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## INTRODUCTION

The 2010-2011 Planning Guide for Windham High School is written to assist you, the student, to plan your program of studies. We encourage you to begin a series of conversations with others (parents, teachers, counselors, and peers) about your future, your aspirations and your goals.

### **FOUR-YEAR PLAN**

We want you to complete a four-year plan of your program, recognizing that each year you will need to update and reassess your plan. A four-year plan will give you focus and a better understanding of the educational foundation you are building for your future plans—in the work force, college or technical college (pages 8-12), military service, etc. Your four-year plan will be based on one of the career paths that will lead you to a broad career field. The four-year plan also gives you a means to keep track of your graduation.

For those of you who already have begun studies at Windham High School, the Planning Guide is a resource to help you choose your academic courses and priorities – academic, goal setting and achievement does not happen without recognition of what you have already accomplished, as well as reassessment of your future goals, career path and plans.

Your four-year plan should be based on a realistic picture of your abilities, motivation, and pace of learning as demonstrated by prior grades and achievement test results. Your interests and aspirations should also be considered. Self-assessment is critical to this process. Ask yourself, “What do I want to be ready to do when I graduate from Windham High School?” If you have no idea yet, schedule an appointment to talk with your school counselor. There are career interest inventories, which may help you clarify your interests and goals.

Please complete the following self-assessment. Share your insights with your school counselor, parents and teachers. You may have different answers for some of the different subjects or courses you take; however, try to come up with an overall picture.

### **SELF-ASSESSMENT**

Motivation (Consider as indicators your grades and how you do on homework assignments)

Low Motivation Uninvolved: Why am I doing this?	Only Do What Is Required	Good Efforts & Grades May have some lower grades	Involved & mostly high grades	All high grades
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Achievement Test Results (Notice if there is a wide discrepancy between one subject and others)

Behind More Than one grade	Inconsistent Some low scores	Average Scores (40-75%ile)	Above Average (Above 75%ile)	Top 90%ile+
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Learning Pace

Need daily review & learn slowly	Need frequent review to recall	Need some repetition of content	Like to move along with new ideas moderate pace	Fast pace Don't need to review often
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Educational Goals after High School:

- |   |  |
|---|--|
| <input type="checkbox"/> Unsure: What is available?   | <input type="checkbox"/> Work Force: On the job Training, Apprenticeship |
| <input type="checkbox"/> 4-Year College or University | <input type="checkbox"/> Military Service                                |
| <input type="checkbox"/> 2-Year Community College     |  |

### STUDENT SERVICES

The Windham High School Student Services Department believes that each student is unique in his/her intellectual, social, emotional, physical and aesthetic development. We are committed to providing services in academic planning, career education, consultation and support, parental involvement, personal development and human relationships, management of information, and evaluation. We believe that guidance services provided in individual, small groups, and classroom settings are beneficial for all students. For example, small groups are held to discuss career planning, college planning, and scheduling.

A counselor is available to meet with students and with parents from 7:05 a.m. to 2:40 p.m. any school day or until 5:30 p.m. on Tuesdays. Appointments must be made in advance by the student services department secretary. You should feel free to enlist the help of your counselor whenever you need any information or assistance. The counselors work with students throughout the four years, and encourage parents to call or visit. The Student Services department's telephone number is 892-1814, ext 456.

In the Student Services office, students may use a computerized information system, BRIDGES, during study halls or after school. The program helps you to explore occupations that interest you and allows you to look for specific career fields. There is a college search program that will list specific colleges according to your criteria. The program also has a list of scholarships that may be especially useful to juniors and seniors. The Student Services office maintains a library of catalogues, files and reference books dealing with colleges, trade schools, business schools, financial aid, etc. A file of summer programs for enrichment is available for student use.

### GRADUATION REQUIREMENTS

Twenty-one credits are required to graduate from Windham High School. Students must earn credit in the following required courses.

<u>COURSES</u>	<u>CREDITS</u>	<u>COURSES</u>	<u>CREDITS</u>
English	4	Mathematics	3
World History	1	U.S. History	1
Science	*3 (courses)	Physical Education	1
Health	1	Fine Arts	1
Foundations of History	1		
Computer Proficiency-see definition below			

\*3 credits to include courses in Earth Science, Biology, Chemistry, and Physics. (see pages 32-33)

Partial Credit will not be awarded for partially completed subjects. Credit will be awarded only for successfully completed subjects.

In order to pass from one grade to the next, a student must have **5 credits** at the end of Grade 9; **11 credits** at the end of Grade 10; **17 credits** at the end of Grade 11.

STUDENTS IN GRADES 9, 10, MUST BE SCHEDULED FOR A MINIMUM OF 6 CREDITS FOR EACH YEAR, STUDENTS IN GRADES 11 MUST TAKE 5 CREDITS, SENIORS MUST TAKE 4 CREDITS.

### COOPERATIVE EDUCATION

A cooperative arrangement is made between the school, employer, and student whereby the student will receive instruction in both academic subjects and in a vocation. The COOP instructor will be both in the classroom and at the training station as agreed upon by the parties involved. The student typically spends one-half day in school and one-half day in supervised employment. It is designed to assure the student an opportunity to learn and develop an employable skill.

To be eligible for enrollment in the program a student must be a junior or senior who is at least 16 years of age and demonstrate aptitude for and interest in acquiring skills in a particular job as preparation for employment. A written agreement, called a training plan, between the parents, the student must work at least 12 hours and no more than 15 hours during any school week. (2 credits) (Maximum refers to time during school hours.) Demand for the cooperative program is great; THEREFORE, IT IS NECESSARY FOR YOU TO REGISTER FOR A FULL SCHOOL PROGRAM IN CASE YOU ARE UNABLE TO PROCUR A JOB. Students who are not placed in the program by the end of the current school year will be assigned to a regular program for September; therefore, the student must complete a regular

schedule at the time of registration. For further information contact the Cooperative Education Office. There is an application to be considered for the program

## COURSE PHASES

Each phase of course, H, and A.P., indicates the degree of difficulty a student should expect to encounter in the class. Students should talk with their current teacher or guidance counselor if they have questions about a phase of a course.

## DEFINITION OF TERMS

Computer Proficiency: Students are required to attain competency in six areas: Fundamentals/Keyboarding, Word Processing, Database/Information Management, Spreadsheet/Analysis & Functions, Media Presentations and Internet/telecommunications. Information on how to meet this requirement is explained in the computer section of the planning guide.

Elective: Courses, which a student may, choose to take

Phase: The level of courses offered, ST.- Standard, AC – Academic, H - Honors, and A.P. - Advanced Placement.

Prerequisites: A course which must be taken before taking another related course; a standard of achievement needed prior to next course in sequence. For example, English I is required before taking English II.

Required Subjects: Courses required by the State Department of Education and/or the local school system. This term also applies to requirements of specific courses of study. An example is the two years of foreign language required in the college preparatory program.

ST. - Standard The standard level is designed to improve basic skills for students who are currently working below grade level. A strong emphasis on literacy across the curriculum and direct skill instruction will comprise the course structure.

AC. - Academic The Academic level is college preparatory instruction for students who are working near or at grade level and have an interest in pursuing some form of post-secondary study. Students will be expected to work independently outside of class.

H - Honors The Honors level courses are for students who are reading above grade level and who have moved beyond acquisition of basic skills and would benefit from a rigorous and highly independent course of study. Students will be recommended by their teachers for these advanced and faster-paced courses.

A.P. - Advanced Placement Students must be selected to enter the advanced placement program through a department selection committee. In each content area, there is a selection process, which may be based on standardized tests, teacher recommendation and self-nomination. Each year, students will take the Advanced Placement Exam at the end of the course. The AP program is a highly challenging academic program, which is recognized by colleges and universities around the country. It is possible to earn college credit or advanced standing by scoring within a certain range of the AP exam. However, the strongest advantage of the AP program is the strength of the preparation, which a student will undergo, preparation that will prepare a student well for the level of work which is expected at the college level.

## INDEPENDENT STUDY PROGRAM

The independent study program provides an opportunity for advanced study in an area of interest to the students. This program is designed for those students who wish to concentrate on a certain topic that is **not covered in the program of studies**. The Independent study program is available for juniors and seniors. Permission to apply may be given to freshmen and sophomores on a case by case basis.

1. Prior evidence of ability to work independently is required.
2. An Independent study course may be applied to the elective credits required for graduation but may not supplant required courses.
3. No more than two credits may be earned in four years.
4. The student must secure a faculty advisor for his/her program.
- 5.

