No. 679, 1/4 Year** **.50 Cr**

Students are introduced to the various hardware and software components located in the music technology lab. Using Apple's "Garageband" combined with midi-controllers from "M-Audio" and a fully networked keyboard lab, students will learn how to electronically compose,

edit, record and mix their own musical creations. Students will also learn the basics of "podcasting" as a means to share their work with a larger virtual audience. While a musical background is not a prerequisite, it is certainly beneficial. Students who successfully complete this course would be eligible for independent study consideration in advanced recording utilizing the various school concerts as source material. Space permitting, grades 9 and 10 may be considered per permission of instructor.

# Construction/Wood Tech

Construction and Wood Technologies enable students to explore several levels of involvement appropriate for a variety of career paths and future academic pursuits.

Through participating in the many courses available in this program, students become prepared for apprenticeship opportunities as well as further education and employment in related fields such as engineering, real estate, property management, and retail.

It is recommended that students supplement their education with courses in geometry, physical science, algebra, and applied communication skills.

## WOOD TECHNOLOGIES

**WOOD A** *Grades 9, 10, 11, 12*  
**Course No. 856, 1/4 Year** *.50 Cr*

The most fun you can have in school! All students of all ages have the opportunity to design and build small to medium sized projects. There is no end to your artistic and creative possibilities. Along with being able to build projects, you may also paint, carve, woodburn, sculpt, and more! Students learn the safe and proper operation of basic power and some machine tools. Emphasis is on exploring different woodworking techniques and enjoying the learning process.

**WOOD B** *Grades 10, 11, 12*  
**Course No. 858, 1/2 Year** *1.00 Cr*

Prerequisite: Wood A

Take your Wood A knowledge and run with it! Dare to design and create more advanced projects. Use your skills and ambition to learn the more advanced machines and power tools such as the router, the lathes, planer, jointer, and table saw. Spend your time and energy to bring out your craftsmanship and fine finishing potential. Dare to be great and make something that you'll remember forever.

**ADVANCED WOOD** *Grades 10, 11, 12*  
**Course No. 859, 1/4 Year** *.50 Cr*

Prerequisite: Wood A

Focus on the finer levels of finishing and design. Maximize your woodworking and creative skills. Students are encouraged to create sophisticated works of art using wood and other materials. There will be opportunities to work on larger construction projects to introduce advanced wood students to the field of construction trades. For those who love independent and small group projects, this is your class!

## CIVIL ENGINEERING

**TECHNOLOGY ALL  
AROUND US** *Grades 9, 10, 11, 12*  
**Course No. 860, 1/4 Year** *.50 Cr*

This hands-on pre-engineering class connects the student to the exciting world around us. Through models and drawings, students explore and describe many fascinating wonders of the world. Students can learn about how big buildings are created; how big projects such as athletic stadiums, and concert halls are made; and about how huge projects such as the Big Dig in Boston go from concept to creation.

**CIVIL ENGINEERING** *Grades 9, 10, 11, 12*  
**Course No. 861, 1/4 Year** *.50 Cr*

These students will select a type of engineering project to focus on and create their own interpretations and models. Recent students have researched and built their own bridges, tunnels, hydroelectric plants, and even an award winning golf course. This class features independent work and small group process where the students decide what they want to research and develop.

## CONSTRUCTION TRADES

**CONSTRUCTION TRADES I** *Grades 10\*, 11, 12*  
**Course No. 867, All Year** *2.00 Cr*

This course provides an introduction to residential construction and design. Students learn about the variety of materials and methods used to build houses, additions, and so on. All projects are designed in class and build to residential construction standards. Students have the opportunity to learn how buildings are put together and how all trades are allied from masonry to carpentry to electricity and plumbing. All participants learn the safe and proper use of major power tools and machinery. This is an excellent choice for those individuals who want to maximize their knowledge of structures and basic construction. \*Open to grade 10 with permission of instructor.

**CONSTRUCTION TRADES II** *Grades 11\*, 12*  
**Course No. 868, All Year** *2.00 Cr*

Students take their knowledge from Construction I and produce high quality projects focusing on finish work and more sophisticated planning and design. Continued emphasis is placed on machine and power tool safety and operating. Projects are designed and built throughout the school and for customers in the community. Successful completion of this course provides students with a two-year certificate based on completion of NH State approved curriculum competencies. \*Open to grade 11 with permission of instructor.

# Culinary Arts      Drafting

The Food Service industry is an exciting, dynamic and rewarding field that offers a variety of opportunities. The two year program offers a broad range of curriculum based learning activities as well as practical experience in cooking, baking, and related restaurant functions. Students completing the program will be prepared for either immediate employment and/or the continuance of their education in a Culinary Arts or Food Service Management school. Valuable additional experience may be gained through the Cooperative Education program.

Students considering food service as a career are encouraged to take at least two years of mathematics, biology, chemistry, and the appropriate communication courses. Accounting, management, and Spanish or French are also valuable courses to take for this career. Students earn a two-year certificate upon completion of the program.

**CULINARY ARTS I**      **Grades 10\*, 11, 12**  
**Course No. 837, All Year**      **2.00 Cr**

Culinary Arts I is the first of a two part program designed to teach fundamental skills associated with the food service industry. Areas covered will include: sanitation, workplace safety, cost control, industry vocabulary, table service, cooking and baking techniques, skills proficiency, and an introduction to career occupations. Focus will also be placed on good work habits such as punctuality, professionalism, cleanliness, ability to work as part of a team, and ability to follow instruction. \*Open to grade 10 with permission of instructor.

**CULINARY ARTS II**      **Grades 11\*, 12**  
**Course No. 838, All Year**      **2.00 Cr**

This course is the second part of a two-year program designed to apply the skills acquired in Culinary Arts I. Students will participate in the planning and preparation of various functions in a practical setting. Greater emphasis will be placed on food costing, industry terminology, nutrition and food composition, as well as increased skill competency in all areas of the curriculum. Career and educational opportunities will be explored at length. \*Open to grade 11 with permission of instructor.

The drafting program prepares students for entry level positions in industry or continued education at the technical college or university level.

Drafting is an exciting career choice for men and women. It has become the corner stone of today's technology. The technical skills and concepts gained through courses in drafting are extremely valuable assets for any student who plans to pursue any technical career.

**MECHANICAL**  
**DRAFTING A**      **Grades 9, 10, 11, 12**  
**Course No. 876, 1/4 Year**      **.50 Cr**

This introductory course serves as the foundation for all further courses in mechanical drafting. The task of accurately representing a real -world three dimensional object onto a two dimensional sheet of paper or computer monitor is the essence of what a drafts person or artist does. Students are introduced to the wide assortment of views and pictorials used to convey information for industrial and consumer applications. Emphasis is on the development of basic sketching and drawing skills with the proper use and care of common drafting instruments. Students are also introduced to the use of the computer as a tool in producing drawings in the field of drafting. This course is highly recommended to all students with interests in technical, scientific, and the engineering fields.

**ELECTRO/MECHANICAL**  
**DRAFTING I**      **Grades 10, 11, 12**  
**Course No. 877, 1/2 Year**      **1.00 Cr**

Prerequisite: Mechanical Drafting

An intermediate course designed for the student who may be thinking about a career in DRAFTING or related areas. This is a half year course which builds on the basics learned in Mechanical Drafting A and progresses to the use of the computer. This is a good chance to apply the math you have learned to real life work. Students anticipating a career in ENGINEERING would find this course most beneficial.

# Early Education

The Early Education program provides entry level skills for the world of work and an educational experience for students contemplating a career as a teacher, classroom aide or any occupational area that focuses on children, e.g. child therapist, pediatrician or social worker.

The program offers practical experience at the Little Clipper Center in which classroom instruction is applied in a real situation. The program also offers students completing a two year sequence of studies a certificate illustrating their respective competencies in the occupational field of Early Childhood Education.

**EARLY CHILDHOOD DEVELOPMENT** *Grades 10, 11, 12*  
**Course No. 845, 1/4 Year-1st or 3rd Qtr. .50 Cr**

Caring for children is one of the most rewarding and frustrating experiences. It is a major responsibility which requires preparation. This course will provide information on prenatal development, normal growth, and development of infants and toddlers. Birth defects, guidance, discipline and playing with children are also covered. "Baby Think it Over" is a realistic doll which each student will take home to experience parenting.

**PARENTING AND FAMILIES TODAY** *Grades 10, 11, 12*  
**Course No. 846, 1/4 Year-2nd or 4th Qtr. .50 Cr**

This course enables students to examine the diversity of families, the roles and responsibilities of parenting, parenting methods, communication skills and understanding how families are an integral part of our community. Guest speakers, field trips, research and writing projects covering parenting issues help students to understand the importance of a healthy family and parent.

**EARLY EDUCATION I** *Grades 11, 12*  
**Course No. 847, All Year 2.00 Cr**

This teacher training program is designed to blend classroom learning with actual work in a preschool setting. The Early Education students are assigned to work in the Little Clipper Preschool on a rotating schedule. Prior to entering the preschool, students must be prepared with a week's worth of age appropriate lesson plans that will interest and challenge the children. The classroom curriculum encompasses all aspects of the early education curriculum which includes units in health and safety, art, language arts and writing, math, nutrition, and instruction in developing, carrying out, and evaluating lesson plans for the children. This class is an awe-inspiring experience. Membership in FCCLA (Family, Career, and Community Leaders of America) is an integral component of the Early Education Program. (Tenth graders may apply for special admittance to this program.)

**EARLY EDUCATION II** *Grade 12*  
**Course No. 848, All Year 2.00 Cr**

This class is an extension of Early Education I. The students are given more responsibility for the day to day working of the preschool. The curriculum includes planning special celebrations for the preschool children, field trips or guest speakers and involving the children's parents in different areas of their child's education. The high school students have the opportunity to extend their classroom experience by working in a local early childhood program for credit or salary. Some Early Education II students may choose to spend the second year doing an internship at a site of their choice such as: local elementary schools, Portsmouth Early Education Program, Children's Museum of Portsmouth, and YMCA School Age Program. Upon completion of the Early Education program many students attend four year teaching colleges as well as two year colleges. This program has articulation agreements with the New Hampshire Community Technical College in Stratham and Hesser College.

# Electricity/Electronics

Electrical power is responsible for our life-style, providing us with light, heat and useful motion. We need power on a continuous basis and electricity is the main form in which power is transported. Electric motors convert electricity into motion which allows us to operate refrigerators, mixers and appliances. Heat produced by electricity, light produced by electricity and the operation of communication devices makes our lives easier and more enjoyable.

Enrollment in successive courses will equip students with entry level skills and provide opportunities as an apprentice electrician, in retail electrical sales, as an industrial maintenance electrician and electronic technician. In addition, with appropriate course selection in Mathematics (algebra, geometry and trigonometry), Applied Physics, and Communications, students will have advanced schooling opportunities in a program accessible to male and female students.

**ELECTRICITY** **Grades 9, 10, 11, 12**  
**Course No. 927, 1/4 Year** **.50 Cr**

The study of electricity offers a wide variety of career choices. This first course in the study of electrical fundamentals enables the student to identify the wide variety of career options available in today's ever changing world. The safe use of electrical devices and the proper technical skills for working on these devices are stressed throughout the program. Soldering techniques and the use of hand tools are taught through the assembly of projects and related hands-on activities to reinforce electrical theory. The selection and use of electrical measuring devices, such as digital and analog multimeters, is emphasized by their use in circuit analysis and the troubleshooting of various circuits as they are studied. An understanding of series, parallel, and series-parallel circuits is obtained through the building of these circuits with increasing complexity and relating these principles to actual circuits. Learn the relationship between voltage, current and resistance through the application of Ohm's Law. Learn why electricity is of such importance to our way of life now and in the future.

**ELECTRONICS** **Grades 9, 10, 11, 12**  
**Course No. 928, 1/4 Year** **.50 Cr**

Prerequisite: Electricity, No. 927

The Electronics course provides an introduction to additional career choices and application of technology. Students will increase their knowledge of electronic components by building electronic circuits with resistors, capacitors, inductors, diodes, transistors, and integrated circuits (ICs). Students will use schematic diagrams as

a guide in the construction of electronic circuits. Students will further increase their skills in the use of multimeters to analyze circuits. The basic operation of the dual trace oscilloscope will be introduced as students learn the operation of simple power supply circuits. Students will demonstrate appropriate skills in using special equipment, hand tools, power tools, and shop manuals. This course is the foundation for the Applied and Robotics Electronics courses.

**APPLIED ELECTRONICS** **Grades 10, 11, 12**  
**Course No. 936, 1/4 Year** **.50 Cr**

Prerequisite: Electronics, No. 928

Students will learn the fundamental operation and the procedures to maintain the electronic devices found in today's home. Communication systems studied will include transmission through wire, air, and fiber optics. Cleaning and maintenance procedures for turntables, cassette players, CD players, and VCR's will be discussed and performed. The operation and basic troubleshooting of the modern receiver/amplifier will be demonstrated and performed. Troubleshooting cassette players, VCR's, and CD player problems will also be discussed. Speaker operation, selection, and construction considerations will be discussed including the crossover types available for multi-speaker systems. This course is designed for the serious student of electronics who wishes to gain an understanding of modern electronic devices to possibly enter the field as a technician or engineer.

**ROBOTICS** **Grades 10, 11, 12**  
**Course No. 938, 1/4 Year** **.50 Cr**

Prerequisite: Electronics, No. 928

Students will become familiar with the wide variety of robot designs and their applications in industry. This course provides students an opportunity to integrate knowledge of electronics and hardware design in the context of building various semi-autonomous robot platforms. Digital concepts will be explored in terms of robotic sensors and controlling stepper motors through robotic programming. Students will work in teams to produce a robotic rover incorporating motor drive mechanisms and sensors for obstacle avoidance. Computers will be used to program and manipulate robotic arms as used in manufacturing.



# English

Students must complete one credit of English during each school year.

**Basic English** - These courses are designed for students to improve upon basic skills in English. (Academic I)

**Standard English** - These courses are designed for students who wish to improve reading, writing, speaking, and listening skills. Students will have the opportunity to prepare for future career/educational choices. Homework may be assigned regularly. (Academic II)

**College Preparatory English** - These courses are designed for students who seek admission to two or four-year colleges or universities. Regular homework assignments will reinforce class instruction. (Academic III)

**Advanced College Preparatory English** - These courses are designed for students who seek admission to competitive colleges or universities. Daily homework will be assigned. (Academic IV)

**Honors English** - See description of Honors English Program on page 26.

## **ENGLISH 9** **Grade 9** **Required**

The freshman program, which explores the theme of "Celebration of the Individual," emphasizes literary genres and a varied writing agenda, the center of which is the writing process.

**Writing Component** **.50 Cr**  
**1/4 Year**

The writing component of freshman English involves the study of the writing process as students begin their four-year PHS portfolios. Students will learn various methods of pre-writing, as well as drafting, revision strategies, editing techniques, and conferencing skills. Much of the writing done in grade 9 is creative in nature, and students begin to find their own voice in writing. Students are expected to share their work with the class. Grammar and language skills will be addressed through student writing. Greek roots and prefixes will also be studied.

**Literature Component** **.50 Cr**  
**1/4 Year**

The literature component of freshman English includes a broad overview of the genres: novel, short story, drama, poetry, essay. Selections range from classical works to contemporary pieces. Works of various authors from around the globe will be studied. Emphasis is on understanding and enjoyment of literary works and on basic critical analysis. Appropriate skills such as word study and understanding of some basic literary concepts complement the study of the selections.

## **ENGLISH 10** **Grade 10** **Required**

The sophomore program explores the topics of loyalty, human nature and compassion as students concentrate on world literature with British components. Writing includes both narrative and expository modes.

**Writing Component** **.50 Cr**  
**1/4 Year**

Writing is an important part of the sophomore English program. Narrative and expository skills are strengthened through various creative and research assignments. Grammar study reinforces the mechanics, usage, and variety of sentence structure appropriate to assigned writing.

**Literature Component** **.50 Cr**  
**1/4 Year**

The literature component of sophomore English includes analysis of the major genres through reading important world authors, with a special emphasis on British and world writers. The goals are enjoyment, understanding, and further development of critical skills. Vocabulary study includes words derived from Latin and more advanced terminology to discuss literature.

## **ENGLISH 11** **Grade 11** **Required**

The junior program, which explores the theme of "Rights and Responsibility," focuses on American literature and persuasive writing.

**Writing Component** **.50 Cr**  
**1/4 Year**

The writing component of junior English places increasing emphasis on expository skills and the development of written argument. The literary essay is studied as well as practical writing forms. The grammar study focuses on selective review of mechanics and usage and introduces more complex syntactic structures.

**Literature Component** **.50 Cr**  
**1/4 Year**

Works studied in the literature term are almost exclusively American. The approach is usually chronological with emphasis on major authors of each literary period. Word study continues, but the emphasis in skills development is on aspects of critical analysis.

# English



**HONORS ENGLISH PROGRAM**      **Grades 9, 10, 11**  
**1.00 Cr**

Students entering grades 9, 10, or 11 may apply for Honors English. This program is designed for students who have ability well beyond grade level and who desire more advanced work in the English area. Honors English students cover more material, work at a faster pace, and function more independently than other students at the same grade level. They must be ready for in-depth analysis of complex literature and have a strong foundation in writing. A good work ethic and a commitment to the program, as well as a passion for reading and writing, are essential.

In order to adequately prepare for Honors English during the summer prior to the course, students are required to read designated selections and do specific writing assignments. This work is not to be done in collaboration with others. Since the summer assignments are a significant part of the course, it is impossible for any student who has not completed the work to participate in the Honors Program. **Summer work must be postmarked by dates announced at the spring meeting. Incoming freshmen will bring their completed summer work to freshmen orientation.**

Candidates for Honors English must submit a completed application form which includes a recommendation from the student's current English teacher, samples of the student's writing, a photocopy of the student's most recent report card, a writing prompt essay, and an essay explaining what they will contribute to an honors class. No applications will be accepted after due date. Each student's completed application package will be reviewed by a panel of Portsmouth High School English Department faculty. Notification of acceptance will occur by early April.

**ENGLISH 12**      **Grade 12**  
**Required — See Below**

The following listings are half-credit courses. In order to receive one (1) full credit for English 12, students must select two courses to be taken during their senior year.

If a student wishes to take a third English course, he/she must do so through a Guidance conference. These additional courses will then be scheduled on a space available basis - and only after all other scheduling has been completed. Only seniors receive required senior English credit.

**ACADEMIC I & II COURSES**

- |                            |                  |
|----------------------------|------------------|
| Creative Writing           | Science Fiction* |
| Grammar and Writing Skills | The Hero's Quest |
| Real World English         |                  |

These courses are recommended for students who may need reinforcement in English Language Arts skills. Through varied reading and writing assignments, teachers will concentrate on the improvement of the four areas of language study -- reading, writing, speaking, and listening. Through these courses, students will have the opportunity to make themselves competitive for future career/educational choices.

**GRAMMAR AND WRITING SKILLS**      **Grade 12**  
**Course No. 142, 1/4 Year**      **.50 Cr**

Grammar and Writing Skills is recommended for seniors who wish to strengthen their knowledge of grammar and basic sentence structure. Spelling, punctuation, capitalization, agreement, and usage are studied with a view toward improvement of basic writing and speaking skills.

**REAL WORLD ENGLISH**      **Grade 12**  
**Course No. 152, 1/4 Year**      **.50 Cr**

This course is for students who want to learn the English skills often needed outside the classroom. They will learn to read and understand legal and workplace documents, such as rental agreements, loan applications, warranties, and job applications. They will also learn to understand advertising and how to "read between the lines." In addition, to be better able to detect and avoid them, students will study scams, including those done at home, on the telephone, and on the Internet.

**CREATIVE WRITING**      **Grade 12**  
**Course No. 162, 1/4 Year**      **.50 Cr**

Students will work to improve skills while receiving individual instruction using the Writing Process. The various genres will be taught and extended projects will be undertaken, but emphasis will be on daily journals, weekly writing assignments, and include a term project.

**THE HERO'S QUEST**      **Grade 12**  
**Course No. 172, 1/4 Year**      **.50 Cr**

Most fictional heroes go on quests or journeys that follow a pattern that is found in hero myths around the world. In this course, students will explore how this pattern still exists in today's short stories and films. They will also examine the role of the hero in society past and present, as well as why these stories are so widespread and still commonly used. Using this pattern, students will write a

# English

short story, show how it is found in other short stories and films, and will come to understand how this pattern fits into their own lives.

**SCIENCE FICTION** **Grade 12**  
**Course No. 182, 1/4 Year** **.50 Cr**

The objective of this course is to teach students about humankind, society, and themselves through the genre of science fiction. Some issues to be discussed will be prejudice, the misuse of technology, and the effect of the present on the future. We will explore these through reading established as well as up-and-coming science fiction authors, primarily in short stories. As a supplement to these readings, we will watch some well-known science fiction films, along with a few cult classics. To demonstrate their learning, students will, among other things, write their own science fiction short story and have the opportunity to produce a hands-on project. \*Students may contract for Level 3 the first day of class.

## ACADEMIC III COURSES

Film Studies I	Literature of Music
Holocaust Studies	Public Speaking
Journalism	Writing a Memoir

These courses are recommended for students who seek admittance to two or four-year colleges or universities. Regular homework assignments will reinforce class instruction. These courses allow students to pursue areas of language study which expand upon the traditional English curriculum.

**FILM STUDIES I** **Grades 11, 12**  
**Course No. 153, 1/4 Year** **.50 Cr**

Learn to "read" a film as confidently as you read print media. Understand how technology and a creative director can shape both what you see and what you think as you watch a film. Students in this course will study films in a variety of categories, including foreign films, "golden oldies," and modern classics. Informed class discussion and selected papers and projects will provide opportunities for exploring new ideas about film. Juniors may take this course as an elective in addition to the required English course. When taken by juniors, this course does not fulfill the Senior English requirement

**HOLOCAUST STUDIES** **Grades 11, 12**  
**Course No. 163, 1/4 Year** **.50 Cr**

This interdisciplinary 1/2 credit course will be offered jointly through the English and Social Studies departments to juniors and seniors. Seniors may take this course to fulfill .50 required English credit. Juniors may take this course for elective credit.

Through various pieces of literature, students will explore how the Holocaust impacted teenagers and their families immediately prior to and during WWII. Students will also view films connected with the Holocaust in order to better understand how both Holocaust victims and the general population of Europe were affected by Nazi doctrine. Students will connect their own pieces of writing with the literature and films in order to have a better understanding of this profound time period during the 20th Century. When taken by juniors, this course does not fulfill the Senior English requirement.

**JOURNALISM** **Grades 9, 10, 11, 12**  
**Course No. 173, 1/4 Year** **.50 Cr**

This course is an introduction to journalism with an emphasis on news, feature, sports, and editorial writing. Other concepts covered include press law, layout and design, and newspaper ethics. Journalism is open to all students. Underclassmen may take this course in addition to their English requirement.

**LITERATURE OF MUSIC** **Grade 12**  
**Course No. 143, 1/4 Year** **.50 Cr**

Music lyrics are increasingly being recognized by universities, textbook editors, and literary critics as a critical component of modern literature. In this course, students will study historical music literature by first focusing on traditional English folk ballads, Civil War tales, and African American spirituals. We will also consider lyrics by 20th century artists such as Chuck Berry, Bob Dylan, Paul Simon, and Joni Mitchell. The course will end with an examination of the literature currently found in rap music and hip hop.

Literature by poets, novelists, and short story writers such as Alan Ginsberg, Jack Kerouac, and Joyce Carol Oates will be studied as a companion to the music lyrics. A focus on common literary themes such as loyalty, compassion, and individual responsibility will be present. An examination of historical events related to protest and social change will be considered. Students will be expected to recognize the multiple literary devices present in music lyrics and will increase their reading, media, and cultural literacy skills as a result. A series of writing reflections and analyses related to the literature of music will be assigned. The course will be offered as a level three class, but a level four option will be available for those interested in completing additional work.

# English

**PUBLIC SPEAKING** **Grades 11, 12**  
**Course No. 193, 1/4 Year** **.50 Cr**

This course will present specific techniques that will help students learn the skills needed to become confident public speakers in many different situations. Students will deliver a variety of speeches. Juniors may take this course as an elective in addition to the required English 11 course. When taken by juniors, this course does not fulfill the Senior English requirement.

**WRITING A MEMOIR** **Grade 12**  
**Course No. 183, 1/4 Year** **.50 Cr**

The purpose of this course is to explore one's own life experience through extensive writing of both prose and poetry. Students will further develop their narrative and descriptive writing skills and their voice as a writer. They will write about their life experiences including significant people, places, and events that are influential. They will discuss their future goals. To model this genre, they will read and discuss excerpts of published memoirs and autobiographies. As a term project, each student will compile these writings into an illustrated, Senior Memory Book. Careful editing and revising are key components of this class. Students will read aloud excerpts of their writing in class. This course is not suggested for students weak in grammar, spelling, and punctuation skills.

## ACADEMIC IV COURSES

British Literature	Linguistics
Creative Writing-Adv.	Mythological and Biblical Allusions
Conscience and Law	Research Skills
Expository Writing	Shakespeare
Film Studies II	Short Story and Poetry

These courses are recommended for students who seek admittance to competitive colleges or universities. Weekly writing assignments and/or major projects will be expected. Nightly homework assignments will reinforce class instruction.

**BRITISH LITERATURE** **Grades 11, 12**  
**Course No. 174, 1/4 Year** **.50 Cr**

This course explores the unique literary world of the British Isles. The focus ranges from earliest times to the 20th century and includes major works as well as short stories and poetry. Authors to be studied include John Donne, William Blake, William Shakespeare, Mary Shelley and Charles Dickens. Weekly response papers, nightly reading assignments, an independent research paper, a visual project and class presentations will be required. When taken by a junior, this course does not fulfill the senior English requirement.

**CREATIVE WRITING - ADVANCED** **Grade 12**  
**Course No. 144, 1/4 Year** **.50 Cr**

The purpose of this course is to develop further narrative and descriptive skills which have already been established in the first three years through English courses. Students selecting this course should be seriously interested in developing their ability to write clearly and concisely, emphasizing vivid word choice and effective use of comparisons, including analogies, metaphor, and similes. Logical development of plot, character, and theme will be emphasized as well as experimentation with most genres. Students will complete a term project. Individuality will be encouraged, but not to the detriment of discipline. This course is not suggested for students weak in grammar, spelling, and punctuation skills.

**CONSCIENCE AND LAW** **Grade 12**  
**Course No. 155, 1/4 Year** **.50 Cr**

Conscience and Law is a literature-based course that explores the variety of laws which influence a person's life, the conflicts created when a person clashes with these laws, the process of change, and the factors involved in making decisions, especially ethical decisions. A significant amount of reading is required for this course. Students are expected to do a close reading of the texts used in class and to analyze an author's style as well as the points he makes. Tests, journals, and discussions will be supplemented by papers and projects which students will share with the class. **A significant amount of reading is required for this advanced level course.**

**FILM STUDIES II** **Grade 12**  
**Course No. 154, 1/4 Year** **.50 Cr**

Prerequisite: Grade of B or higher in Visual Literature I

This course is a continuation of Visual Literature I. We will build on the concepts introduced in Visual Literature I through the study of national cinemas (e.g. American, French, German, and Japanese), directors (e.g. Bergman, Fellini, Hitchcock, Kurosawa), and genres (e.g. Silents, Noir, Western, Detective, literary adaptations). We will view films primarily from historical, critical, and creative perspectives. Students will screen films, discuss techniques, and make films themselves. Students will complete several papers and projects.

**MYTHOLOGICAL AND BIBLICAL ALLUSIONS** **Grades 11, 12**  
**Course No. 164, 1/4 Year** **.50 Cr**

This course will offer the opportunity to study those figures and stories from the *Bible* and Greek and Roman mythology commonly referred to in modern Western literature. The objective is to increase cultural literacy in

# English

college-bound students. Readings will include mythological and biblical stories, as well as modern poetry, short stories, and novel excerpts. An independent research and visual project will be required. When taken by juniors, this course does not fulfill the Senior English requirement.

**RESEARCH SKILLS** **Grades 11, 12**  
**Course No. 184, 1/4 Year** **.50 Cr**

What's the secret to writing a successful research paper? Learn how to choose and narrow topics, prepare an outline, utilize research tips, take appropriate notes, and write organized drafts. The relationship of grammar, style, and mechanics to effective papers will also be covered. Use of the Internet with regard to research, documentation, and the ethics involved will be an integral part of the course. Students in grades 10 and 11 may select this course in addition to the required English 10 or English 11 course. Students will write a ten page research paper and give an extensive oral presentation. When taken by sophomores or juniors, this course does not fulfill the Senior English requirement.