6. The student must submit a written plan – available from Student Services
  - A. What the program is
  - B. What the objectives are
  - C. The date of completion
  - D. The amount of credit desired
7. If the student does not complete the program or does not reach the objectives he/she has indicated, a course failure will be recorded for the program.
8. The program will be on a pass/fail or graded basis. Additional criteria are required to receive a grade.
9. Programs proposed for consideration must be submitted for approval prior to the beginning of the semester in which the program is to be pursued.
10. The independent study program must have approval by the faculty advisor, counselor, department head involved, parent, and the principal.

No exceptions to the above conditions will be allowed.

### GRADUATION CREDITS EARNED OUTSIDE THE SCHOOL PROGRAM

Graduation credits may be earned outside of the [regular school program]in the following ways.

1. Students may earn up to two credits for remediation of failed courses by attending and passing an approved high school summer school program, successfully completing twenty hours of tutoring for a one credit course with a certified teacher or completing and passing an approved correspondence course.
2. Two credits may be earned by students through correspondence courses if the student requires more elective credits to graduate than he/she can schedule during his or her graduation year.
3. This completion of approved Adult Education class must be approved in the spring of junior year. Students who want to look at this option for U.S. History, for example, must meet with their school counselor and get approval in advance for this option. During the senior year, students must be passing all of their courses at the semester and meet the requirements for the Adult Education program to be eligible to take a course the second half of their senior year. These courses are offered at night, have a strict attendance policy, and often have no cost to the student.
4. PLATO – Credit may be earned through PLATO Learning , self-paced on-line courses for credit recovery and first time course credit.

### Credit Recovery

Windham High School offers an opportunity for a student to recover credit in classes they have failed from the previous year during the school day. In small groups, selected teachers will develop units of study and a contract for a student to complete work to restore a credit from a failed class. Students are eligible to take one credit recovery class in each content area – ie. English, math, science, social studies, etc. The class will be graded on a pass/fail basis.

Students who failed a class with a 65-69 average are eligible and must have permission from their previous teacher, the department head and their school counselor to participate.

Any student who has a failing grade at progress report time in a credit recovery class, will be removed from the class and have their schedule adjusted. Teachers will submit a list of names of student eligible for the program in June and school counselors will notify students that they can take advantage of this program for the following year.

### EARLY COLLEGE FOR ME / EARLY STUDIES

Juniors and seniors may be eligible to take courses at USM, St. Joseph's or one of the community colleges. Students who qualify will be able to get tuition free, or for reduced tuition. Students and/or families are responsible for all additional fees and textbook costs. Students should discuss their options for this early studies program with their school counselor. Prior permission is required.

There are guidelines set by the colleges for admissions. More information can be found on our website under the Student Services section.

## THE SCHEDULING PROCESS

The Scheduling Process and building of the Master Schedule is driven by student requests for courses. This is why it is so important to us that students and parents take time to look at the Planning Guide and ask questions of teachers, school counselors or administrators during the scheduling process. A timeline for the scheduling process is below.

January and February	Students receive Planning Guide, 4-year plan and schedule request sheet. Meetings will be held with all students, either in large groups with juniors, sophomores and freshmen and in classes with incoming eighth graders. Students should talk with their present teachers to get recommendations for courses and levels for the following year
January	8 <sup>th</sup> Grade parents night & Curriculum – <b>February 1, 2010 6:00 p.m.</b> Held in the High School Performing Arts Center.
February vacation	All student requests must be entered in Infinite Campus in by February 10th. Students who do not select electives have them selected by Student Services or Administration. A final decision must be made at this point for staffing and budget implications for the following year.
February and March	Numbers will be reviewed by the administration, curriculum leaders and Student Services. Courses that do not have enough student requests will be deleted. Students will be consulted if there are conflicts.
March – April	The Master Schedule will be built.
April – May	The Master Schedule will be reviewed by department heads for accuracy. Students with schedule conflicts will be meeting with school counselors to look at solutions.
Mid-May	All students should get their schedules, minus study halls. We will have an add/drop period through the end of the year. Students must make changes in their schedule before the beginning of the school year.
June	School counselors will make any changes in schedules to reflect any student failures and send information to parents about summer school options. 8 <sup>th</sup> grade students have a step up day sometime during high school finals week – date to be determined.
August	High school counselors are in a week before school starts to make any last minute changes to schedules. Freshman step up day – date to be determined. Letter will be sent in August to 9 <sup>th</sup> graders.
1 <sup>st</sup> day of school in the fall	All students will receive a copy of their schedules with study halls in place. Students with errors on their schedule should see their counselor immediately to make corrections.

## GENERAL POLICIES

The registration process includes presentations by the counselors and advisors about the typical requirements for each grade and an overview of the four-year plan. If there is disagreement about the phase or course selection, a notice will be sent to the counselor and either a phone contact or conferences held with parents or guardians. Parents will review course selections through the Infinite Campus website.

Course selection should be completed carefully according to grades, interests, and aspirations. The career pathways will be helpful in this process. While it may be necessary to change a course selection at the end of the year because of low achievement or failure, changes will be rare.

### Schedule Changes

Any and all schedule changes must be made by the end of the fifth full day of school. Second semester courses must be added or dropped by the last day of the second quarter. Only in extreme circumstances, will a student be allowed to drop a course after the add/drop deadline. If a course is dropped, for any reason, after the first five weeks, it will remain listed on the transcript with a "WF" (withdraw-fail) or a "WP" (withdraw-pass).

Level changes are allowed if a teacher advises it or the student requests it and the change is supported by the teacher and parent/guardian.

If a senior drops a course after a transcript is sent to colleges, he/she will be required to write a statement to explain the change in his/her schedule. That statement will be forwarded to the colleges.

At the discretion of the teacher, students may be required to make up time/assignments missed if adding a course after the start of the semester.

If unusual circumstances make it necessary to discuss changes after the end of the registration period, a new registration form must be completed and signed by the parent. Changes are made only with sufficient cause and require the approval of the parent, teachers involved, and counselor. Any requests for change in schedule must be in writing. Due to the need to project enrollments for courses, students and parents should not plan to make changes in their schedules in September.

## CAREER PATHWAYS

Each Student will select a broad career path. The selection of a career path will provide:

- \*a program of studies which results in specific preparation for further training
- \*a guided approach to course selection
- \*an opportunity for career awareness and exploration

The two main educational career pathways are:

1-2 years technical education: Courses are designed to expand knowledge and skill levels and prepare you for 2 or 4 Year post secondary programs or for entering the world of work, apprenticeships, military or other training programs. Decision making, problem solving, communication and reasoning will be stressed.

Requires at least a 4 year college degree: Courses are created to expose you to a college preparatory sequence of studies. Critical thinking skills, written and oral communication, research techniques, and problem-solving are emphasized. Also keep in mind that most four-year colleges require the following high school courses as the very minimum accepted for admission. More selective colleges require a greater number of academic courses and encourage the completion of advanced placement and weighted courses.

- |                           |                                 |
|---------------------------|---------------------------------|
| 4 years of English        | 2 years of Lab Science          |
| 2 years of Algebra        | 2-3 years of a Foreign Language |
| 1 year of Geometry        | Computer Proficiency            |
| 3 years of Social Studies |                                 |

## ARTS AND COMMUNICATION CAREER CLUSTER

*CAREERS IN THE ARTS OR COMMUNICATIONS APPEAL TO PEOPLE WHO:*

- \*enjoy oral communication and debate    \* have musical or artistic ability    \*enjoy being independent
- \*like to write stories or poetry or keep a journal    \*enjoy performing in front of people    \*enjoy creative work
- \*seek opportunities for self-expression    \*have a good imagination    \*listen to different types of music

*EXAMPLES OF CAREER OPPORTUNITIES:*

*Careers (on the job training): floral designer - bookbinder - sales clerk - press operator - merchandise displayer - hairdresser/cosmetologist - painter/paper hanger - short order cook*

*Careers (1-2 years technical education): artist - camera technician - chef - disc jockey - drafter - stage technician - travel agent - paralegal - graphic designer - photographer*

*Careers (require at least a 4 year college degree): TV announcer - interior designer - advertising - editor - journalist - lawyer - politician - non-math teacher - music director - architect - actor/actress - teacher*

Grade	English	Math	Science	Social Studies	Foreign Language	Electives Diploma Req.
9 <sup>th</sup>	English I	-Applied Math I xAlgebra I *Geometry +Algebra II	#Earth Science \$Biology(H)	Foundations of Social Studies/ Intro to World History	Foreign Language I or II	Health/ Wellness Computer Courses
10 <sup>th</sup>	English II	-Applied Math II xGeometry *Algebra II +FST	#Biology \$Chemistry (H) (plus 1 semester of Earth Science (H))	World History II US History: A Nation Emerges	Foreign Language I, II or III	Phys. Ed. Fine Arts
11 <sup>th</sup>	English III	-Applied Math III xAlgebra II *FST *Senior Topics +Pre-Calculus	#Intro Chem/Physics #Chemistry \$Physics #Environmental Science	US History American Identity & Foreign Policy	Foreign Language II, III or IV	Co-op Program Vocational Health
12 <sup>th</sup>	English IV	-Consumer Math xFST xSenior Topics *Pre-Calculus +Calculus	#Physics #Environmental Science \$Chemistry(AP) \$Physics II(AP) \$Biology II(AP) \$Human Anatomy/Physiology	Social Studies Electives	Foreign Language IV or V	Co-op Program Vocational

Same symbols indicate the order in which courses will be taken.