**SHAKESPEARE** **Grade 12**  
**Course No. 194, 1/4 Year** **.50 Cr**

In this course students will examine William Shakespeare's cultural impact and the ongoing importance of his literature in our lives. Students will study four plays from genres as diverse as comedy and tragedy, as well as selected sonnets. Coursework will emphasize Elizabethan history and the societal conditions that helped form Shakespeare's work. Students will explore Shakespeare's use of poetic and dramatic devices, improve their understanding of Shakespeare's English, grow to appreciate Shakespeare's works as performance art, and analyze universal themes present in the literature. Weekly papers, nightly reading, individual projects, and active participation are required.

**SHORT STORY AND POETRY** **Grades 11, 12**  
**Course No. 148, 1/4 Year** **.50 Cr**

This course will present a variety of short stories, both contemporary and classic, for analysis and appreciation of styles and themes. Poetry for analysis offers students an opportunity to study the significance, techniques, and the beauty of poetry, both ancient and modern. Emphasis will be placed on reading poetry for enjoyment through understanding. Students will be encouraged to write both poetry and a short story. A variety of projects will be assigned throughout the term. When taken by juniors, this course does not fulfill the Senior English requirement.

## ADVANCED PLACEMENT COURSES

**ADVANCED PLACEMENT**  
**ENGLISH** **Grade 12**  
**Course No. 195, 3/4 Year** **1.5 Cr**

Candidates for AP English must submit an application form which includes a recommendation from the student's current English teacher, samples of the student's writing, and a photocopy of the student's most recent report card. Each student's completed application package will be reviewed by a panel of Portsmouth High School English Department faculty. Notification of acceptance will occur in the late spring. Since the summer assignments are a significant part of the course, it is impossible for any student who has not completed the work to participate in the AP program. Summer work must be postmarked by dates announced at the spring meeting.

Advanced Placement English is a literature-intensive course which emphasizes the development of skills in close reading, literary analysis, critical thought, and in writing the analytical essay. Course content will focus on major literary works as well as short stories and poetry from the classical to the modern period including multi-cultural works. Representative selections include: Shakespeare's King Lear, Irving's A Prayer for Owen Meany, O'Brien's The Things They Carried, Ellison's Invisible Man, and Wright's Native Son. A summer reading list will facilitate students in their coursework.

## COLLEGE CREDIT COURSE

**EXPOSITORY WRITING** **Grade 12**  
**(RUNNING START)**  
**Course No. 197, 1/2 Year** **1.00 Cr**

This is a college-level course offered in conjunction with New Hampshire Community Technical College. Students earn both high school and college credit for this Expository Writing course. Students should be prepared for extensive reading and writing. The course focuses on rhetorical principles and their impact on effective writing. Emphasis will be placed on concepts such as topic selection, audience, purpose, and style. In addition, students will write a comprehensive term paper. Readings in support of these concepts will be an integral part of the course. The ACT/Asset assessment test is given at the high school. This is required of any student enrolled in this course. The cost to enroll in a Running Start course is \$100, plus books. This represents a substantial savings in college tuition costs.

# E.S.O.L.

# Health

**ENGLISH FOR SPEAKERS OF OTHER LANGUAGES**      **Grades 9, 10, 11, 12**  
**Course No. Assigned by Counselor**

English for Speakers of Other Languages (E.S.O.L.) is offered to students whose primary language is not English. Generally these students have recently come to the United States. The course content develops an awareness of the United States - from its geography, cultures and people, to current issues and problems. The objective of the course is to facilitate growth in spoken and written English.

**HEALTH STUDIES I**      **Grades 10, 11, 12**  
**Course No. 802, 1/4 Year**      **.50 Cr.**

Health is a nine week course offered primarily to tenth grade students and those students transferring into the district that have not yet met the health course requirement. The course is intended to help students obtain information, acquire skills, and examine attitudes conducive to the formation of positive health behaviors throughout their lives. The course design is aligned with the district health curriculum's tenth grade benchmarks.

**HEALTH STUDIES II**      **Grades 10, 11, 12**  
**Course No. 803, 1/4 Year**      **.50 Cr.**

Prerequisite: Health Studies I

Is your life not going as well as you wish? Time for a change? This course will help you to plan and implement changes in your behavior, e.g. to stop smoking, to create an exercise plan, or to work on stress management, anger management or relational skills development. You will be guided through the steps necessary for behavioral change and learn how to implement and maintain healthy behavior.

**RELATIONSHIPS**      **Grades 10, 11, 12**  
**Course No. 804, 1/4 Year**      **.50 Cr.**

Prerequisite: Health Studies I

This course explores healthy relationships, including values, skills and how people interact with each other. Issues that affect relationships, such as sexual decision-making, substance use, power-sharing, and other topics will be explored through classroom discussions and learning activities.

# Interdisciplinary Studies

**SERVICE LEARNING**  
Course No. 961, 1/2 Year

Grades 11, 12  
1.00 Cr

Prerequisite: Transportation with required insurance

Would you enjoy offering your time and talents to your community helping make a difference in peoples lives? Students have described Service Learning as: "The act of expanding your mind and thoughts, to be open to learning, absorbing willingness to take challenges with responsibility. Working to help people build knowledge and acquire self-esteem, to give a positive outlook and attitude to others. To commit yourself to teach and be taught, to take hold of new experiences." This **semester long course** will involve three days of hands on volunteering at a community site combined with two days in the classroom reflecting on project work, and studying the concept of service and it's impact on our society. The choice of a service learning site reflects your own personal goals and interests. Among the sites chosen by students in the past are: local elementary schools, the SPCA, Sexual Assault Support Services, the Senior Center, New Heights, Strawberry Banke, and other non-profit organizations. While at your site you will be working closely with your site supervisor, developing relationships with employees there and exploring possible future careers. Course requirements include a portfolio of the work done at the community site, a field research paper, journal entries, classroom reading and writing assignments.

**STUDENTS MUST PROVIDE THEIR OWN TRANSPORTATION WITH THE APPROPRIATE INSURANCE COVERAGE OF 100,000/300,000/100,000.**

**LEARNING SKILLS**  
Course No. 970, 1/4 Year

Grades 9, 10, 11, 12  
.50 Cr

The purpose of this course is to assist students in attaining a greater knowledge of the process and importance of learning by allowing each student to assess his/her motivational and learning styles and address individual academic concerns. Students will be encouraged to become more engaged in their own education and to develop practices that enhance their educational experience in high school and beyond. A variety of strategies and techniques will be introduced intended to facilitate successful learning, including organization, studying, test-taking, listening, and reading skills. The concept that learning should be enjoyable and invigorating is a central theme of this course. **THIS COURSE IS COMBINED WITH THE OPPORTUNITY FOR THE STUDENT TO STAY CURRENT ON CLASSWORK AND ASSIGNMENTS.**

# International Languages

Our International Languages Department provides basic through advanced instruction in French, Latin and Spanish. We use a proficiency model in teaching modern languages. Students concentrate on communication in speaking and writing in levels one and two, reading skills are developed in level three and integration of all skills is the focus of level three through the advanced grammar and literature classes. Through the contrast and comparison of language, students develop critical thinking skills. The ability to communicate with the people of other cultures is important as American society becomes increasingly multi-cultural and multi-lingual and as our economy becomes more dependent on global trade. The study of another language offers the opportunity to profit in the increasing number of careers available in the international arena.

**Advancement to the next level will be based on teacher recommendation.**

**SPANISH I** **Grades 9, 10, 11, 12**  
**Course No. 505, 1/2 Year** **1.00 Cr**

Spanish I helps students to develop basic communication skills in reading, listening, speaking and writing. To reinforce vocabulary usage and comprehension, visuals are used with comprehension activities. Active participation is necessary for development of oral skills. Quizzes and tests are given regularly. Continuous review is encouraged. Unit tests check cumulative knowledge. Oral and/or written homework is assigned daily. Oral presentations are part of the final examination.

**ADVANCED SPANISH I** **Grades 9, 10, 11, 12**  
**Course No. 508, 1/2 Year** **1.00 Cr**

Prerequisite: Grade of C- or better in Spanish I

Advanced Spanish I focuses on continued development of oral and written skills. In individual, paired and group activities they ask original questions, describe events, express opinions, and discuss their own lives. Students are responsible for writing more detailed compositions. Tapes of native speakers develop further comprehension. Student participation is a priority and success in class is in direct proportion to class participation and daily preparation of homework.

**SPANISH II** **Grades 9, 10, 11, 12**  
**Course No. 512, 1/2 Year** **1.00 Cr**

Prerequisite: Grade of C- or better in Advanced Spanish I

With continued emphasis on personal expression, both oral and written, this course will review previously taught grammar and introduce new concepts. The student's

knowledge of present and past tenses will be enhanced and expanded. Classes are conducted in Spanish with students participating in class discussions. Tapes of native speakers will be used to reinforce comprehension and students will continue to improve writing skills through compositions. Class participation, homework, and written work continue to play integral roles in student assessment.

**SPANISH III** **Grades 10, 11, 12**  
**Course No. 515, 1/2 Year** **.1.00 Cr**

Prerequisite: Grade of C- or better in Spanish II

In Spanish III a balanced sequence of speaking, listening, reading and writing is continued. The curriculum is designed to expand knowledge of Spanish grammar. More emphasis will be placed on reading which will include an introduction to literature in the target language. Classes are conducted in Spanish with continued stress on oral participation. Student participation is mandatory as students' grades are based on both class participation and written work.

**SPANISH IV** **Grades 10, 11, 12**  
**Course No. 518, 1/2 Year** **1.00 Cr**

Prerequisite: Grade of B- or better in Spanish III

This course is designed to meet the needs of the more serious Spanish student and develops the student's ability to read with comprehension. Contemporary literature by Latin American and Spanish authors are critically analyzed. In addition to literature, history and present day culture are studied in depth. Written assignments include comprehensive analyses of literature. An intensive review of grammar is continued throughout the semester in conjunction with other aspects of this course. Student's grades are based on written work, class participation and performance.

**SPANISH V** **Grades 11, 12**  
**Course No. 521, 1/2 Year** **1.00 Cr**

Prerequisite: Grade of B- or better in Spanish IV

This course is designed to meet the needs of the most serious and motivated Spanish students who have received a "B" or better in *Spanish IV*. Individuals will continue to develop ability to read and comprehend factual information about the Iberian Peninsula and chart Spanish civilization up to the 17th Century through the reading of biographies, short stories and videos.

A thorough grammar review will be ongoing and grammar modules will be pursued on an individual basis. Students



# International Languages

will speak only Spanish in class where overall grade reflects class participation and written work. A major written and oral project will also be submitted.

**ADVANCED PLACEMENT  
SPANISH LANGUAGE** **Grades 11, 12**  
**Course No. 525, 3/4 Year** **1.50 Cr**

Prerequisite: Spanish IV or V, or the teacher's permission

Advanced Placement Spanish Language is a course that focuses on reading, speaking, and grammatical structures that enhance understanding the language. The reading selections are from current periodicals and newspapers, published in Spanish-speaking countries. Every lesson has a cultural component, taking the students deeply into the language-culture connection.

The book *Triangulo* is used as well as *Una Vez Mas*, *Barron's Guide to the AP Spanish Exam*, and selected readings from the AP Literature textbook published by Amsco. Students will review and practice exercises from previous exams. Students are expected to prepare speaking tapes to accompany lessons. During the summer, students are expected to keep a journal and complete review exercises.

**FRENCH I** **Grades 9, 10, 11, 12**  
**Course No. 532, 1/2 Year** **1.00 Cr**

This course presents the basic principles of listening, speaking, reading and writing. The teacher speaks French as often as possible to initiate student participation. CD's and videos are used to further listening and speaking development. Written homework is assigned daily. Quizzes and tests on grammar structures and vocabulary are given regularly. Oral participation in class is necessary to further one's speaking skills. All four components are part of the final exam.

**ADVANCED FRENCH I** **Grades 9, 10, 11, 12**  
**Course No. 535, 1/2 Year** **1.00 Cr**

Prerequisite: Grade of C- or better in French I

Advanced French I strengthens the skills acquired in French I with more advanced principles of grammar and increased vocabulary development. French is used almost exclusively in class. Students use present, past and future time in their oral activities and written work. Besides being required to participate in class, students present skits and short oral presentations before the class in French. CD's and videos develop further comprehension. Students at this level begin writing short, controlled compositions. Quizzes and tests are given regularly. Written homework is assigned daily.

**FRENCH II** **Grades 9, 10, 11, 12**  
**Course No. 538, 1/2 Year** **1.00 Cr**

Prerequisite: Grade of C or better in Advanced French I

In French II the student's listening, speaking and writing skills are strengthened by varied types of oral and written work. The class is taught in French. To reinforce comprehension, CD's and videos are used with comprehension activities. Student participation in class is necessary for development of oral skills. Three new tenses will be learned.

**FRENCH III** **Grades 10, 11, 12**  
**Course No. 541, 1/2 Year** **1.00 Cr**

Prerequisite: Grade of C- or better in French II

In French III a balanced sequence of oral comprehension, speaking, writing and reading is stressed. There will be a revision of all tenses. The subjunctive tense will also be introduced. CD's are used to further listening and speaking development. Classes are conducted in French with continued stress on oral participation. Student participation is mandatory and students' grades are based on written work and class participation.

**FRENCH IV** **Grades 10, 11, 12**  
**Course No. 544, 1/2 Year** **1.00 Cr**

Prerequisite: Grade of B- or better in French III. This is a fast-paced class that will review grammar adding a few additional points.

In this course listening and speaking skills are strongly developed. Continued use of CD's is necessary to reinforce comprehension. The student's ability to read easily with direct comprehension is also emphasized. French history and culture are also studied. Class participation is of the utmost importance and a significant percentage of the student's grade is based on this.

**FRENCH V** **Grades 11, 12**  
**Course No. 547, 1/2 Year** **1.00 Cr**

Prerequisite: Grade of B- or better in French IV

This course is designed to meet the needs of the students who have received a "B" or better in French IV. A reading program is an integral part of this class. French history is also studied. Students are expected to write papers as well as give oral reports on the assigned readings. An intensive review of grammar is continued as needed. Students' grades reflect written work as well as mandatory class participation. A certain level of maturity and life experience is required to fully benefit from this course.

# International Languages

**ADVANCED PLACEMENT  
FRENCH LANGUAGE** **Grades 11, 12**  
**Course No. 546, 3/4 Year** **1.50 Cr**

Prerequisite: French IV or V, or the teacher's permission

The goal of Advanced Placement French Language is to ensure fluency in each of the four major areas: listening, reading, speaking and writing. Grammatical accuracy and idiomatic structures are also developed through intense practice using multiple texts. The study of native literature is crucial to ameliorating these skills as well. Success on the AP exam at the end of the course is the ultimate goal, however, this cannot be achieved without success in the language overall. Summer work is required, as well as consistent study habits throughout the year.

## LATIN

Nothing else tells as much about a civilization as its language. Words and how they are arranged capture the substance and style of a people. The civilization that was Rome lasted 1229 years and the ultimate goal of Portsmouth's Latin curriculum is to study the greatness of the Romans through their words about themselves.

**LATIN I** **Grades 9, 10, 11, 12**  
**Course No. 550, 1/2 Year** **1.00 Cr**

An introduction to the Latin Language through basic grammar and vocabulary as well as simple readings about Roman Culture and History. Homework will not ordinarily exceed 30 minutes a night. Recommended for college bound students who want to strengthen verbal, organizational, and thinking skills.

**LATIN II** **Grades 10, 11, 12**  
**Course No. 553, 1/2 Year** **1.00 Cr**

Completion of Latin Grammar as well as further vocabulary, complemented by various readings including excerpts from *Ulysses*. Homework will not ordinarily exceed 30 minutes a night.

**LATIN III Tales of the Wild West** **Grades 10, 11, 12**  
**Course No. 557, 1/2 Yr** **1.00 Cr**

Readings based on Livy's *Early History of Rome* showing how the Romans, like us, grew from being the humble subjects of kings to the strongest republic in the world. Homework will not ordinarily exceed 35 minutes a night.

**ADVANCED LATIN PROSE** **Grades 11, 12**  
**Course No. 560, 1/2 Year** **1.00 Cr**

This course is offered in alternating years from Latin Poetry.

What caused Rome to shift from being a republic to having one man rule? Some challenging translation of Julius Caesar. A chance to read the Latin comic book Asterix. A sidebar about the role of law courtesy of Njal's Saga. Homework will not ordinarily exceed 40 minutes a night.

**ADVANCED LATIN POETRY** **Grades 11, 12**  
**Course No. 563, 1/2 Year** **1.00 Cr**

This course is offered in alternating years from Latin Prose.

Epic struggles will be based on the Trojan War with translation from Virgil's Aeneid and Homer's Iliad and Odyssey. Personal struggles will be based on Catullus' love poems. Homework will not ordinarily exceed 40 minutes a night.

## CHINESE

**BEGINNING CHINESE** **Grades 9,10,11, 12**  
**Course No. 570, 1/4 Year** **.50 Cr**

Students will learn the Chinese language and study the culture and geography of China. Interactive participation is required. Students will research information to share, participate in class discussions and be able to compare and contrast cultures. The course will be taught by Yige Wang, a teacher from China. Preference will be given to upperclassmen.

# Mathematics

The goal of teaching mathematics in the Portsmouth School District is to develop in students the value and enjoyment of mathematics. Students must be able to reason and communicate mathematically, have confidence in their mathematical skills, use math to make informed decisions in their daily life, and see themselves as mathematical problem solvers. In solving problems, students must be able to question the reasonableness of a solution, be flexible, persevere, and take risks. Students must have these skills to adapt to the changing needs of the 21st Century.

Guidelines:

- All students must pass three units of mathematics in order to graduate.
- A grade of "C" or better is strongly recommended before electing the next level course.
- All students should consult with teachers and counselors concerning course selection.
- Honors sections are offered in Algebra II, Algebra III, Precalculus. Also offered are A.P. Calculus and A.P. Statistics.
- Students must apply for admission to honors and A.P. Courses.

Recommended math sequences:

<b>Sequence I</b>	<b>Sequence II</b>
Applied Algebra A	Algebra I/Algebra IX
Applied Algebra B	Formal Geometry
Informal Geometry	Algebra II
Applied Algebra II	Algebra III
	Precalculus
	Calculus

Sequence I is designed to provide a course of study for those students who find math challenging. Successful completion of this sequence will fulfill college entrance requirements.

Sequence II is for students who are strong math students who may plan to have a math/science major.

**EXPLORING MATH** **Grades 9, 10**  
**Course No. 302, All Year** **1.00 Cr Math**

Exploring Math is a five day per week, full-year program designed for the student who would benefit from a course that explores the basics of mathematics. The first 45 minutes of this course are designed to review the basic arithmetic skills of fractions, decimals, and percents as the students are given an introduction to other mathematical topics. The ideas of geometry, algebra, probability and statistics will be taught and the basic skills reviewed as needed. \*The second 45 minutes of Exploring Math (for the additional elective credit) could be an academic

support designed to preview and review Exploring Math lessons, as well as focus on other content areas in which the student may need support.

**APPLIED ALGEBRA A** **Grades 9, 10, 11, 12**  
**Course No. 315, 1/2 Year** **1.00 Cr**

In this course the student will cover the material of the first half of an Algebra I course. The student will learn problem solving skills, calculator skills, the properties of algebra, the order of operations, the rules of integers, methods of solving linear equations, and graphing. These concepts and a review of arithmetic skills will be taught with the emphasis on real life applications.

**APPLIED ALGEBRA B** **Grades 9, 10, 11, 12**  
**Course No. 318, 1/2 Year** **1.00 Cr**

Any student who has successfully completed Applied Algebra A is eligible to take this course. In this class, the student will cover material from the second half of Algebra I and apply it. Students will review material covered in Applied Algebra A, while investigating new topics. The course will cover graphing, systems of linear equations, probability, data analysis, quadratics, exponents, and different types of equation solving. Students can not receive credit for both Algebra B and Algebra I.

**ALGEBRA I** **Grades 9, 10, 11, 12**  
**Course No. 332, 1/2 Year** **1.00 Cr**

An understanding and application of the structure and principles of algebra, designed for the student who has mastered the operations and properties of rational numbers and is preparing for a three to four year program in mathematics. The course is structured to cover the following topics: algebraic expressions, formulas, equations, inequalities, exponents, quadratics and a variety of real world problems. Students can not receive credit for both Algebra B and Algebra I.

**ALGEBRA IX** **Grade 9**  
**Course No. 336, 1/2 Year** **1.00 Cr**

This course is designed for the student who had Algebra I in the 8th grade. The goal of this course is to reinforce the basics of Algebra I, and to cover in more depth the concepts of exponents, quadratics, factoring, and rational expressions and equations. The student will develop a solid basis in algebra and gain confidence in his/her ability to use mathematics to solve problems. From this course the students should enter Formal Geometry and then Algebra II.

# Mathematics

**PERSONAL FINANCIAL MANAGEMENT** *Grades 10, 11, 12*  
**Course No. 338** *1/4 Year* **.50 Cr**

Prerequisite: Algebra I or Algebra B

This course is designed to help the student enter the world of adulthood with financial information that will help to lead them to financial security. The course will stress budgeting, banking, credit, investing, and consumer education. This course satisfies 1/2 math credit.

**INFORMAL GEOMETRY** *Grades 10, 11, 12*  
**Course No. 341**, *1/2 Year* **1.00 Cr**

Prerequisite: Algebra I or Algebra B

Informal Geometry is a course for the student who has successfully completed Algebra I or Algebra B. It is designed to be an intuitive course in which the concepts of symmetry, congruence and similarity are developed with emphasis throughout on metric relationships of geometry and reinforcement of algebraic techniques. The approach to teaching the nature of proof and geometric reasoning is realistic and practical. Informal Geometry or Formal Geometry will satisfy the requirement for admission to many post-secondary schools as an academic math course.

**FORMAL GEOMETRY** *Grades 9, 10, 11, 12*  
**Course No. 344**, *1/2 Year* **1.00 Cr**

Prerequisite: Algebra I

Formal Geometry is offered as a preparation for Precalculus. A solid foundation in algebra is recommended as a prerequisite for this course. Reasoning is stressed and logical conclusions are arrived at through the deductive process. The writing of proofs is stressed to enable the student to see and appreciate the structure, and orderly arrangement of mathematics. A student can not receive credit for both Informal and Formal Geometry.

**APPLIED ALGEBRA II** *Grades 10, 11, 12*  
**Course No. 362**, *1/2 Year* **1.00 Cr**

This is a half year course for the student who has passed an Algebra I and a Geometry course with average success and may require review and/or additional development in these areas. Basic algebra skills will be reinforced and further development of geometry and algebra concepts and connections will be emphasized.

**ALGEBRA II** *Grades 10, 11, 12*  
**Course No. 367**, *1/2 Year* **1.00 Cr**

Prerequisite: Algebra I and Geometry

In this course, the basics of algebra are reinforced and new concepts are introduced. Linear, quadratic, exponential, and logarithmic equations will be studied. The student will apply these concepts and solve a variety of problems. A grade of "C" or better in previous math courses is recommended before electing to take Algebra II.

**ALGEBRA III** *Grades 10, 11, 12*  
**Course No. 377**, *1/2 Year* **1.00 Cr**

Prerequisite: Algebra II

Algebra III is the continuation of the study of mathematics with the focus on rational functions, conics, trigonometry, and sequences. This course following the Algebra II curriculum will provide the necessary foundation for further study in the area of mathematics. A grade of "C" or better in Algebra II is recommended before electing Algebra III.

**PROBABILITY AND STATISTICS** *Grades 11, 12*  
**Course No. 388**, *1/4 Year* **.50 Cr**

Prerequisite: Algebra II or Applied Algebra II

Probability and Statistics is a half credit course for any student who has successfully completed Algebra II. Any student interested in careers in business, social sciences, and math-science related fields would benefit from taking this course. In this course students will be introduced to the basics of statistical methods. Students will gain an understanding of how to collect data, interpret data, and develop an understanding of how statistical hypotheses are made and tested. Topics to be covered are organization of data, measures of central tendency, probability distributions, populations and hypothesis testing.

**PRECALCULUS** *Grades 11, 12*  
**Course No. 383**, *1/2 Year* **1.00 Cr**

Prerequisites: Algebra III

Precalculus is designed as a continuing course for the student who has demonstrated better than average success in Algebra III and Geometry and seeks to prepare for Calculus. Precalculus will cover topics including functions, graphing, exponents, logarithms, trigonometry, sequences and series, and limits. Applications and an introduction to calculus will be included as time allows.

# Mathematics

## **CALCULUS**

**Course No. 394, 1/2 Year**

**Grade 12**

**1.00 Cr**

Prerequisite: Precalculus

Topics included in this course are analytic geometry, limits, differentiation, integration, and applications using derivatives and definite integrals. The course is presented from a practical standpoint, without rigorous proof on the part of the student. Much of the theory is presented using graphing calculators or in geometric terms and is based on the material covered in Precalculus.

## **ADVANCED PLACEMENT CALCULUS**

**Course No. 395, 3/4 Year**

**Grade 12**

**1.5 Cr**

Prerequisite: Precalculus

Advanced Placement Calculus (AP Calculus) is designed to cover the first and second semesters of college calculus. Topics include elementary functions, limits, differentiation, integration, polar coordinates and analytic geometry. Background requirements include a solid knowledge of mathematics through Precalculus with special emphasis on Algebra I, II, and III. The purpose of the course is to expose students to an intensive course in college calculus and to enable the students to take the national Advanced Placement Test offered in May. Successful completion of the required A.P. Test may allow for one semester of college credit in calculus.

## **ADVANCED PLACEMENT STATISTICS**

**Course No. 397, 3/4 Year**

**Grade 11, 12**

**1.5 Cr**

Prerequisite: Algebra II with a "B" or better

The purpose of this course is to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students will study four broad conceptual themes: exploring data - observing patterns and departures from patterns, planning a study - deciding what and how to measure, anticipating patterns - producing models using probability theory and simulation, statistical inference - confirming models. Students who enroll in this course are required to take the advanced placement examination.

# Performing Arts - Music

## MUSIC

The Music Department offers a wide selection of courses in both performance and classroom areas of instruction. Music studied ranges from the classical tradition to popular to contemporary. Traditional instruments as well as music technology equipment such as keyboards, computers, synthesizers and sequencers are available in the Music Department. Members of the music performance groups also have the opportunity to audition for placements in All-State Music Festival, All-New England Music Festival, and New Hampshire Jazz All-State.

In addition to the large ensembles, Band and Choir, which meet during the school day, the Music Department has several musical groups which meet outside the regular school day. These include Big Band, Jazz Combo, Mixed Instrumental Ensembles, Percussion Ensemble, Color Guard, Treble Choir, Madrigal Singers, and Men's Ensemble. No additional credits are given for participation in these performing groups.

All courses in the Music Department may be taken to satisfy the Fine Arts requirement.

### PERFORMANCE COURSES

**CLIPPER BAND** **Grades 9, 10, 11, 12**  
**Course No. 773, All Year** **1.00 Cr**

The Clipper Band is open to all students (previous band experience is strongly recommended). As musical ambassadors for the City of Portsmouth, the Clipper Band will be expected to perform at various community functions during the school year. These performances include home football games in the fall, Portsmouth Holiday Parade in December, and the Memorial Day Parade in late May. The Band performs a variety of music ranging from traditional literature to contemporary and Broadway show medleys. In order to prepare for these events, there will be a week long Band Camp before school begins. Some fund raising activities may be scheduled throughout the year to help support the band activities.

**CONCERT CHOIR** **Grades 9, 10, 11, 12**  
**Course No. 775, All Year** **1.00 Cr**

This large choral ensemble is open to all students regardless of previous vocal experience. Music performed is both sacred and secular in nature and ranges from classics to the Broadway stage and arrangements of popular music--all with an emphasis on choral and vocal tone quality development, diction, and balance and blend of voices. It is mandatory that students participate in concerts which occur in after-school or evening times. Some fundraising activities may be scheduled throughout the year.

### CLASSROOM COURSES

**PIANO KEYBOARD** **Grades 9, 10, 11, 12**  
**Course No. 779, 1/4 Year** **.50 Cr**

Piano Keyboard skills class will serve as an introductory course to anyone interested in learning how to play the piano. A performance-based class, the students will become familiar with the notes on the keyboard, learn

music reading skills and chord symbols, and perform a selected ability-appropriate repertoire. The practice and performance needs of Intermediate and Advanced students will be accommodated.