**DIPLOMA REQUIREMENTS FOR ALL PROGRAMS:** Fine arts, Computer Proficiency, Physical Education and Health

**SPECIALTY ELECTIVES:**

- |                  |                     |                               |                     |                         |
|------------------|---------------------|-------------------------------|---------------------|-------------------------|
| Photography      | Fashion Fabric I-II | Psychology                    | Law & You           | College Survival Skills |
| Creative Writing | Journalism I-II     | Sociology                     | Sculpture           | Communication Video     |
| Ceramics         | Theatre             | Music Theory I-II             | Poetry              | Fiber Art and Design    |
| Public Speaking  | Fiber Arts I & II   | Concert Band/Chorus/Orchestra |                     |                         |
| Computer Art     | Guitar Lab          | Piano Lab                     | AP Art              |                         |
| Concert Choir    | Band                | Orchestra                     | Tech Theater I & II |                         |

PATHS – Architectural Drafting, Communication Design, Dance, Graphic Design & Printing, Music

WRVC – Architectural Drafting

See pages 42-48 for further information regarding vocational programs.

## BUSINESS AND TECHNOLOGY CAREER CLUSTER

### *CAREERS IN BUSINESS AND TECHNOLOGY APPEAL TO PEOPLE WHO:*

- \*find it easy to meet and talk with new people
- \*have the ability to work under pressure
- \*enjoy working with people
- \*enjoy planning and directing activities
- \*like working with computers
- \*like to solve problems and make decisions
- \*are enthusiastic and self confident
- \*are organized, efficient, and can do detail work with numbers or words
- \*prefer directing the work of others to having others direct your work
- \*are ambitious and achievement oriented

### *EXAMPLES OF CAREER OPPORTUNITIES:*

*Careers (on the job training): bank teller, receptionist, salesperson data entry clerk, customer service representative*

*Careers (1-2 years technical education): appraiser, secretary, bookkeeper, claims adjuster, property manager, travel agent, mortgage broker, claims adjuster, administrative assistant (legal/medical)*

*Careers (require at least a 4 year college degree): accountant, auditor, economist, teacher, loan officer, human resource officer, administrator, hotel and restaurant manager, statistician, database administrator, computer system analyst, network systems analyst, data communication analyst, business management, entrepreneur (business owner)*

Grade	English	Math	Science	Social Studies	Foreign Language	Electives Diploma Req.
9 <sup>th</sup>	English I	-Applied Math I xAlgebra I *Geometry +Algebra II	#Earth Science \$Biology(H)	Foundations of Social Studies/ Intro to World History	Foreign Language I or II	Health/ Wellness Computer Courses
10 <sup>th</sup>	English II	-Applied Math II xGeometry *Algebra II +FST	#Biology \$Chemistry (H) (plus 1 semester of Earth Science (H))	World History II US History: A Nation Emerges	Foreign Language I, II or III	Phys. Ed. Fine Arts
11 <sup>th</sup>	English III	-Applied Math III xAlgebra II *FST *Senior Topics +Pre-Calculus	#Intro Chem/Physics #Chemistry \$Physics #Environmental Science	US History American Identity & Foreign Policy	Foreign Language II, III or IV	Co-op Program Vocational Health
12 <sup>th</sup>	English IV	-Consumer Math xFST xSenior Topics *Pre-Calculus +Calculus	#Physics #Environmental Science \$Chemistry(AP) \$Physics II(AP) \$Biology II(AP) \$Human Anatomy/Physiology	Social Studies Electives	Foreign Language IV or V	Co-op Program Vocational

Same symbols indicate the order in which courses will be taken.

**DIPLOMA REQUIREMENTS FOR ALL PROGRAMS:** Fine arts, Computer Proficiency, Physical Education and Health

### *SPECIALTY ELECTIVES:*

Accounting I	Business Simulation	Public Speaking	Psychology
Sociology	Entrepreneurship	Intro. to Business	College Survival Skills
Electronic Portfolio	Internet Web Site Development		Advanced ICT/EA
			Law & You

\*ICT (Information & Communication Technology)

\*IEA (Intro to Excel and Access)

**PATHS:** Marketing Education, Hospitality WRVC: Automated Business Careers, Marketing, Business Management, Computer Repair, Computer Science

See pages 42-48 for further information regarding vocational programs.

## ENVIRONMENTAL AND NATURAL RESOURCES CAREER CLUSTER

### *CAREERS IN THE ENVIRONMENTAL AND NATURAL RESOURCES APPEAL TO PEOPLE WHO:*

\*would like a flexible work schedule \*enjoy Science \*like to work alone \*enjoy a variety of tasks  
 \*are concerned about the environment \*enjoy travel \*want to be physically active  
 \*want to grow a care for plant \*like wildlife \*like to work outdoors \*want to work with animals

### EXAMPLES OF CAREER OPPORTUNITIES:

Careers (*on the job training*): animal caretaker - dairy worker - grounds keeper - gardener – logger – pest control worker

Careers (*1-2 years technical education*): veterinary technician - fish hatchery - waste management - landscaping - plant and soil technician – animal trainer

Careers (*require at least a 4 year college degree*): environmentalist - geologist - fish and game warden - biologist - meteorologist - ecologist - park ranger – astronomer – microbiologist – zoologist – horticulturist – marine biologist - teacher

Grade	English	Math	Science	Social Studies	Foreign Language	Electives Diploma Req.
9 <sup>th</sup>	English I	-Applied Math I xAlgebra I *Geometry +Algebra II	#Earth Science \$Biology(H)	Foundations of Social Studies/ Intro to World History	Foreign Language I or II	Health/ Wellness Computer Courses
10 <sup>th</sup>	English II	-Applied Math II xGeometry *Algebra II +FST	#Biology \$Chemistry (H) (plus 1 semester of Earth Science (H))	World History II US History: A NationEmerges	Foreign Language I, II or III	Phys. Ed. Fine Arts
11 <sup>th</sup>	English III	-Applied Math III xAlgebra II *FST *Senior Topics +Pre-Calculus	#Intro Chem/Physics #Chemistry \$Physics #Environmental Science	US History American Identity& Foreign Policy	Foreign Language II, III or IV	Co-op Program Vocational Health
12 <sup>th</sup>	English IV	-Consumer Math xFST xSenior Topics *Pre-Calculus +Calculus	#Physics #Environmental Science \$Chemistry(AP) \$Physics II(AP) \$Biology II(AP) \$Human Anatomy/Physiology	Social Studies Electives	Foreign Language IV or V	Co-op Program Vocational

Same symbols indicate the order in which courses will be taken.

DIPLOMA REQUIREMENTS FOR ALL PROGRAMS: Fine arts, Computer Proficiency, Physical Education and Health

### ***SPECIALTY ELECTIVES***

Psychology	Journalism	Public Speaking	Maine Studies
Modular Technology	Adv. In the Outdoors	Sociology	College Survival Skills
			Law & You

WRVC / PATHS: Horticulture

See pages 42-48 for further information regarding vocational programs.

## HEALTH AND HUMAN SERVICES CAREER CLUSTER

### CAREERS IN THE HEALTH AND HUMAN SERVICES APPEAL TO PEOPLE WHO:

- \*are interested in Life Sciences                      \*like to analyze situation, develop solutions and solve problems
- \*have good eye and hand coordination           \*get along with a wide variety of people
- \*enjoy sharing ideas with others                   \*are interested in the human body or mind
- \*enjoy providing service to other people: giving information, seeing to their comfort or enhancing their appearance
- \*have a genuine concern for the health and well-being of others

### EXAMPLES OF CAREER OPPORTUNITIES:

Careers (*on the job training*): home health aide - personal care attendant - tour guide - child care worker - security guard – waitress – guard – prep. cook – dental assistant – nanny – security guard

Careers (*1-2 years technical education*): EMT - registered nurse - medical secretary - teacher's aide - occupational therapy assistant - police officer - veterinary technician – radiological technician – chef – fire fighter – flight attendant

Careers (*require at least a 4 year college degree*): athletic trainer - nurse - teacher - pharmacist - speech pathologist - dietitian - lawyer - dentist - clergy - optometrist - doctor - physical therapist – nurse – psychologist – social worker – urban planner – pre-med – pre-vet

Grade	English	Math	Science	Social Studies	Foreign Language	Electives Diploma Req.
9 <sup>th</sup>	English I	-Applied Math I xAlgebra I *Geometry +Algebra II	#Earth Science \$Biology(H)	Foundations of Social Studies/ Intro to World History	Foreign Language I or II	Health/ Wellness Computer Courses
10 <sup>th</sup>	English II	-Applied Math II xGeometry *Algebra II +FST	#Biology \$Chemistry (H) (plus 1 semester of Earth Science (H))	World History II US History: A NationEmerges	Foreign Language I, II or III	Phys. Ed. Fine Arts
11 <sup>th</sup>	English III	-Applied Math III xAlgebra II *FST *Senior Topics +Pre-Calculus	#Intro Chem/Physics #Chemistry \$Physics #Environmental Science	US History American Identity& Foreign Policy	Foreign Language II, III or IV	Co-op Program Vocational Health
12 <sup>th</sup>	English IV	-Consumer Math xFST xSenior Topics *Pre-Calculus +Calculus	#Physics #Environmental Science \$Chemistry(AP) \$Physics II(AP) \$Biology II(AP) \$Human Anatomy/Physiology	Social Studies Electives	Foreign Language IV or V	Co-op Program Vocational

Same symbols indicate the order in which courses will be taken.

DIPLOMA REQUIREMENTS FOR ALL PROGRAMS: Fine arts, Computer Proficiency, Physical Education and Health

### SPECIALTY ELECTIVES:

Anatomy & Physiology	Public Speaking	Computer courses	Parenting and Child Development
Psychology	Law and You	College Survival Skills	Sociology    Law & You
Foods and Wellness	Culinary Arts	PE Electives	Health II    Life After High School

WRVC / PATHS: Child Care, Health Occupations, Hospitality, Medical Occupations  
See pages 42-48 for further information regarding vocational programs.

## INDUSTRIAL TECHNOLOGY AND ENGINEERING CAREER CLUSTER

### CAREERS IN INDUSTRIAL TECHNOLOGY AND ENGINEERING APPEAL TO PEOPLE WHO:

- \*work well with others
- \*are comfortable working with computers, machines and equipment
- \*have ability to work with tools
- \*like or create, design, assemble, build or repair things
- \*use good observational skills
- \*enjoy problem solving using facts and judgments
- \*ability to work accurately and precisely
- \*have aptitude for math and/or science

### EXAMPLES OF CAREER OPPORTUNITIES:

Careers (*on the job training*): sheet rock installer - iron worker - junior drafter - stock clerk - custodian - machine shop assistant

Careers (*1-2 years technical education*): auto technician - computer technician - electronics technician - mason - drafter - parts manager - surveyor - HVAC - heavy equipment operator – electrician – carpenter – plumber – welder – auto body repair

Careers (*require at least a 4 year college degree*): airplane pilot - automotive instructor - mechanical engineer - architect - civil engineer – math teacher – landscape architect – air traffic controller – electrical engineer – biomedical engineer

Grade	English	Math	Science	Social Studies	Foreign Language	Electives Diploma Req.
Grade	English	Math	Science	Social Studies	Foreign Language	Electives Diploma Req.
9 <sup>th</sup>	English I	-Applied Math I xAlgebra I *Geometry +Algebra II	#Earth Science \$Biology(H)	Foundations of Social Studies Intro to World History	Foreign Language I or II	Health/ Wellness Computer Courses
10 <sup>th</sup>	English II	-Applied Math II xGeometry *Algebra II +FST	#Biology \$Chemistry (H) (plus 1 semester of Earth Science (H))	World History II US History A NationEmerges	Foreign Language I, II or III	Phys. Ed. Fine Arts
11 <sup>th</sup>	English III	-Applied Math III xAlgebra II *FST *Senior Topics +Pre-Calculus	#Intro Chem/Physics #Chemistry *Physics #Environmental Science	US History American Identify & Foreign Policy	Foreign Language II, III or IV	Co-op Program Vocational Health

Same symbols indicate the order in which courses will be taken.

DIPLOMA REQUIREMENTS FOR ALL PROGRAMS: Fine arts, Computer Proficiency, Physical Education and Health

### SPECIALITY ELECTIVES:

Modular Technology CAD Pre-Engineering Technical Theater I & II

WRVC / PATHS: Architectural Design and Drafting, Electricity, Masonry, Computer Technology, Plumbing and Heating, Carpentry, Auto Collision Tech., Welding/Metal Fabrication, Mechanical Tool, Recreational and Marine Repair

See pages 42-48 for further information regarding vocational programs.

## ART AND FINE ART COURSES

*All students need 1 fine art credit to graduate. (2 semester long classes or 1 year long course) Fine Arts Classes, which fulfill the graduation requirement, include: all visual arts classes, all music classes, Drama, Journalism, Technical Theater I and II, Fashion Techniques and Fiber Arts.*

### **ART CONCEPTS AND IDEAS**

Grades 9-12      Half year                      Half credit

This studio-based course is for open-minded students who wish to explore their creativity and expressive capability through the visual arts. A challenging curriculum of drawing and 2-d design will be presented in tandem with art criticism and history. Emphasis will be placed on understanding basic art concepts, technical development and critical thinking skills. This course will provide the foundation required for progressing into all upper level courses.

### **DIGITAL ART**

Grades 10-12    Half year                      Half Credit

Prerequisite: Computer Proficiency and Art Concepts and Ideas BEFORE taking the class (NOT in tandem with the class). Students will need to have access to a digital camera for class assignments.

Art meets technology in this semester long class. Students will learn to use Adobe Photoshop, and will work from original drawings and photographs (digital and traditional) to create computer generated works of art. This is a great class for those students interested in a digital twist on making art. Emphasis on the artistic effects of Photoshop, composition, and design is to be expected. . Please bring to class: your open mind, your imagination and creative thinking skills.

### **ADVANCED DRAWING I & II**

Grades 10-12    Half year                      Half credit

**Prerequisite: Art Concepts and Ideas**

A continuation of what is learned in Art Concepts and Ideas, this drawing class will explore mark-making on the next level by experimenting with different art media and surfaces. Personal expression of thoughtful ideas and the process of reflective creating will be stressed along with technical knowledge.

### **PRINTMAKING**

Grades 10-12    Half Year                      Half Credit

Prerequisite: Successful completion of Art Concepts and Ideas

Printmaking is a fun, sculptural process of creating a printing plate from different materials and techniques and then printing the plate on a printing press.. The results are expressive works of art that can be produced in multiples (a series). In this class, students will experiment with monoprints, drypoint engraving on copper plates, relief prints (linoleum), and collagraphs. This is a fun and active studio class for those who like to experiment with different artistic processes and materials.

### **PAINTING I**

Grades 10-12    Half Year                      Half Credit

Prerequisite: Successful completion of Art Concepts and Ideas

In this class we will experiment with watercolor, acrylic and tempera paint on a variety of surfaces from canvas to collage. The class will provide a supportive and creative environment to explore painting styles and thoughtfully express ideas, life experiences, and personal stories. Focus for the class will be on color and painting techniques. No experience needed. Bring your enthusiasm. (i.e.: Wahoo! We paint today!)

### **PAINTING II *new!***

Grades 10-12    Half Year                      Half Credit

Prerequisite: Successful completion of Art Concepts and Ideas

Painting II is for students who have a desire to continue exploring the creative process in paint. As students continue to understand color, painting techniques and page design, they will use their paintings to express their own personal stories and identities. Students will develop their own creative projects looking to various sources for inspiration, including contemporary and traditional paintings, personal sketches, digital imagery and most importantly: their unlimited imaginations! Once again, bring your enthusiasm and willingness to take creative risks.

### **ADVANCED ART**

Grades 11-12    Full Year                      One Credit

**Prerequisite: Successful completion of Art Concepts and Ideas and/or – Ceramics or Sculpture.**

This course is for those students who would like to study or major in an art field after high school. Classes are a balance between instruction and independent projects. Time is spent on developing and organizing a portfolio.

### ADVANCED PLACEMENT STUDIO ART/DRAWING

Grades 11-12 Full Year One Credit

**Prerequisite:** Completion of Art 1 and 2 and at least one art elective. Teacher permission is also required.

This studio course is for those students who plan to study or major in an art related field after high school. Emphasis will be placed upon meeting the high demands of the required advanced placement portfolio consisting of 40 major works within a variety media.