**VOCAL WORKSHOP** **Grades 9, 10, 11, 12**  
**Course No. 767, 1/4 Year** **.50 Cr**

How do you get the most out of your singing voice whether you are performing pop, jazz, classical, choral, or Broadway music? This course is for students who want a beginning knowledge of the basics of singing. Students will learn proper breathing and voice production techniques, review the fundamentals of music reading, and get some keyboard experience. This is a good way to get experience in nearly every type of music. Many students who are active in the PHS choirs and Drama Department musicals have elected Vocal Workshop.

**DICTION FOR SINGERS** **Grades 9, 10, 11, 12**  
**Course No. 768, 1/4 Year** **.50 Cr**

Prerequisite: Vocal Workshop

Diction for Singers will focus on studying and performing vocal music in English and other languages. Emphasis will be placed on learning the symbols of the International Phonetic Alphabet, and applying pronunciation skills to solos in English, Italian, Latin, French, and German.

**MUSICAL THEATER:**  
**Page to Stage and Beyond** **Grades 9, 10, 11, 12**  
**Course No. 770, 1/4 Year** **.50 Cr**

Musical Theater: Page to Stage will serve as an introductory course to anyone interested in learning about how a Broadway show is put together. A non-performance-based class, Page to Stage will provide an overview of musicals from several decades as the main focus of the course. It will cover various elements of music, voice types, stage lighting, choreography and make-up as they relate to the American musical theater

**FUNDAMENTALS OF MUSIC THEORY** **Grades 9, 10, 11, 12**  
**Course No. 771, 1/4 Year** **.50 Cr**

Open to all students regardless of musical background. Basic musical concepts such as rhythms, scales, key signatures, intervals and chords will be covered. The music technology assisted classroom is used for music history research, and provides an introduction to technology-based learning. If you want to learn how to read and write music, this is the class for you.

**ADVANCED MUSIC THEORY** **Grades 10, 11, 12**  
**Course No. 777, 1/4 Year** **.50 Cr**

Prerequisite: Fundamentals of Music Theory or permission of instructor

Students interested in this course must have a background in basic musical concepts (*Band, Choir or Fundamentals class*). Advanced musical concepts such as harmonic analysis, voicing, arranging and composition skills will be covered. The music technology assisted classroom is

# Performing Arts - Theater

used extensively for creating and performing instrumental and vocal pieces. If you want to learn how to create music, this is the class for you.

**JAZZ IMPROVISATIONAL STUDIES** **Grades 10, 11, 12**  
**Course No. 778, 1/4 Year** **.50 Cr**

Prerequisite: Fundamentals of Music Theory or permission of instructor.

Students interested in this course must play an instrument to participate. The history of Jazz and the variety of styles will be explored through research and performance. Students will learn how to improvise using the "Jamey Aebersold" method. Students will learn about blues and jazz scales, solo construction, and performance techniques. Students will also perform in small group combos.

**ADVANCED INSTRUMENTAL MUSIC PERFORMANCE** **Grades 9, 10, 11, 12**  
**Course No. 780, 1/4 Year** **.50 Cr**

Advanced Instrumental Music Performance class is intended for the student with an instrumental music background and a strong understanding of the fundamentals of performance. Students will be given opportunities to study and play challenging solo and ensemble literature. **Instrumentalists who plan to audition for NH All-State and Jazz All-State ensembles should take this class in preparation for the rigorous audition process.** Primary course work will be based on individual, small ensemble and group practice. There will be several opportunities for technology integration (recording and playback) and analysis of performances. Guest artists will provide "real-life" perspectives in a master class setting.

## THEATER

The Theater Department offers courses in theater and play production. In addition to the course offerings, an ambitious co-curricular program in play production is mounted each year. Plays ranging from a major musical, to full plays, to children's theater are produced yearly. In addition, the department participates in the annual NH State Drama Festival. All PHS students are eligible to participate in the drama program either onstage or backstage.

Courses in the Theater Department should normally be taken in the sequence indicated. A student may take courses out of sequence, but permission must be given by the Drama teacher in advance. All courses in the Drama Department may be taken to satisfy the Fine Arts Education requirement.

**INTRODUCTION TO THEATER A** **Grades 9, 10, 11, 12**  
**Course No. 741, 1/4 Year** **.50 Cr**

Who are the people, and what is involved in producing a play? Explore these topics and more, through group and

individual projects in such areas as: technical theater, costuming, lighting, sound, and the elements of performance! Learn the basics of directing (play selection, casting, blocking and rehearsal techniques), and acting through presenting two-person scenes, "mini-productions," and monologues.

**INTRODUCTION TO THEATER B** **Grades 9, 10, 11, 12**  
**Course No. 742, 1/4 Year** **.50 Cr**

Prerequisite: Introduction to Theater A

A continuation of Introduction to Theater A. Topics may include further study in set design, directing, play reading and analysis, playwriting, the history of theater, and the business of theater management. This class will include group and individual hands-on projects

**TECHNICAL THEATER** **Grades 9, 10, 11, 12**  
**Course No. 743, 1/4 Year** **.50 Cr**

This course is designed for those who are interested in the technical (non-acting) aspects of theater. It will give hands-on experience in set design, building and "set dressing"; sound and lighting design, and stage management. Further topics will include special effects and sound effects, poster and program design, props, costumes and make-up. Students will learn about different types of stages and theaters where technical work may be done. Students may become members of the stage crew for the current PHS production as part of class work.

**ACTING A** **Grades 10, 11, 12**  
**Course No. 747, 1/4 Year** **.50 Cr**

This is a performance based class with emphasis on the techniques and methods of acting. Students will learn about the actor's "instrument" and "craft". Topics may include improvisation and ensemble work, the imagination, the psychological gesture, character and characterization, creative individuality, approaching a part, auditioning, performing, and directing a scene!

**ACTING B** **Grades 10, 11, 12**  
**Course No. 748, 1/4 Year** **.50 Cr**

Prerequisite: Acting A

This class will continue in-depth work on character study, scene work, and play analysis. A major group project may be the public performance of a children's show or short dramatic presentation, with the inclusion of creative movement, interpretive dance, and music (vocal or instrumental).

# Physical Education

Physical Education is an integral part of the total education which contributes to the development of the individual through the natural medium of physical activity-human movement. As one of the health sciences, it is a broad learning area which promotes healthful living and positive health attitudes.

Physical Education will provide students with a basic workable knowledge and understanding of the various activities, and create a level of skill that will enable the students to effectively participate in lifetime sports and fitness pursuits. Our basic objective is to see that our students become active participants and knowledgeable spectators.

All classes are coeducational, and offer an opportunity to work cooperatively, develop leadership and sportsmanship while releasing tension in a constructive manner. Up to 4 credits in physical education may be applied toward graduation.

**PHYSICAL EDUCATION I** **Grade 9**  
**Course Nos. 781, 1/4 Year** **.50 Cr**  
**782, 1/4 Year** **.50 Cr**

**Required**

Freshmen must sign up for both course #781 (inside activities) and #782 (outside activities). The Freshman seasonal course offerings are team and dual sports and an introduction to Project Adventure utilizing the ropes course.

Students must pass the required grade 9 Physical Education I course before selecting any of the following Physical Education electives.

**PHYSICAL EDUCATION II** **Grades 10, 11, 12**  
**Course No. 786, 1/4 Year** **.50 Cr**

This advanced physical education course is more intensive, with greater skill expectations than P.E. I. Seasonal course offerings will include an advanced level of team and individual sports.

**INDIVIDUAL ACTIVITIES**

Archery	Handball
Badminton	Personal Fitness
Cross Country Skiing	Tennis

**TEAM ACTIVITIES**

Basketball	Field Hockey
Volleyball	Floor Hockey
Soccer	Softball
Touch Football	Team Handball
Recreational Games	

**STRENGTH TRAINING** **Grades 10, 11, 12**  
**Course No. 787, 1/4 Year** **.50 Cr**

A coeducational course dealing with the methods of developing size, strength, and endurance, through various weight-training procedures. The course has some lecture sessions dealing with philosophies and body functions. Attention will also be given to cardiovascular fitness through agility work, interval training, as well as learning how to calculate heart rate, maximum heart rate, and how to strengthen your heart. Theory as well as full participation in developing your own weight-training/cardiovascular program is expected.

**STRENGTH BUILDING FOR ATHLETES** **Grades 10, 11, 12**  
**Course No. 788, 1/4 Year** **.50 Cr**

This course offers competitive athletes an opportunity to develop strength for their respective sport, while at school. The students will be expected to already have or create with their coach a strength program. It will then be the student's responsibility to carry out this program and monitor results with the teacher/coach.

**FITNESS THROUGH SPORTS AND GAMES** **Grades 10, 11, 12**  
**Course No. 789, 1/4 Year** **.50 Cr**

Students will explore a variety of ways to improve their fitness through this course. Activities offered will include a variety of non-traditional outdoor and indoor games and lifetime and recreational sports, as well as cooperative, team building activities. Students will be able to work together with their peers, and improve their skills in physical fitness. A classroom component will cover a number of topics to further the student's knowledge of maintaining a physically active life-style.

This course may include units in, but not limited to, individual and non traditional lifelong activities such as archery, bowling, frisbee, tennis, golf, badminton, croquet, bocce, horseshoes, hockey, juggling, and snow sports. Also included will be a variety of conditioning methods such as walking, jogging, circuits, ladder agility drills and use of the weight room.

Activities will be geared towards all ability levels so that everyone can participate.



# Physical Education

**PROJECT ADVENTURE** *Grades 11, 12*  
**Course No. 795, 1/4 Year** *.50 Cr*

This is a fun, exciting, outdoor adventure class that is created on the foundation of teamwork, trust, and respect. The course begins with trust building activities and initiatives, and progresses to learning how to tie knots, rope-seats, belay techniques, and eventually applying all that is learned out on the ropes course. Project Adventure helps to build relationships with old friends and new ones, and assists in getting individuals over their everyday fears. This is an excellent way to start your year or end it. Only one half credit in Project Adventure is allowed.

**PROJECT ADVENTURE II** *Grades 10, 11, 12*  
**Course No. 796, 1/4 Year** *.50 Cr*

Prerequisite: "B" or better in Project Adventure

This course is designed for the students who have taken Project Adventure and want to learn more about what goes into teaching and executing the course. By using concepts of "Full Value", students will learn more about knot tying techniques, low an high element set up and take down, as well as gear retrieval. Self belay techniques as well as belay team management and alternative belaying techniques will also be covered.

**BEGINNING SWIMMING** *Grades 10, 11, 12*  
**Course No. 797, 1/4 Year** *.50 Cr*

This course is designed to improve the swimming skills of the novice swimmer, and to teach the nonswimmer how to swim. The students will be evaluated as to their skill level, and will work to improve that level during the course. Conditioning, stroke mechanics, and safety will be stressed. All students are required to provide their own swim suits.

**WATER SPORTS AND AQUATIC  
 ACTIVITIES** *Grade 10, 11, 12*  
**Course No. 798, 1/4 Year** *.50 Cr*

Prerequisite: Completion of Beginning Swimming Class or with the instructor's approval based on students swimming ability. Students are expected to be competent swimmers.

This course introduces the student to aquatic activities that are not only fun but also promote physical fitness.

Improvement in swimming skills will be stressed. The student will also learn about activities such as wind surfing, water polo, snorkeling, diving, and others with the use of guest lectures, video tapes, field trips, and pool activities.

**SPORTS MEDICINE I** *Grade 11, 12*  
**Course No. 799, 1/4 Year** *.50 Cr*

Prerequisite: "B" or better in Biology

This introductory course is designed for anyone considering athletic training, physical therapy, medical or interested in pursuing careers in athletic training and sports medicine. It will review basic anatomy of the human body and begin prevention, recognition, assessment, management, and rehabilitation of lower extremity sports-related injuries. In addition, sports related illnesses and conditions will be covered. Practical skills in taping and wrapping techniques will be practiced and evaluated throughout the quarter. This course offers the opportunity for American Heart Association adult, child and infant CPR and AED training. Written work, projects, oral reports, and observation hours are required.

**SPORTS MEDICINE II** *Grade 11, 12*  
**Course No. 800, 1/4 Year** *.50 Cr*

Prerequisite: "C" or better in Sports Medicine I

This course will continue studying the applications of sports medicine. It will review the basic anatomy of the human body and lower extremity sports-related injuries and begin prevention, recognition, assessment, management, and rehabilitation of upper extremity sports-related injuries. Practical skills in taping and wrapping techniques will be practiced throughout the quarter. Recertification of American Heart Association adult, child, and infant CPR and AED training will be offered. Written work, projects, oral reports, and observation hours are required.

# Science

The Science Department offers students a strong basic core of science through the required courses of Physical Science, Earth Science, Biology and Ecology which prepare them for the NECAP in their junior year. Most students continue on to take many of our vast array of electives.

The Science Department offers three academic levels to students taking Science 9, Science 10 and Chemistry. Their former teachers and their guidance counselor recommend students to each level. Students may also apply for the honors level in these three courses. Selection is based on grades, classroom performance, teacher recommendation and the application requirements. Advanced Placement is offered to juniors and seniors in Biology and Physics. These students are expected to take the AP exam in the spring.

The Science Department offers a wide variety of science courses taught by an experienced staff. Each elective explores one of the many specialty areas of science and students are also encouraged to create their own Independent Study course, which allows them to branch off from our electives and dive deeper into a particular area of interest. See page 7 regarding Independent Studies.

**Students must first achieve passing grades in Physical Science, Earth Science, Biology, and Ecology in order to be eligible to select any other science courses during junior and/or senior year.**

<i>REQUIRED COURSES</i>	<i>GRADE LEVEL/ PREREQUISITE</i>
Physical Science*	9
Earth Science*	9-10
Biology*	9-11/Physical Science
Ecology*	10-11/Physical Science, Earth Science, Biology

The successful completion of all four required courses listed above is a prerequisite for all elective classes.

ELECTIVES: With Teacher Recommendation

Planetary Astronomy	11-12
Oceanography	11-12
Natural Disasters	11-12
Environmental Issues	11-12
Botany	11-12/B Average in Biology
Zoology	11-12/B Average in Biology
Anatomy and Physiology	11-12/B Average in Zoology
Applied Life Science	11-12
Physics of Predictions	11-12
Topics in Physics	11-12
Applied Chemistry	11-12/Algebra I Recommended
Chemistry**	11-12/Algebra II Recommended
Microbiology	11-12/Chemistry and Algebra II
Physics	11-12/Algebra III or Precalculus
A.P. Biology	11-12/Chemistry and Algebra III
A.P. Physics	11-12/Calculus Concurrently/Physics Recommended

\*Three levels available (Applied, College Prep, Honors).  
 \*\*Two levels available (College Prep, Honors)

Students entering Science 9, Science 10, and Chemistry are recommended for the following levels by their guidance counselor and their teacher based on past

performances. The levels of difficulty are defined as follows:

**HONORS** - This level is designed to offer a very challenging educational environment for students who have shown high academic achievement in this discipline in the past.