### AUDIO/VISUAL COMMUNICATION

Grades 11-12 Half Year Half Credit

**Prerequisite:** Successful completion of Art Concepts and Ideas, Permission of instructor required

Students will be introduced to basic video production techniques including camera operation, lighting, editing and visual special effects. This course will also explore the principal roles involved in a typical production environment. Part of this exploration will take form though a field trip to a Portland-based news station. To sharpen the students' production skills, projects such as news reports, instructional videos, video music, animation, and sports will be assigned. The projects will help the students understand how video messages are constructed and also develop critical evaluation skills needed in assessing and analyzing the video medium as a communication tools.

### CERAMICS I

Grades 10-12 Half Year Half Credit

**Prerequisite:** Art Concepts and Ideas

Students will explore clay and the various ways they can work with it, turning ideas into forms. Handbuilding with coils, slabs and pinching will be demonstrated. Students will use equipment such as the potter's wheel, slab roller, and clay extruder. Several firing techniques including "raku", an ancient Japanese process, will be explored.

### CERAMICS II

Grades 10-12 Half Year Half Credit

**Prerequisite:** Art Concepts and Ideas and Ceramics 1.

A continuation of Ceramics 1 but with emphasis on wheel throwing and advanced glaze applications. Classes are a balance between instruction and independent projects.

### SCULPTURE

Grades 10-12 Half Year Half Credit

**Prerequisite:** Art Concepts and Ideas

This course will introduce the student to basic sculptural techniques using both additive and subtractive processes. Students will use materials such as plaster, clay, stone and wood. Construction, modeling, casting and carving techniques will be introduced.

### PHOTOGRAPHY 1 & II

Grades 10-12 Half Year Half Credit **There will be a \$50.00 lab fee for each course**

**Prerequisite:** Art concepts and Ideas 1 & 2

This course will explore the idea of the photographic image as art. Students will be given initial instruction of the functions of the camera and darkroom as they apply to black and white photography. After acquiring competent camera and darkroom skills, students will work on their creative problem solving skills through the lenses of the camera exploring new ways of "seeing" the photographic image as art. Photography II will be an extension of semester I where students will be asked to combine their skills with more challenging projects with alternative techniques.

## BUSINESS/TECHNOLOGY COURSES

### INTRODUCTION TO BUSINESS

Grades 9-12 Half Year Half Credit

This course will introduce students to the world of business and help prepare them for the economic roles of consumer, worker, and citizen. This course will serve as a background for other business courses students may take in high school and in college, assist with consumer decision making, prepare for future employment, and help students effectively perform their responsibilities as a citizen. This course is highly recommended to all students who plan to get a job after high school or go on to business college.

## ACCOUNTING I

Grades 9-12 Full Year One Credit

This course qualifies as one of the three required math credits.

This course introduces students to the basic accounting principles. The importance of keeping good financial records is stressed throughout the course. Students will learn how to analyze business transactions, journalize and prepare financial statements for both a sole proprietorship and a partnership. The students will be asked to put to use the knowledge they learned through problems and business simulations. This course is highly recommended to all students who plan to get a job after high school or go on to a business college.

## ACCOUNTING II

Grades 10-12 Full Year One Credit

Prerequisite: Accounting I

The Accounting II course is a follow-up to Accounting I. College bound students are strongly urged to take this course. Due to the speed that accounting courses are taught at the college level, this course will allow students to keep pace and not to feel the burden that so many college students experience without a proper accounting background. The course will take the student through analysis of departmental systems, partnerships, and corporations. It will also introduce students to computerized spreadsheets and other application software.

## COLLEGE SURVIVAL SKILLS

Grades 9-12 Half Year Half Credit

This course is designed to improve the college-bound student's study skills. Students will learn how to take an active approach to their education and find their own formula for academic success. Students learn to set goals, establish priorities and develop strategies to meet their personal goals. They will have an opportunity to broaden their knowledge of career opportunities by participating in a job shadow experience. Students will learn time-management techniques, skills for effective listening, note taking and test taking strategies, how to read efficiently and deliver oral presentations.

### Exploring Careers for the 21<sup>st</sup> Century

Grade level 9-12 1 semester ½ credit

Do you know what your next step will be? You have a multitude of options and some crucial choices to make. Maybe you'll attend a two-year, four-year, technical college or join the military. Or perhaps, you'll go right into the workplace with a full-time job. In this course, you will learn more about yourself and match your individual interests with possible career options. You will investigate careers, education, and work opportunities. You will learn how to write a resume and interview for a job. And, you will also have an opportunity to participate in a job shadow experience. This course will give you a jumpstart on planning the future that's right for you!

## ENTREPRENEURSHIP

Grades 11-12 Half Year Half Credit

Entrepreneurship is a course designed for the student whose goal is to some day own and operate his/her own business. The actual procedure to starting up a business and the problems that arise in doing so are discussed. During the first quarter, student will be asked to choose a business and proceed as if they were actually going to start this business. Topics such as: Bookkeeping, employer and employee relations, where and how to finance the business, taxation, marketing and sales techniques. Advertising analysis and product development will also be discussed in detail. The course will include outside lectures from area business people. Students will prepare a business plan for their business and present this to the class. The course is highly recommended for anyone who feels that some day he/she will want to stop working for other people and begin working for himself/herself.

## BUSINESS SIMULATION (aka BuŞim)

Grades 10-12 Full Year 1 Credit

Business Simulation is designed to strengthen and broaden understanding and knowledge of the nature of business operations. Students will develop fundamental concepts, principles, and ideas needed to understand how businesses are operated and managed. They will gain an awareness of the many activities, problems, and decisions involved in successfully operating a business. An application process that includes how to create a letter of application, a resume, and proper interviewing techniques are also included. The computer will be used for operating the business as well as other classroom projects. Students will experience working in various capacities such as management, sales, personnel, shipping, accounting, secretarial, and banking with the BuŞim challenge – multiple businesses created and run by the students.

## **BUSINESS SIMULATION (aka Bu\$im) 2**

Grades 11-12 Full Year 1 Credit

Prerequisite: Teacher permission

Business Simulation 2 is designed to prepare students for management level positions. Students will improve principles, and ideas needed to understand how businesses are managed. They will gain an awareness of the many activities, problems, and decisions involved in successfully operating a business at management level. They will prepare and interview the first year students for hire into the Bu\$im organization. The computer will be used for operating the business as well as other projects. Students will experience communicating with community members and businesses in their daily work managing the Bu\$im organization.

### **RELATED INSTRUCTION**

Grades 11-12 Full Year One Credit

This course is required for all first year Cooperative Education students. This related instruction course has been developed to provide a solid curriculum and to fortify the training experience. Flexibility is employed in adapting the outline to individual needs. This course consists of units of study generally related to succeeding in the world of work. Some time will be spent with each trainee to provide individual technical related instruction in her/his particular field of work. Units of study include employer and employee relations, human relations, consumer education, government regulations, economic systems, career planning, job seeking, and job keeping techniques and advancing on the job.

### **3-D WINDHAM—SKETCHUPS**

Grades 9-12 1 Semester ½ Credit

Students will transform Windham, Maine to 3-D...Using Google Sketchup and Google Earth students will use photographs of various points of interest in the Town of Windham such as the Windham Schools, Windham Town Offices, Windham Skate Park and other places of interest. Using Google Sketchup, students will "sketch" select places of interest, add relevant information such as the population for the Town of Windham. Students will then submit their sketch for acceptance to Google Earth to add their sketch as part of Google Earth's satellite images of Windham. The goal will be to convert Google Earth's satellite of Windham to a 3-D version over the next several years.

### **COMPUTERIZED ACCOUNTING FOR FUTURE BUSINESS OWNERS/MANAGERS**

Grades 9-12 1 semester ½ credit

Prerequisite: Enrolled in or have successfully completed Accounting 1.

This course will provide an opportunity for you to see the value of the computer as a tool in keeping accounting records. With the increasing use of computers in business today, you need to learn to maintain accounting records electronically. Today, simply understanding accounting concepts and being able to apply them manually are not enough. You will use simulations to learn QuickBooks and Peachtree Accounting software, two of the more popular accounting software to complete the accounting cycles for a merchandising business. Completion of this simulation will help you to become familiar with computer software and help you appreciate the speedy advantage of computerized accounting over manual accounting. Today very few businesses use manual accounting, so students who plan to own businesses or have accounting careers will definitely need to learn how to use computer software and how to analyze information to make successful decisions about the business.

## **COMPUTER COURSES**

The graduation requirement for computer proficiency requires students to attain competency in six areas: Fundamentals/Keyboarding, Word Processing, Database/Information Management, Spreadsheet/Analysis and Functions, Internet/Telecommunications and Media Presentations. Students may meet this requirement by successfully completing two semesters of either the introductory or advanced levels of ICT and IEA. In addition, any teachers in grades 6-8 may certify a student as proficient in any of the above areas as determined by a common set of criteria developed by the high school and middle school computer teachers.