Honors science students are expected to perform at a higher level in the following areas: use of hypothetical and deductive reasoning; comprehension and application of science concepts while showing attention to detail. Also, writing skills should be above grade level in order to adequately display an understanding of the scientific method. Successful honors students are self-directed and motivated learners. They are also accepting of academic challenge. Science success is coupled with the ability to apply mathematical concepts to scientific questions.

Placement at this level requires student application and acceptance by the faculty through a selective screening process. Honors and/or A.P. courses are offered in grades 9-12.

In order to adequately prepare for Honors Science during the summer prior to the course students are required to read designated selections and do specific writing assignments. This work is not to be done in collaboration with others. Since the summer assignments are a significant part of the course, it is impossible for any student who has not completed the work to participate in the Honors Program. **Summer work must be postmarked by dates announced at the spring meeting.**

**ACADEMIC/COLLEGE PREP** - This level is designed for students who are planning on going to college. Courses will require students to develop and demonstrate an understanding of complex concepts and themes. Daily homework assignments will reinforce class instruction.

**APPLIED** - This level is designed to meet the needs of students who have not acquired the skills necessary for placement in the academic level. Daily homework assignments will reinforce class instruction.

## REQUIRED COURSES

**PHYSICAL SCIENCE** *Grade 9  
Required, 1/2 Year  
1.00 Cr*

Grade 9 Science is designed to provide a core of scientific knowledge and skills in introductory physics, chemistry, and geology, and to prepare students for other required sciences and the electives offered by the Science Department. Computer and internet use to do research are important aspects of this program. Laboratories involving the use of scientific measuring instruments and mathematical analysis are used to develop higher order thinking skills and problem solving.

# Science

## **EARTH SCIENCE** **Required, 1/4 Year**

**Grade 9, 10**  
**.50 Cr**

Earth Science is a required course that has been designed to introduce students to concepts that lead to an understanding of the development of the universe and of planet Earth. Examples of some concepts that will be studied in detail are plate tectonics, the rock cycle, and geologic time.

## **BIOLOGY** **Required, 1/2 Year**

**Grades 10, 11**  
**1.00 Cr**

Prerequisite: Successful Completion of Physical Science

Grade 10 Science is designed to provide a core of scientific knowledge and skills needed to prepare students for a variety of science electives offered. Computer technology and internet use to do research are important aspects of this program. Laboratory experience and the study of biological concepts help students better understand their positions as members of the world community.

Students who successfully complete Physical Science, Earth Science, Biology, and Ecology will have met the State's Science requirement for graduation and will have earned three credits in science which is equivalent to three years of science.

## **ECOLOGY** **Required, 1/4 Year**

**Grade 10, 11**  
**.50 Cr**

Prerequisite: Successful completion of Physical Science, Earth Science and Biology

Ecology is designed to introduce students to environmental concepts and issues. An introduction to ecological concepts will include an overview of technological tools used to analyze environmental issues. Local and global problems affecting the environment will be covered including global warming, pollution, deforestation and invasive species. Field work and journal writing will be required.

### **GRADE 11 AND 12 ELECTIVE COURSES**

Students must first earn three credits in the four required courses in order to be eligible to select any other science offerings during junior and/or senior year. Future juniors and seniors should plan accordingly.

#### **Life Science Electives**

Anatomy and Physiology	Environmental Issues
Applied Life Science	Microbiology
Advanced Placement Biology	Zoology
Botany	

#### **Earth Science Electives**

Natural Disasters	Oceanography
Environmental Issues	Planetary Astronomy

### **Life and Earth Science Course Descriptions**

## **APPLIED LIFE SCIENCE** **Course No. 440, 1/4 Year**

**Grades 11, 12**  
**.50 Cr**

This elective is designed for the students from Applied Biology who wish to explore topics in Zoology and Anatomy & Physiology. Activity based, this course will examine the development of the various body systems. Each system will be developed through the various animal groups and be completed when compared to the form taken in the human body. It is recommended that this elective be taken by students who have earned a "B" or better in Applied Science 10 - Biology.

## **ZOOLOGY** **Course No. 442, 1/4 Year**

**Grades 11, 12**  
**.50 Cr**

Prerequisite: "B" or better in Academic Biology or interview with Department Head

Explore Kingdom Animalia. This course is designed to introduce students to the features unique to each animal group. System development will be highlighted, tracing changes that occur in the vertebrate classes. Labs will focus on animal dissections.

## **ANATOMY AND PHYSIOLOGY** **Course No. 444, 1/4 Year**

**Grades 11, 12**  
**.50 Cr**

Prerequisite: "B" or better in Zoology, or interview with Department Head

This is a course for students who intend to continue their studies in a medical/biological field. It is recommended that a student is taking Chemistry, 483, concurrently and has had a "B" in Zoology. Included in this course will be an in-depth study of anatomy and physiology of the human body. Through the use of dissection a comparative study of vertebrates will be seen. Also covered in this course is an introduction to biochemistry, biophysics, embryology and pathology. Due to the intensity of the lab component there is a limit to the number of students that may opt for this course.

## **MICROBIOLOGY** **Course No. 446, 1/2 Year**

**Grades 11, 12**  
**1.00 Cr**

Prerequisite: Chemistry, Algebra II

This very intensive course is designed for students who plan to continue their studies in a biological or medical field. This is an in-depth college level course that focuses on the study of microorganisms. Bacteria will be examined in detail using both labs and other activities. Other microorganisms studied will be viruses, fungi and protozoa. Also included in the course work will be the study of various diseases. (The number of students in each section of this class will be limited.)

# Science

**BOTANY** **Grades 11, 12**  
**Course No. 448, 1/4 Year** **.50 Cr**

This course is laboratory oriented. Plant anatomy and physiology are explored through investigations. Students are required to grow and maintain three species of plant. Their observations of these plants are compiled into a term paper analyzing their growth patterns and responses. Class size is limited.

**NATURAL DISASTERS** **Grades 11, 12**  
**Course No. 463, 1/4 Year** **.50 Cr**

This course is designed for students who have an interest in the changing world around us. Events that will be discussed will focus on the impacts that they have on our landscape and on human beings. These will consist of meteorological, climatic, geological and astronomical occurrences. A sample of topics that will be covered are volcanoes, hurricanes, avalanches, and meteor impacts.

**ENVIRONMENTAL ISSUES** **Grades 11, 12**  
**Course No. 464, 1/4 Year** **.50 Cr**

This course is designed to be taught to students who have an understanding of ecological concepts. Issues are discussed that affect our planet both locally and globally. Guest speakers and some field trips are a part of this course. A genuine interest in environmental issues is expected.

**PLANETARY ASTRONOMY** **Grades 11, 12**  
**Course No. 452, 1/4 Year** **.50 Cr**

This course is designed for students already demonstrating an aptitude for science and wishing to gain a comprehensive understanding of this current and expanding field of science. Some of the topics which will be studied in detail are: the cataclysmic processes involved in our solar systems (an in-depth study of each planet) and the possibilities of life elsewhere in our solar system. It should be noted that this course is designed for high interest and does not rely heavily on math physics.

**OCEANOGRAPHY** **Grades 11, 12**  
**Course No. 462, 1/4 Year** **.50 Cr**

This course deals with the physical, biological, and chemical aspects of our oceans. Examples of some of the topics that will be studied are: ocean topography, beaches, waves, tides, fishes, marine mammals, and ocean pollution, just to name a few. Special emphasis will be placed on our local and regional areas; current events will also be discussed.

**ADVANCED PLACEMENT BIOLOGY** **Grades 11, 12**  
**Course No. 487, 3/4 Year** **1.5 Cr**

Prerequisite: Minimum grade of "B" in Biology, Chemistry, and Algebra I and II

This intensive elective is for students who intend to continue their studies in a biology/medical field. This course focuses on cell biology, heredity and evolution. Students will be prepared to take the required AP Biology test in the spring.

### Physical Science Electives

Advanced Placement Physics	Physics
Applied Chemistry	Physics of Predictions
Chemistry	Topics in Physics

### Physical Science Course Descriptions

**APPLIED CHEMISTRY** **Grades 11, 12**  
**Course No. 480, 1/2 Year** **1.00 Cr**

Applied Chemistry is a program for students who plan to either further their education in a technological program or who wish to receive a practical background in chemistry. This program is designed to introduce all students to important concepts of chemistry with an emphasis placed on laboratory experiment framework, which will give substance and meaning to chemical theory. Selected practical applications in industry and the home will enable the students to develop an appreciation of the fundamental role of chemistry in the real modern world.

**CHEMISTRY** **Grades 11, 12**  
**Course No. 483, 1/2 Year** **1.00 Cr**

Prerequisite: Algebra II recommended (can be taken concurrently)

This course is designed primarily to meet the needs of students planning to go to college. It consists of a study of the chemical nature of matter, the solution of various chemical problems, both by mathematics and by laboratory experimentation, and the development of fundamental manipulatory skills and techniques in handling of chemical materials and apparatus.

# Science

**PHYSICS OF PREDICTIONS** **Grades 11, 12**  
**Course No. 491, 1/4 Year** **.50 Cr**

Using scenarios that involve illusions used by magicians, the difference between the nature of science and pseudo-science, and present day ideas of quantum theory, students will develop an understanding of the science principles of inquiry, the laws of motion, general and special relativity and basic quantum theory.

**TOPICS IN PHYSICS** **Grades 11, 12**  
**Course No. 492, 1/4 Year** **.50 Cr**

The goal if this course is to help students gain a working understanding and appreciation of a number of topics in physics that students may not have been exposed to in their science education. This goal will be achieved through a variety of laboratory experiments, assignments, projects, and other explorations that will provide students with opportunities to experience physics in a hands-on interactive manner. Student input will help determine topic selections and additions.

**PHYSICS** **Grade 12**  
**Course No. 494, 1/2 Year** **1.00 Cr**

Prerequisite: Algebra II

This course is designed for the student who plans to continue his/her education in either an academic or scientific field. Major units include kinematics, dynamics, work/energy principles, momentum, rotational mechanics, gravitation, and wave mechanics. If time allows, electricity and magnetism will also be studied. By means of appropriate demonstrations, selected laboratory experiments, and the solution of representative mathematical problems, the student develops a knowledge of the application of important physical laws that relate to his/her physical environment.

**ADVANCED PLACEMENT PHYSICS** **Grade 12**  
**Course No. 495, 3/4 Year** **1.5 Cr**

Prerequisite: Algebra III; Physics strongly recommended

This course is designed for the student who desires a more challenging program than the traditional high school physics course. Emphasis will be placed on the transition from theoretical physics to problem solving. Main topics include mechanics, thermodynamics, light/wave mechanics, electricity and magnetism, and modern physics. This course is intended to help prepare students to take the required A.P. Physics Exam in May.

# Social Studies

A minimum of three credits of Social Studies is required for graduation . You must complete the requirements in each of the following areas:

- I. World Geography .50 credit
- IIA. American Government .50 credit
- IIB. American Studies I .50 credit
- III. American Studies II 1.00 credit
- IV. Social Studies Elective .50 credit

## HONORS PROGRAM

Students entering grades 10, 11, or 12 may apply to the Honors and Advanced Placement Social Studies programs. These programs are designed for students who have the ability to work beyond grade level and who desire more advanced study in the Social Studies. Candidates for Honors American Studies I (grade 10), Advanced Placement United States History (grade 11), or Advanced Placement Modern European History (grade 12) must obtain an application from Guidance, and submit the required materials to the Guidance Department.

In order to adequately prepare for Honors and A.P. Social Studies during the summer prior to the course, students are required to read designated selections and do specific writing assignments. This work is not to be done in collaboration with others. Since the summer assignments are a significant part of the course, it is impossible for any student who has not completed the work to participate in the Honors Program. **Summer work must be postmarked by dates announced at the spring meeting.**

### **I. WORLD GEOGRAPHY** **Grade 9** **Required .50 Cr**

This course is required for one term. It consists of three units: The Five Themes of Geography, U.S. Geography, and World Geography. In the Five Themes unit, students will learn about Location, Place, Movement, Regions and Interaction. It will include scientific theories and fact. In the U.S. unit, students will learn about their country based on the five themes. There will also be some history and economics. In the World unit, students will learn about the continents and how the five themes are connected. If time permits, some specific countries will be studied.

### **IIA. AMERICAN GOVERNMENT** **Grade 10** **Required .50 Cr**

All students are required to complete this half credit course. Students will examine the basic principles and ideals of American government at the local, state, and

federal levels. The structure and operation of the government will be studied with an emphasis on the students' rights and responsibilities as citizens. Historic and current examples will be used to enhance student understanding of our government.

### **IIB. AMERICAN STUDIES I** **Grade 10** **Required .50 Cr**

All students are required to complete this half credit course. Students will trace the history of America from the arrival of the first Europeans to the era of Civil War Reconstruction. Major themes of study include the establishment of the American Colonies, the revolutionary birth of the United States, westward expansion, and the Civil War era.

### **III. AMERICAN STUDIES II - TWENTIETH CENTURY AMERICAN HISTORY**

One credit in American Studies II is required. Students have several options for fulfilling the American Studies II credit.

1. By choosing *American Studies II Survey* or *Advanced Placement American History* a student can fulfill the entire American Studies II requirement.
2. The second option is for students to select TWO HALF-CREDIT MINI-COURSES over the junior and senior years.

### **AMERICAN STUDIES II SURVEY - TWENTIETH CENTURY HISTORY** **Grade 11** **1/2 Year 1.00 Cr**

Prerequisite: American Studies I

American Studies II is a one semester, one credit required course. This course is taken in the junior year and will trace the history of the United States of America from the age of Imperialism at the end of the 19th Century to the present day. The course is designed for the student who desires a chronological overview of the numerous topics that took place in recent American history. Students will examine issues such as America's involvement in foreign policy during the World Wars and the Cold War. Students will also be asked to look at social and economic issues by focusing on the 1920's, the Great Depression and the Civil Rights Movement.

# Social Studies

## ADVANCED PLACEMENT UNITED STATES HISTORY Course No. 299, 3/4 Year

Grade 11  
1.5 Cr

Prerequisite: Completed application by due date, teacher recommendations, completion of summer required materials, take A.P. American History exam in May upon completion of course, successful completion of American Studies I.

This challenging college level course is designed for academically advanced students who wish to gain greater insight into American History. The emphasis of this course is on detailed analytical examination of the political, cultural, and economic aspects of American History from the period of exploration through the post World War II era. Students enrolled in this course will be expected to complete daily reading assignments in secondary sources, primary sources and other related materials, and to show evidence of daily preparation by volunteering information, convincing questioning, and responding to questions from the instructor. Extensive research and writing will be required in order to prepare for the document based essays on the A.P. exam.

## AMERICAN STUDIES II MINI COURSES LEVEL 3 OR 4

*American Studies I and American Government are prerequisites for American Studies II mini courses. Students must take two American Studies II mini-courses to fulfill the American Studies II requirement. Students may elect to take the following half-credit courses for either a level 3 or 4. Students opting for a level 4 will be required to complete additional work and a term project. It is recommended that students who seek admittance to competitive colleges or universities select a level 4. Students must decide on the desired class level when they enter courses, you can not change the level once the class is in progress. **These courses are for juniors and seniors only.***

Level 3 or 4 Mini Courses:

American Government	Modern America
America's Role in the World Wars	Money Makes the World Go Round
Another View	The Cold War
50's in America: Happy Days	The Turbulent Decade: The 60's in America
From Boom to Bust	

## MODERN AMERICA: 70's, 80's, 90's AND BEYOND Course No. 243, 1/4 Year

Grades 11, 12  
.50 Cr

*From Watergate to George W. Bush, how have the past thirty years in America impacted our current world? In this course students will examine the recent past and apply their knowledge to their lives and the events in America and the world today. Students will learn how the United States emerged victorious from the Cold War to become the primary world leader. Students will also examine how both liberal and conservative political forces have shaped public policy, how the economy has shifted from an industrial to information base, and how society and culture reflect the themes of this time period.*

## AMERICA'S ROLE IN THE WORLD WARS Course No. 245, 1/4 Year

Grades 11,12  
.50 Cr

*From "Trench Warfare" to the "Blitzkrieg" the major causes, events, personalities and results of the two most cataclysmic events of the 20<sup>th</sup> century will be explored. These two wars will be examined by comparing and contrasting how the effects of war impacted our policy makers and our people. A review of the changing conditions inside the United States during both wars will be examined as well as the contributions of women, minorities and others. A thorough examination of the results of World War I and how they in part paved the way to the outbreak of World War II will also be considered.*

## FROM BOOM TO BUST (the 20's and 30's in America) Course No. 247, 1/4 Year

Grades 11,12  
.50 Cr

*Flappers, Model T's, Prohibition, the Jazz Age, Al Capone, The Great Depression, the New Deal and FDR. Few eras in American history offer a more colorful and diverse opportunity to examine the significant social, economic, and political events of a time period that saw our country go from the golden opportunities of the twenties to the deep economic troubles of the thirties. From the famous Scopes Monkey Trial to the Lindbergh baby kidnapping; from the solo flight of "Lucky Lindy" to the crash of the stock market, the events of the 20's and 30's offer the student insights into two distinct eras that left an indelible mark on the history of 20<sup>th</sup> century America.*

# Social Studies

**HAPPY DAYS:  
THE 50'S IN AMERICA** Grades 11,12  
Course No. 249, 1/4 Year .50 Cr

*This course is an examination of one of the most misinterpreted decades in American history. Students will look at the often seen social aspects of the decade, the onset of Rock and Roll, the television boom, suburbia and Wonder Bread. Students will also look at what was really going on: McCarthyism and the Red Scare, the Korean War, and the grass roots Civil Rights Movement. Was this decade really Happy?*

**MONEY MAKES  
THE WORLD GO 'ROUND** Grades 11,12  
Course No. 251, 1/4 Year .50 Cr

*What do John D. Rockefeller and Bill Gates have in common? How did the economic boom and the stock market crash of the 1920's lead to the growth of nationalized government during the Great Depression? What happened during the 1950's to create our consumer society? What happens when some Americans are left out of the financial "American Dream"? This economic history of 20th century America focuses not only on economic principals but on the role that money has in your life today and in the future.*

**THE COLD WAR** Grades 11,12  
Course No. 257, 1/4 Year .50 Cr

*From post World War II through 1989 a relatively silent war occurred: the Cold War. In this class students examine the buildup of nuclear weapons after World War II by both the United States and it's allies and the Soviet Union and it's allies. The worldwide threat of a nuclear war led to many conflicts between the 'Big 2' that will be examined: the Korean War, the Cuban Missile Crisis, and the Vietnam War. Students will also examine attempts that were made socially and politically to put an end to the nuclear build up. The course will culminate with the fall of communism in Eastern Europe and how that event shaped the current world structure.*

**THE TURBULENT DECADE:  
THE 60'S IN AMERICA** Grades 11,12  
Course No. 259, 1/4 Year .50 Cr

*From peace, love, and granola to Woodstock, Kennedy, the Chicago eight and the Vietnam War. The focus of this course will be the controversial history of the 1960's and how the American social scene affected this history. Students will be expected to understand the history first and then be ready to examine how the American people reacted to events through a variety of avenues: passive inquisitiveness, violence, peaceful protests, assassination, folk music, riots and rallies. Does the legacy survive?*

**ANOTHER VIEW** Grades 11, 12  
Course No. 253, 1/4 Year .50 Cr

*This course is a history of the American people from the point of view of those who have been exploited politically and economically...the stories of blacks, women, American Indians and poor laborers of all nationalities...told in their own words. It is a history told from the bottom up by "the despised poor", the alienated and the radicals whose lives have created a counter tradition which is not often presented as a coherent version of American History.*

## AMERICAN STUDIES II MINI-COURSES LEVEL 3

*The following listings are half-credit courses. They may only be taken for a level 3. These courses are for juniors and seniors only.*

Level 3 American Studies II Mini-Courses:

America's Pastime/ You and the Law  
Sports in America  
Current Issues in America

**AMERICA'S PASTIME –  
THE INFLUENCE OF  
SPORTS IN AMERICA** Grades 11,12  
Course No. 261, 1/4 Year .50 Cr

*Americans have long been obsessed with competitive athletics on all levels. In many ways sport embodies the basic values of our culture and provides a means of transferring these to successive generations of young people. This course will trace the growth of both individual and team sports to show how they have served as a vehicle for social change while reflecting traditional values. Most of the content will be from the period 1945–2000 and focus on secondary, collegiate, and professional athletics and the resultant economic, social, and psychological impact upon America.*

**CURRENT ISSUES IN AMERICA** Grades 11,12  
Course No. 262, 1/4 Year .50 Cr

*As the title implies, the focus of this course is on the here and now. Starting with the daily headlines we will follow important evolving events while researching pertinent historical influences on the events. Students should expect daily assignments from periodicals, magazines, video news, and the Internet. Class discussion, debate small group research activities and individual presentations will be expected. The purpose of this course is for students to become involved in the daily affairs of the nation and world so they may become knowledgeable, concerned, and active citizens.*



# Social Studies

## YOU AND THE LAW Course No. 264, 1/4 Year

Grades 11,12  
.50 Cr

*What are your rights in the eyes of the law? Have you ever wondered about the laws involved in random drug testing, search and seizure, teen driving laws, Internet access rights, and freedom of speech and expression? In this class students will be expected to look at all points of view on some of this century's most controversial court cases and how these landmark court decisions have a direct effect upon the individual. Critical arguments concerning the conflict between preserving the rights of the individual versus the rights of society will also be examined.*

### SOCIAL STUDIES ELECTIVE COURSES

*The following listings are half-credit courses. In order for students to receive a well-rounded background in the Social Studies all students are required to complete at least one of the following courses. **These courses are for Juniors and Seniors only. THESE COURSES DO NOT FULFILL THE AMERICAN STUDIES II REQUIREMENT***

#### Social Studies Elective Courses

Asian Studies	Holocaust Studies
Comparative World Religions	Modern European History*
Contemporary Global Issues	Psychology
	Sociology
	The Modern Middle East

\*Advanced Placement (AP) level is available in this course

## THE MODERN MIDDLE EAST Course No. 265, 1/4 Year

Grades 11, 12  
.50 Cr

For thousands of years the Middle East has been marked by an extraordinary history. In recent history the Middle East has also become an area of deep interest and concern for the United States. This course will examine the Modern Middle East through the study of its geographic, cultural, religious, history, and the internal conflicts that are impacting the rest of the world. Specific topics of study may include analysis of the Arab/Israeli conflict, the current war against terrorism, and the cultural shifts in the Middle East.

## ASIAN STUDIES Course No. 266, 1/4 Year

Grade 11, 12  
.50 Cr

India, China, Japan, Korea. The names summon immediate and sometimes confusing reactions: mysterious cultures, formidable foes, and potential allies. This class takes an in-depth historical and current look at the cultural, economic, and political systems of Asia and how developments in Asia directly impact the United States. This course is a must for anyone who wants to be ready for the modern emergence of Asia as a major power in our world.

## COMPARATIVE WORLD RELIGIONS Course No. 268, 1/4 Year

Grades 11, 12  
.50 Cr

This course has been designed to introduce the serious student to the basic concepts and practices of the world's major belief systems. Each religion is examined in an historical context and includes the impact of religion on social, political, and cultural traditions. Living in our current day global society it is imperative that we understand and appreciate our neighbors, their frame of reference, philosophies and religious convictions. This course provides the framework needed to enhance this vision. Students will be afforded an opportunity to gain additional insight into the diversity of the religious experience by presenting individual projects of their choosing.

## CONTEMPORARY GLOBAL ISSUES Course No. 270, 1/4 Year

Grades 11, 12  
.50 Cr

The course explores current issues that shape our world and affect us as members of a global community. Topics to be examined include Europe in the post-communist era, the effects of nuclear weapons, the role of underdeveloped nations, terrorism, the impact of disease around the world, as well as a study of global cultural and moral concerns. Students will utilize texts, current periodicals, newspapers, and video sources to gain a deeper understanding of his/her role not only as an American citizen, but as a global citizen.

## PSYCHOLOGY Course No. 272, 1/4 Year

Grade 11, 12  
.50 Cr

The focus of this **survey** course is on the various theories and principles of the science of human behavior. Equally as important is the opportunity for students to apply these concepts to their own lives. The emphasis is always on

# Social Studies

individual and not group or societal behavior. Some of the course content is taken from contemporary sources.

**SOCIOLOGY** *Grades 11, 12*  
**Course No. 273, 1/4 Year** *.50 Cr*

This course is an examination of our society and the institutions we established to fulfill our needs and expectations. Careful analysis of group values, attitudes and behaviors is required. Students will be introduced to various research designs and asked to apply these to current social problems.

**HOLOCAUST STUDIES** *Grades 11, 12*  
**Course No. 163, 1/4 Year** *.50 Cr*

This interdisciplinary 1/2 credit course will be offered jointly through the English and Social Studies departments to juniors and seniors. Juniors or seniors may take this to fulfill .50 credit required social studies elective.

The Social Studies portion of this course will include the history of anti-Semitism, Jewish life in Europe before the Holocaust, the aftermath of WWI, and the Nazi rise to power. Students will analyze the political and social conditions of this period and apply them to current violations of human rights in order to promote dignity and freedom of all people today.

**MODERN EUROPEAN HISTORY** *Grades 11, 12*  
**Course No. 274, 1/2 Year** *1.00 Cr*

The focus of this course is to acquire a better understanding of the characteristics of Western Civilization that have made an impact on not only Europe but the world. Emphasis will be placed on the legacy of Greece and Rome and historical events which have influenced the development of Western Civilization. Present day Europe and its relationship with the United States and the world will be emphasized. Advanced placement option is available.

**ADVANCED PLACEMENT**  
**MODERN EUROPEAN HISTORY** *Grades 11, 12*  
**Course No. 275, 3/4 Year** *1.5 Cr*

Prerequisite: Completed application by due date, teacher recommendations, completion of summer required materials, take APMEH exam in May upon completion of course. Successful completion of American Studies I and II requirements.

The Advanced Placement Modern European History course is designed to challenge academically advanced

students and give them an opportunity to earn college credit by taking the APMEH exam. The course emphasis is on the development of Western Civilization from the Renaissance to the present. The study includes the political and diplomatic, cultural and intellectual, and social and economic history of Europe. The students will be expected to do daily readings in a college text, primary sources, secondary sources and other related materials. Research projects of different types will be required. Students will learn how to write document based essays to prepare for the advanced placement exam.

Students taking the APMEH course are expected to take the exam, which is **content based**. It is a four part test of multiple choice questions (very content specific), two open response essays, and a document based question based upon the knowledge of a subject area's development over several centuries. If a student is not comfortable with this expectation, he/she should choose the level four Modern European History course.

# Student Academic Services

Student Academic Services (SAS) offers assistance to students who require an individualized approach to their academic and/or vocational program. Most students have been referred for formal evaluation and found to have a need for an Individualized Educational Program in academic, social/emotional, or vocational areas. Services are provided based on the student's level of performance and individual needs as determined by the Evaluation Plan. More specific information regarding the area of Student Academic Services may be obtained by contacting the Department at Portsmouth High School (436-7100, extension 2939).

## **ACADEMIC STUDY CENTERS**

Students may work in small groups or one-to-one with a SAS staff member. Emphasis is placed on students developing the necessary organizational and academic skills for success in all disciplines. SAS staff uses Study Center time to apply the accommodations according to student's Individual Educational Plan in all academic areas. Students in Study Center classes have the opportunity to develop appropriate skills while completing course assignments.

Services that can take place in Study Center classes include: previewing content area material; reviewing for quizzes/tests; monitoring assignments which may involve vocabulary, grammar, worksheets, chapter guides and questions; editing written assignments; reading assigned novels/literature with discussion for clarification; outlining chapters; reviewing and expanding upon notes; drilling for reinforcement and mastery; completing (w/assistance) assigned classroom work; using library for resources and research purposes; and supporting other activities as requested by content area teachers.

A weekly contact system with content area teachers has been established so that Study Center teachers are aware of current course requirements and students' academic performance. Parent/teacher contact is also encouraged when appropriate. All contact, written and/or informal, is important for assisting students to achieve success in their classes and supporting the mainstream teachers.