### **ICT (INFORMATION & COMMUNICATION TECHNOLOGY)**

Grades 9-12      1 semester      Half credit      Fulfills half of the Computer Proficiency Requirement  
Meets computer proficiency: Fundamentals/Keyboarding, word processing and Internet/telecommunications and media presentations

Do you know how to set up an MLA research paper with internal citations and a works cited page? In this course, you will learn how to use a browser to access web sites and use search engines to conduct on-line searches. You will learn how to evaluate these web sites for authenticity and format a research paper. Do you know that many of your high school teachers and college professors use a program to check your paper for plagiarism? You will learn about this software and how you can submit your paper for review. Would you like to be able to type up your paper in record time? In this course, you will learn how to touch-type and improve your speed and accuracy on the keyboard. You will be able to type so fast that your fingers will "fly" across the keyboard! Would you like to impress your teachers and your classmates with your oral presentations? You will learn how to prepare dynamic and active PowerPoint presentations with customized features. Do you want to learn skills that will be invaluable to you in high school and college? Then, you must sign up for this course!

### **INTRODUCTION TO EXCEL & ACCESS**

Grades 9-12      1 semester      Half credit      Fulfills half of the Computer Proficiency Requirement  
Meets computer proficiency: Database/information technology and spreadsheet/analysis and functions

In this introductory-level course, you will master basic database and spreadsheet applications using a powerful Windows-based program, MS Office. With Excel, you will use spreadsheets to sort, manipulate, and represent numerical data. You will use basic math functions, formulas, and notations to create charts and graphs. With Access, you will learn how to use relational database tools to organize vast amounts of information. You will learn how to build, organize, sort, search, and filter databases. You will be able to utilize your knowledge and skills in many of your high school and college courses.

### **INTERMEDIATE TO ADVANCED COMPUTER WORD PROCESSING & MEDIA PRESENTATIONS**

Grades 9-12   1 semester   ½ credit   (fulfills ½ of the computer proficiency requirement)

Meets the following competencies: Fundamentals/Keyboarding, Word Processing and Internet/Telecommunications and Media Presentations.

Are you advanced at using technology? If so, this class is for you! Learn advanced skills that will help you become college ready and increase your abilities to work more efficiently. This class is about improving your technology skills to work smarter, not harder. This is a fast-paced, hands-on approach to learning advanced word processing and media presentations.

### **INTERMEDIATE TO ADVANCED COMPUTER EXCEL & ACCESS**

Grades 9-12   1 semester   ½ credit   (fulfills ½ of the computer proficiency requirement)

Meets the following competencies: Database/Information Technology and Spreadsheet/Analysis and Functions. Would you like to expand your knowledge of Excel and Access? In this fast-paced, hands-on class, you will learn the advanced features of spreadsheets and database applications. Student will learn how to filter data and design data reports for improved data analysis.

### **ELECTRONIC PORTFOLIO DESIGN**

Grades 11-12      1 semester      Half credit

Meets computer proficiency: Media presentations

What is a digital or electronic portfolio? Electronic portfolios are a creative means of organizing, summarizing, and sharing information about your abilities, experiences, and achievements. Many colleges and prospective employers are requiring that applicants present a portfolio of their high school career. In this course, you will have an opportunity to design and create your own personal portfolio using digital photography and the latest technology.

## COMMUNICATING IN A HIGH-TECH WORLD

Grades 9-12 1 semester ½ credit

Meets the following competencies: Internet/Telecommunications

Connections in the 21st Century – using technology to communicate in today's world. This course will explore various communication methods involving technology to include email (epals), blogs, social networking, wikis, Twitters, Skyping, Moodle and Web 2.0. Note: due to the exponential growth of technology, topics are subject to change.

## INTERNET WEB SITE DEVELOPMENT

Grades 9-12 1 semester ½ Credit

This course develops a basic understanding and skill in the design, development, and maintenance of Internet web sites. Topics include web site design methods, Internet fundamentals, HTML, and web-based multimedia. Students will develop sample web documents and design a web site. (It is assumed that students taking this course have a working knowledge of personal computers.)

## ENGLISH COURSES

The English classes are designed to refine and improve the grammar, writing, and literacy skills that students have acquired. Four credits of English (English I, II, III and IV) are required for graduation. A course failure at any level of English must be made up through repeating the course, summer school, credit recovery (for qualifying students), or an approved alternative program..

### ENGLISH I

All FRESHMEN are required to take Standard, Academic, or Honors English.

Standard- 15:1 student-to-teacher ratio – Instruction will focus on reading and writing in preparation for meeting the standard on the common assessments. Students will study units on the short story, poetry, nonfiction, novel elements, mythology, and Shakespeare's *Romeo and Juliet*.

PREREQUISITE: None

Academic – 20:1 student-to-teacher ratio – College preparatory instruction will focus on grammar, composition, vocabulary, and literature, including short stories, novels, mythology, poetry, and *Romeo and Juliet*. Students will complete independent reading and be introduced to research techniques. Students are required to read a summer reading selection to begin the school year.

PREREQUISITE: Passing grade in previous years' English course, teacher's recommendation, and a recommended score of at least 220 on the NWEA Reading Test.

Honors – Teacher recommendation is required. – Instruction will focus on grammar, composition, literature, and vocabulary. Also included will be an in-depth study of *Romeo and Juliet*, including memorization of sonnets. Independent reading and analyses is required, as is a research project. Summer reading assignments must be received by mail on or before the required due date (ordinarily August 15), or the student will be removed from the Honors level at the beginning of school in the fall.

PREREQUISITE: Recommended grade of 93 or higher in previous years' English course, teacher's recommendation, and a recommended score of at least 238 on the NWEA Reading Test.

### ENGLISH II

All SOPHOMORES are required to take Standard, Academic, or Honors English (descriptions as outlined above). The focus of literature study during the sophomore year is World Literature. Prerequisites are outlined below.

Standard – A passing grade in English I.

Academic – Passing grade in previous year's English course, teacher's recommendation, and a recommended score of at least 223 on the NWEA Reading test.

Honors – Recommended grade of 93 or higher in previous year's English course, teacher's recommendation, and a recommended score of 241 on the NWEA reading test.

Grade 10                      Full Year                      One Credit

The English II course is required of all SOPHOMORES. The instruction will focus on grammar, composition and literature. Grammar instruction is specific and comprehensive beginning with a review of English I. Literature study will focus on World Literature from the beginnings in the East through the Renaissance. Vocabulary, drama, poetry, outside reading, literary analyses, and oral reports will be an integral part of assigned work. In all courses, research papers are required. All students are required to complete summer reading. Honors students are required to submit summer assignments by the established deadline(s) or they will be placed in an Academic class upon entering school in the fall.

### ENGLISH III

All JUNIORS are required to take Standard, Academic, Honors, or Advanced Placement English (descriptions as outlined above – student to teacher ratio does not apply). The focus of literature study in junior English is American literature. Prerequisites are outlined below.

Standard – A passing grade in English II.

Academic – A passing grade in previous year's English course, teacher's recommendation, and a recommended score of 226 on the NWEA Reading test.

Honors – A recommended grade of 93 or higher in previous year's English course, teacher's recommendation, and a recommended score of 241 on the NWEA reading test.

Advanced Placement – See course description for prerequisites.

Grade 11                      Full Year                      One Credit

Particular emphasis will be placed on the correct use of grammar in written and oral forms. A variety of American literature will be explored in depth. Several types of oral presentations may be required. Various research projects will be required of AP, Honors, and academic students. Specific instruction and assignments in the following areas will also be given: grammar, vocabulary, drama, poetry, and book reviews or analyses. All students are required to complete summer reading. Honors and Advanced Placement students are required to do the summer writing assignment(s) by the established deadline or they will be placed in a lower level class in the fall.

### ENGLISH III AP

Grade 11                      Full Year                      One Credit

Prerequisites:

1. A minimum of 90 in an Honors level course (or 85 if the student has achieved success at a 95 percentile on some standardized language arts test – SAT, PSAT, Iowa, etc).
2. Recommendation of the sophomore English Instructor.
3. Approval of the Instructor
4. Successful completion of an AP-type writing prompt (scored by at least 2 members of the instructional staff prior to acceptance into the course).
5. Successful completion of all summer reading assignments and assessments.
6. To remain in the course, the student would need to achieve a grade of 85 or higher for each semester enrolled in AP (or year grade).
7. Where applicable – students MUST participate in required speech contests – e.g. Lions Club, Kiwanis, etc.

Students will study major and minor American literary works, including short stories, essays, poetry, drama, and novels. Students will focus on critical analysis through classroom discussion, frequent writing assignments, a persuasive research paper, and varied oral presentations. The course will cover the elements of grammatical and stylistic structure and essay writing, sentence and paragraph analysis, parallel structure, diction, tone, style and will help develop a more sophisticated understanding of grammar, punctuation, usage and mechanics. Students will take the AP English Language and Composition Test at the end of the course.

### ENGLISH IV

All SENIORS are required to take Standard, Academic, Honors, or Advanced Placement English (descriptions as outlined above – student to teacher ratio does not apply). The focus of literature study in junior English is American literature. Prerequisites are outlined below.

Standard & Academic – A passing grade in English III and teacher recommendation.

Honors – A recommended score of 93 or higher in previous years' English course and teacher's recommendation.

Grade 12                      Full Year                      One Credit

English IV will emphasize grammar review, vocabulary development, British literature, research, poetry, drama, and critical writing. All students are required to complete summer reading. Honors and Advanced Placement students are required to do the summer writing assignment(s) by the established deadline or they will be placed in a lower level class in the fall.

### ENGLISH IV AP

Grade 12                      Full Year                      One Credit

Prerequisites:

1. A minimum of 90 in an Honors level course (or 85 if the student has achieved success at a 95th percentile on some standardized language arts tests – SAT, PSAT, Iowa, etc).
2. Approval of the Instructor.
3. Successful completion of an AP-type writing prompt to be scored by at least 2 members of the instructional staff prior to acceptance into the AP Program.
4. Successful completion of all summer reading assignments and assessments.
5. To remain in course, student would need to achieve a grade of 85 or higher for each semester enrolled in AP (or year grade).
6. Where applicable – students MUST participate in required speech contests – e.g. Lions Club, Kiwanis, etc.

In the second year of the AP program, students will study British literary works, including stories, essays, poetry, drama, and novels. Expectations are intensified: more works will be covered with less time spent on writing instruction. Classroom discussion and frequent papers will continue to focus on critical analysis. Students will take the Advanced Placement Literature exam in May.

### ENGLISH ELECTIVES

English electives are intended for enrichment and in some instances to fulfill the Fine Arts requirement. None may be substituted for the required English classes.

### THEATRE

Grades 9-12                      One Semester                      Half Credit

Drama class provides the inexperienced student with an introduction to the basic aspects of theater. The course begins with a brief history of theater and moves on to fundamental acting techniques, theatre craft, script analysis, make-up, set and costume design and lighting. The class, eventually, will be involved in a production. Classes will be supplemented with field trips and outside readings. This course fulfills ½ of the Fine Art requirement.

### ADVANCED THEATRE

Grades 10-12                      One Semester                      Half Credit

Prerequisite: Theatre

This will be a course which takes the basic information from the introductory course to a more intense, in-depth level. Theatre history will focus on specific authors and plays of each period. Acting instruction will include the study of various techniques, including Stanislavsky, Strasberg, and the Method. Each student will also write, produce, direct, act and critique tests as well as techniques and results. The class will present two separate plays for the school. Numerous scenes and monologues will also be presented in class and on the stage. This course will count as ½ credit for the Fine Arts requirement.

### JOURNALISM

Grades 9-12                      One Semester                      Half Credit

The goal of this course is to introduce students to print journalism; to acquaint them with techniques required in all facets of newspaper production, and ultimately to produce a student newspaper for circulation to the students of Windham High School. This course will count as ½ credit for Fine Arts requirement.

### ADVANCED JOURNALISM

Grades 11-12                      One Semester                      Half Credit

Prerequisite: Completion of Journalism with a grade of no less than 85.

Students in the Advanced Journalism course continue to build upon skills acquired in the regular journalism course. Special attention is paid to computer-assisted layout and design of the school newspaper. The course will count as ½ credit for Fine Arts requirement.

### MOVIES AND LITERATURE

**Grades 11-12**      One Semester      Half Credit

Prerequisite: A recommended score of 223 on the NWEA reading test

This course is designed to introduce students to the study of the relationship between various genres of literature and film. Units will explore the novel, the short story and film, theatre and film, poetry and film, while examining the issues and elements pertaining to the genres. Students will also study the elements of film and film-making, as well as, read various criticisms related to the films viewed. All students will be expected to complete various writing tasks in response to both the literature and the movies. Examples of works studied are Washington Irving's "The Legend of Sleepy Hollow" and its relationship with Tim Burton's film version *Sleepy Hollow*, and Jane Austen's *Emma* and its contemporary adaptation, Amy Heckerling's *Clueless*.

### POETRY

**Grades 10-12**      One Semester      Half Credit

This course will explore a wide variety of poets and diverse poetic styles. Poems will be drawn from various eras and cultures, and at least two poets will be studied in depth. Students will also have the opportunity to do independent study on poets, eras or styles that especially interest them, and to engage their personal creative muse and to share some of their own poetry.

### THE HOLOCAUST

**Grades 11-12**      One Semester      Half Credit

This course examines issues surrounding the Holocaust and its aftermath. Students will consider the experiences of victims, survivors, by-standers, rescuers, and perpetrators. We will study non-fiction and fiction texts, films, and works of art, and will attend presentations by Holocaust survivors. Some of the material is very graphic, so parental permission to take the course is required. This class requires the ability to critically read and analyze a variety of texts. Students must have taken U.S. History CP or above, or must be enrolled in U.S. History. Instructor permission is required

### PUBLIC SPEAKING

**Grades 10-12**      One Semester      Half Credit

This course focuses on developing skills in effective speaking and listening. Students will practice planning, organizing, delivering, and evaluating oral presentations for a variety of purposes and a variety of audiences. Students will develop a sense of self-confidence as they better understand communication processes. The relationship between verbal and nonverbal communication will also be explored.

### CREATIVE WRITING

**Grades 9-12**      One Semester      Half Credit

This will be a course focusing on writing that involves the imagination and invention in form and content. Creative writing may include the short story, poetry, and drama. The course will discuss the fundamental elements in a piece of creative writing – theme, setting, characters, and plot. The basic techniques for handling point of view, tone, description, dialog and imagery will also be discussed. Students will be asked to share their writing in an introductory workshop and be required to revise every piece of writing. Prerequisite: All students entering 9th & 10<sup>th</sup> grades must complete a writing prompt and receive instructor permission prior to enrolling in this course.

### READING

**Grades 9-12**      One Semester      Half Credit

This course is designed to improve the reading ability of students. Reading is a complex skill and the instruction will take many different forms on an individually student-designed basis. Instruction will include, but will not be limited to, working with words in context, making meaning as the sole basis for reading, previewing, organizing and summarizing, note taking, structured overviews. The only real assessment of the instruction's value will be each individual student's reading improvement. All students are welcome, but priority will be given to literacy challenged students. This course may be taken for more than one semester, depending upon individual student's improvement and assessment.

## SHAKESPEARE

Grades 10-12      One Semester      Half Credit

"He was not of an age, but for all time!" - Ben Jonson

This semester course is designed for college-bound students who wish to widen their literary experience with one of English's literature's most revered writers, William Shakespeare. In addition to sonnets, students will read a variety of plays from Shakespeare's tragedies, comedies, and histories which are not covered in the core English curriculum. Class discussions will help students understand the history, politics, culture, and language of Shakespeare's time, as well as the literary techniques he used. Formal and informal writing assignments will help students to think critically, to write clearly, and to appreciate the Bard's humor and timeless wisdom. Some oral interpretation and literary criticism will be explored. This course is open only to students in grades ten to twelve.

## TECHNOLOGY EDUCATION COURSES

### TECHNICAL THEATER I

Grades 9-12      One Semester      Half Credit, meets half of the fine arts requirement

This introductory course gives students a foundation in the basics of play production. Class time includes formal instruction in the use of scenery and prop production. Theory will be balanced with a wealth of hands on experience. Students are required to spend at least 10 hours outside of class working on theater related projects. This requirement can be satisfied through participation in after school tech or in a play production.

### TECHNICAL THEATER II

Grades 9-12      One Semester      Half Credit, meets half of the fine arts requirement

Designed to follow Technical Theater I, this course is for more serious techies. In addition to work on school productions, students will focus on the theory and practice of lighting the stage and sound production, in particular learning the mechanics of operating the WHS lighting and sound systems in the Performing Arts Center. Students are required to spend at least 10 hours outside of class working on theater related projects or school assemblies.

### MODULAR TECHNOLOGY

Grades 9-12      One Semester      Half Credit

The Technology Education 1 course has now been changed. Windham High School now has a brand new "Modular Technology Lab". We will be the first high school in the state to offer this new technology to our students. The modular lab will cover construction technology, bioengineering, robotics and automation, and environmental technology. Students will be able to cover two modules in one semester and the modules are randomly assigned.