## **SUPPORTS FOR LEARNING**

Supports for learning is designed for adolescents, ages 14-21, that require an individual approach to their academic and/or vocational program. Each student's program is individually designed to meet his/her needs by providing education on a continuum ranging from full inclusion to self-contained. The team consists of parents, teachers, paraprofessionals, specialists, area agencies, peer tutors, and the Portsmouth community.

The goals of Supports for Learning are: to provide the student with the least restrictive learning environment; to create opportunities and build skills to reach each student's maximum potential in the following curriculum areas; academics, experiential learning, communication, social skills, and community; to assist in a gradual transition from the school to the community with the involvement of

family and outside agencies; to create a positive culture that offers a safe environment, which enhances desire to learn; to develop inclusive relationships among peers, staff and community. The following related services are available to the students as designated in their IEP; occupational therapy, physical therapy, speech and language therapy; adaptive physical education; community involvement; peer tutoring and counseling.

## **SERVICES FOR DEAF AND HARD-OF-HEARING**

This is a regional program that educates and provide services to deaf/hard-of-hearing students in the mainstream. The following services are provided: Interpreting - to facilitate communication utilizing the communication style of the student, translate/interpret the content, intent and manner in which information is exchanged; Specialized Instruction - classroom instruction by a teacher of the deaf for students for whom the mainstream has been deemed inappropriate; Consultation - to provide information on deafness, teaching aids/tools to regular classroom teachers, to provide information regarding individual students; Curriculum Adaptation - to assist classroom teachers who have deaf/hard-of-hearing students who can achieve in the mainstream but need some adaptation of materials or modifications of curriculum; Assessment - to assist teachers who find regular assessment procedures not appropriate for deaf/hard-of-hearing students and need alternatives for grading purposes.

## **THE OPTIONS PROGRAM**

Students who meet the criteria of the referral process may receive a wide range of therapeutic and academic services from the Options Program staff. Students with emotional and behavioral difficulties are provided a positive, supported learning environment within the mainstream school setting. These services allow students to continue in the least restrictive placement.

The Options Program offers multiple services to support classroom teachers working with difficult or challenging students and/or students with unique learning styles.

## **SPEECH AND LANGUAGE**

The Speech/Language Pathologist is available to provide services to students with communication disorders and/or language/learning disabilities. A variety of options are offered, including the following: assistance with understanding and using the language of the curriculum; consultation to staff regarding strategies and modifications to benefit the student with language needs; managing alternative means of communication for students with limited speaking abilities; implementing assistive technology to enable students with physical and cognitive challenges to maximize their oral and written communication abilities; teaching strategies to control disfluent speech (stuttering); treating voice disorders (upon referral by a physician). Services are provided on a 1:1 basis, in a small group, by classroom interventions and/or through consultation as deemed appropriate for each student.

# TV Production

Images and sounds are all around us. By recording, editing and presenting these sights and sounds students learn how to communicate with an audience, and how media programmers communicate with us. Students of media create the next generation of television and media programming. Using small camcorders and computerized (non-linear) editing techniques, we learn professional methods to express a vision of our community and our world. The goal is media literacy, and effective communication in the contemporary world and in the future.

Basic studio skills and practice in operating televised broadcasts are included. Students earn a two-year certificate upon completion of the two-year program.

Any TV course may be taken to satisfy the Fine Arts Education requirement.

**INTRODUCTION TO TV PRODUCTION/MEDIA**                      **Grades 10, 11, 12**  
**Course No. 826, 1/4 Year**    **.50 Cr**

This is a hands-on course that explores the basics of production and media by creating short videos while studying topics from recognizing equipment and writing simple storyboards, to videotaping and editing.

**TV PRODUCTION/MEDIA I**                      **Grades 10, 11, 12**  
**Course No. 827, Year**    **2.00 Cr**

A hands-on, full-year course where students participate in individual and crew work to produce higher quality videos. Students study the functions and uses of equipment, the physics of light management and exposure control, types of media and composition, and the practical application of techniques in pre-production, production, and post-production environments. Work habits and safety are also learned and included in student assessment.

**TV PRODUCTION/MEDIA II**                      **Grades 11, 12**  
**Course No. 828, Year**    **2.00 Cr**

Prerequisite: A grade of C- or higher in TV Production/Media I

A course for students who are serious about this career field and desire a more in-depth study and practice of the topics outlined in TV Production/Media I, including good work habits and safety. Students will be responsible for producing some school and community projects. Additional emphasis will focus on career development and post-secondary opportunities.

# Visual Arts

All courses in the Visual Arts Department may be taken to satisfy the Fine Arts Education requirement. A grade of "C-" or better is required in prerequisite courses.

The visual arts program is interdisciplinary in nature and integrates culture, history and writing through the art process. Emphasis is placed on critical thinking, problem solving and expression. A positive work ethic and respect for the studio space is expected. Peer and self-assessment are also an important component of each course.

\*\*Students not able to schedule advanced courses, but who have met the prerequisite, may be integrated within beginning sections. Continuing students will reinterpret the same curriculum as the other students, revisit it in new ways and be expected to work more independently. The student, with guidance from the teacher, will develop one individual project. Permission of Instructor required.

**FUNDAMENTALS OF ART** Grades 9, 10, 11, 12  
Course No. 701, 1/4 Year .50 Cr

The Fundamentals of Art course is a prerequisite for all visual arts courses. This course explores two and three-dimensional art forms. The elements and principles of design are taught through diverse projects and styles of art. Students will use drawing, painting, printmaking and sculpture through a variety of materials to create works of art. All students will demonstrate an understanding of line, color theory, and value in all mediums.

**DRAWING** Grades 9, 10, 11, 12  
Course No. 710, 1/4 Year .50 Cr

Prerequisite: Fundamentals of Art

Drawing is the basis for all art making. Students will draw from life in a way that involves their observations, imaginations and emotions. Line, value, and perspective are emphasized using a variety of drawing styles through still life, cartooning, the figure, landscape and portraiture. The foundations of drawing are taught through a variety of mediums. Sketchbook assignments are required for homework.

**PAINTING** Grades 9, 10, 11, 12  
Course No. 711, 1/4 Year .50 Cr

Prerequisite: Fundamentals of Art

Students experience the expressive act of painting through observation and the study of color. A variety of painting styles are explored through still life, the figure, portraiture, landscape and perspective. The foundations of painting are taught through a variety of mediums. Sketchbook assignments are required for homework.

**INTERMEDIATE DRAWING AND PAINTING** Grades 10, 11, 12  
Course No. 712, 1/4 Year .50 Cr

Prerequisite: Painting and Drawing

This course incorporates an in-depth study of drawing

and painting. New subject matter, mediums and styles are explored. The students will work on developing a more personal style. Assistance in portfolio preparation is available. Sketchbook assignments are required for homework.

**PRINTMAKING** Grades 10, 11, 12  
Course No. 713, 1/4 Year .50 Cr

Prerequisite: Fundamentals of Art

The traditional and contemporary use of the various processes are explored. Prints are made through experimentation with color and repetition with a variety of colored inks, papers, plates and blocks. Students learn numerous printmaking techniques such as stamping, woodcuts, etchings, relief prints, collagraphs, and monoprints. Mixed media, text, combination printing and collage and are used with composite prints, visual books and alternative formats.

**ADVANCED PRINTMAKING** Grades 11, 12  
Course No. 714, 1/4 Year .50 Cr

Prerequisite: Printmaking

This course incorporates a more in-depth study of printmaking and its historical use. New, sophisticated and complex types of processes such as photo transfer and Gocco printing are introduced. Sculptural and three-dimensional presentations of prints as well as large format printing are covered.

\*\*See third paragraph in the introduction section (page 53). Permission of instructor required.

**ADVANCED ART (2-D)  
(PAINTING, DRAWING,  
PRINTMAKING)** Grades 11, 12  
Course No. 715, 1/4 Year (Sem. 1) .50 Cr

Prerequisite: Three classes from the following; Painting, Drawing, Intermediate Drawing and Painting, Printmaking

This rigorous course is designed for experienced students who wish to study two-dimensional art at the highest level. Sophisticated ideas and techniques are intensively explored in a variety of styles through printmaking, drawing, and painting. Large and small-scale works are created. The use of drawing, painting and printmaking mediums and methods are further explored and refined. Students compile and document a portfolio of their work. Sketchbook assignments are required for homework.

**HANDBUILT POTTERY** Grades 10, 11, 12  
Course No. 720, 1/4 Year .50 Cr

Prerequisite: Fundamentals of Art

Students will learn pinch, coil, slab and extruded handbuilding methods to create functional and non-functional forms. Recycling clay, glazing, kiln firing and the use and care of a pottery studio are taught, and surface treatments are explored. Record keeping and glaze notations of works created is part of the studio work ethic.

# Visual Arts

All studio processes will be the responsibility of the students. Sketchbook assignments are required for homework.

**ADVANCED  
HANDBUILDING POTTERY** **Grades 11, 12**  
**Course No. 721, 1/4 Year** **.50 Cr**

Prerequisite: Handbuilt Pottery

This course will integrate slab, extruded work, pinch, and coil in more complex projects. Using a variety of surface treatments to enhance the work will be emphasized: underglaze, carving, oxides, glaze, relief and wax relief. The studio processes will be the responsibility of the students. Sketchbook assignments are required for homework.

\*\*See third paragraph in the introduction section (page 53). Permission of instructor required.

**WHEELTHROWN POTTERY** **Grades 10, 11, 12**  
**Course No. 722, 1/4 Year** **.50 Cr**

Prerequisite: Handbuilt Pottery

Students acquire basic skills in wheel-throwing through functional and non-functional forms. The work of ceramicists and pottery styles and surface treatments will be explored. Integrating hand-built and wheel thrown forms, glazing, and a variety of surface treatments will be developed. Record keeping and glaze notations of works created is part of the studio work ethic. The studio processes will be the responsibility of the students. Sketchbook assignments are required for homework.

**ADVANCED  
WHEELTHROWN POTTERY** **Grades 11, 12**  
**Course No. 723, 1/4 Year** **.50 Cr**

Prerequisite: Wheelthrown Pottery

Students will develop further the ability to throw forms on the wheel, incorporate handbuilt elements and explore their own styles in this three-dimensional process. Surface treatment, glazing and carving and relief will be used. The studio processes will be the responsibility of the students. Sketchbook assignments are required for homework.

\*\*See third paragraph in the introduction section (page 52). Permission of instructor required.

**SCULPTURE** **Grades 10, 11, 12**  
**Course No. 724, 1/4 Year** **.50 Cr**

Prerequisite: Fundamentals of Art

Students create three-dimensional art such as masks, figures, mobiles, stabiles, sandblocks, puppets, and busts. A variety of freestanding and relief sculptures are constructed using clay, wire, wood, cardboard, foam, paper mache, sandblocks, plastercraft and mixed media. Large and small-scale sculptures are created with additive and subtractive methods. A variety of sculptural styles are studied.

**ADVANCED ART (3-D)  
(SCULPTURE, POTTERY)** **Grades 11, 12**  
**Course No. 726, 1/4 Year (Sem. 1)** **.50 Cr**

Prerequisite: Handbuilding, Sculpture

This rigorous course is designed for experienced students who wish to study three-dimensional art at the highest level. Sophisticated ideas and techniques are intensively explored in a variety of styles through sculpture, pottery and the study of artists. The advanced use of new sculpture and clay materials and methods are used to build complex structures.

**ALTERNATIVE PHOTOGRAPHY** **Grades 11, 12**  
**Course No. 730, 1/4 Year** **.50 Cr**  
**\$40.00 Lab Fee**

Prerequisite: Fundamentals of Art and Printmaking

Alternative camera-less photographic processes will be explored as an art form, serving as a foundation for the technical, aesthetic and innovative problem solving skills needed for Photography I and II. Topics covered will include image making using a variety of light sensitive processes; handmade negatives, contact printing, cyanotypes, photograms, pinhole photography, hand-coloring, and digital imaging and manipulation using Adobe Photoshop.

**PHOTOGRAPHY I** **Grades 11, 12**  
**Course No. 731, 1/4 Year** **.50 Cr**  
**\$40.00 Lab Fee**

Prerequisite: Printmaking and Alternative Photography

Students will study photographic history, photographers and significant styles, and focus on effective composition in black and white photography. Topics covered will include 35mm camera operation, processing black and white film, custom enlarging and printing, and natural and artificial lighting. Also included will be continued exploration of alternative printing and digital imaging using Adobe Photoshop.

**PHOTOGRAPHY II** **Grades 11, 12**  
**Course No. 732, 1/4 Year** **.50 Cr**  
**\$40.00 Lab Fee**

Prerequisite: Photography I

Students will fine tune skills learned in Photography I, and learn advanced techniques used in making black and white photographs, including in-depth understanding of camera control in shooting creative images as well as advanced darkroom techniques for making high quality museum grade prints. Students will also advance their proficiency in alternative printing and digital imaging using Adobe Photoshop.

# Welding

## WELDING

Welding is a program that provides students an opportunity to acquire entry-level skills for employment. The program offers practical experience enabling each student to identify with the welding industry. The career options in the welding industry are varied and include such options as follows: welder, metal fabricator, heavy equipment repair, maintenance person and steel worker. Communication skills, a year of physical science and good mathematical skills will enhance ones career opportunities.

**INTRODUCTION TO WELDING**      **Grades 9, 10, 11, 12**  
**Course No. 946, 1/4 Year**      **.50 Cr**

An introduction is provided to welding, one of the principle means of fabricating and repairing metal products. Industry has found that welding is an efficient, dependable and economical means of joining metal in fabricating operations. Students will demonstrate acquired knowledge in oxy-acetylene welding, flame cutting and arc welding through construction of various joint designs and projects. In addition, students will acquire knowledge of the properties of metals and basic blueprint reading.

**ADVANCED WELDING**      **Grades 11, 12**  
**Course No. 947, 1/2 Year**      **1.00 Cr**

Prerequisite: Introduction to Welding

In this course emphasis is placed on shop safety and the development of good work habits such as: punctuality, dependability and responsible behavior. The basis of oxy-acetylene welding and flame cutting with blueprint reading, mathematics, and operation of metal fabrication machinery are covered extensively during this phase. In addition, there is an emphasis on practical application under simulated industrial conditions. The activities are designed to develop proficient skills in the use of oxy-acetylene and arc welding equipment.

*Student initiated course changes will not  
be allowed after the  
beginning of any quarter!*

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