### MODULAR TECHNOLOGY II

Grades 10-12      One Semester      Half Credit

In Technology Education 2, students will continue their exploration of technology. Students will work individually and in small groups to maximize the skills learned in the Modular Technology Lab. Projects could range in the areas covering transportation, energy and power and communications.

Preference will be given to upper class students at the time of course registration.

### PRE-ENGINEERING

Grades 10-12      Full year      One credit

Prerequisite: Permission of the instructor is required along with a note of recommendation from a math or science teacher. Preference will be given to upper class students at the time of course registration. There are no prerequisites for the class.

Pre-Engineering is designed with the highly motivated student in mind who wishes to pursue a career in some form of engineering. This course is intended to give students a broad background in a variety of areas that will help them prepare for their journey towards college. There are some very common practices that are a must for success in today's job market. Students who choose to take this course will be exposed to the areas of research and development, drafting, blueprint reading, fluid power, electricity, material testing and properties, automation and other areas of engineering as time permits.

## COMPUTER AIDED DRAFTING (CAD)

Grades 9-12      One Semester      Half Credit

This course is an introduction to computer-aided drafting and design systems and their relationship to design, drafting, production, and documentation processes. Emphasis is on understanding and utilizing computer-aided design (CAD) hardware and software. The course focuses on basic 2D and 3D functions as they generally apply to computer-aided design applications. Students taking this course should be self-directed learners. Prerequisites: Computer literacy

## LATIN AND MODERN FOREIGN LANGUAGE COURSES

The major goals of French and Spanish are to enable students to attain a measurable degree of communicative competency in the language, and to develop an awareness of the background, daily life, customs, and traditions of the people in the world who speak these languages. Any foreign language should be studied for at least two years and most colleges recommend that a foreign language be taken for at least three years.

### FRENCH I

Grades 9-11 or permission of instructor (seniors only) Full Year      One Credit

French I is an introductory language course which will enable students to attain a measurable degree of competency in the basic four skill areas: listening, speaking, reading, and writing. The basic text, which stresses real life situations encountered in the target language, is supplemented by workbooks, transparencies, tapes, and teacher-made material. The study of culture is an integral part of the French program. At the end of the course, the student will have acquired a practical vocabulary and a basic knowledge of French sentence structure necessary for communication.

### FRENCH II

Grades 9-12      Full Year      One Credit

**Prerequisite: Minimum grade of 77 in French I**

The second year of French begins with a review of the materials covered in French I and continues with the approach used in the first year. Emphasis is on developing greater proficiency in the four skill areas in culturally authentic situations. Students are expected to speak in French more frequently than in French I.

### FRENCH III

Grades 10-12      Full Year      One Credit

**Prerequisite: Minimum grade of 77 in French II**

The emphasis in the third year of French is on greater self-expression. Skills stressed at the elementary level are expanded. Students are expected to speak more frequently in French. Cultural reading selections on materials are discussed. Short essays, oral reports, and reading a novel may also be required. A basic text is used and it is supplemented with workbooks, tapes, and a variety of audiovisual materials.

### FRENCH III Honors

Grades 10-12      Full Year      One Credit

**Prerequisite: Minimum grade of 85 in French II plus teacher recommendation**

French III Honors covers the French III curriculum more in-depth and at a faster pace. Students will read two short novels as well as be expected to speak French on a daily basis.

### FRENCH IV Honors

Grades 11 or 12      Full Year      One Credit

**Prerequisite: Minimum grade of 85 in French III or French III Honors plus teacher recommendation**

In French IV all skills acquired in the first three years are reviewed and further developed. The primary topic of readings and discussions is French history. There is an extensive review of the concepts of French I, II, and III along with the introduction of more advanced grammatical concepts. Classes are conducted in the language with the aid of current, authentic, cultural materials. Several books each emphasizing a variety of skills are used. Newspapers, magazines and video programs are incorporated to keep material current and discussions lively and relevant.

#### FRENCH V Honors

Grade 12                      Full Year                      One Credit

**Prerequisite: Minimum grade of 85 in French IV plus teacher recommendation**

In French V students are required to actively and comfortably use the language on a daily basis. French V is designed to build the confidence of the student in the use of the language in all skill areas: listening, speaking, reading, and writing. Grammatical concepts are extensively reviewed and are expanded upon and there is a focus on vocabulary building. History, current events, and culture are used to encourage and develop language acquisition and expression. Students express themselves in oral presentations, essays, and projects.

#### SPANISH I Honors

Grades 9-12                      Full Year                      One Credit

**Recommended for students with a 93 or above in English and a score above 238 on the NWEA**

Spanish 1 honors is an introductory course designed for the student who is highly motivated and has exception ability in English and for those who have been previously exposed to Spanish. Emphasis is on developing greater proficiency in the areas of: speaking, listening, reading, and writing. The honors course works at a more rapid pace than basic level 1 and studies the grammar at greater depth.

#### SPANISH I

Grades 9-12                      Full Year                      One Credit

Spanish I is an introductory course designed for the student who wishes to be able to speak and understand the Spanish language. This class focuses on competency in the four basic areas: listening, speaking, reading and writing. The text stresses real life situations encountered in the target language and is supplemented by workbook transparencies; tapes and teacher made materials. The study of culture is an integral part of the Spanish program. At the end of the course, students should have acquired a practical vocabulary and a basic knowledge of Spanish sentence structure necessary for communication.

#### SPANISH II

Grades 9-12                      Full Year                      One Credit

**Prerequisite: Minimum grade of 77 in Spanish I**

Spanish II begins with a review of the materials studies in Spanish I and continues to build on these skills. Emphasis is on developing greater proficiency in all four areas: speaking, listening, reading and writing. The basic text is supplemented with tapes, workbooks, films and teacher made materials. Increased use of Spanish is encouraged and expected.

### SPANISH II Honors

Grades 9-12                      Full Year                      One Credit

**Prerequisite: Minimum grade of 85 in Spanish I or permission of instructor.**

Advanced Spanish II is designed for those students who have a strong interest and an exceptional ability in Spanish. The course covers the same material as a regular Spanish II class but in more depth and at a more rapid pace. The text is supplemented with skill building materials which emphasize the four basic skills of reading, writing, listening and speaking. A study of the Spanish speaking countries and their cultures is an integral part of this course. Advanced Spanish II along with sequential Spanish classes prepares students to take the Spanish Achievement section of the SAT's.

### SPANISH III

Grades 10-12                      Full Year                      One Credit

**Prerequisite: Minimum grade of 77 in Spanish 2**

The emphasis of level 3 is on greater self-expression. Students will take grammar to greater depths and will increase their vocabulary immensely. This course is for the student who truly desires becoming fluent and working hard to get there. There are quarterly cultural projects along with song memorizations. Students will read books, present show-n-tells and use technology throughout the year.

### SPANISH III Honors

Grades 10-12                      Full Year                      One Credit

**Prerequisite: Minimum grade of 85 in Spanish 2**

Spanish 3 Honors is for students who have been highly successful in levels 1 and 2. While the curriculum is the same as basic level 3, the grammar and vocabulary are studied at a more rapid pace and in greater depth.

### SPANISH IV Honors

Grades 11or 12                      Full Year                      One Credit

**Prerequisite: Minimum grade of 85 in Spanish III**

This course emphasizes increased oral proficiency in Spanish through continued conversation, vocabulary development and mastery of grammatical structures. During semester one students will complete a project focusing on Internet based research of Spanish-speaking countries. The semester two project focuses on Spanish and Latin American artists. Students will study five artists in depth and will reproduce several pieces of artwork. Students will read two novels and watch a video series that goes along with novels. By the end of level four students should feel very comfortable with all aspects of the language.

### SPANISH V Honors

Grades 12                      Full Year                      One Credit

**Prerequisite: Minimum of 85 in Spanish IV**

This course emphasizes increased oral proficiency in Spanish through extended conversation, vocabulary development and mastery of grammatical structures. During semester one, students will create a magazine focusing on a topic of their own choice/interest. In semester two, there will be a major video project, which will be written by class members, memorized and acted out while being video taped. Finishing five years of language successfully will prepare students for intermediate to advanced levels in college.

## INTRODUCTION TO LATIN

Latin students focus their attention on the language of the ancient Romans. All Latin courses are reading intensive, with a keen focus on grammar and vocabulary. Also, students become aware of the history, mythology, and culture of ancient Rome. Unlike modern language courses, spoken Latin is not emphasized, although students learn to pronounce the language effectively. The Latin program also stresses English etymology and grammar, as well as the fundamental concepts and institutions, which we have inherited from the ancient world.

### LATIN I

Grades 9-12      Full Year      One Credit

In Latin I students will begin to learn the forms and syntax of the Latin language. They will master a vocabulary of about 600 words. Readings in simple Latin impart cultural information about the ancient world. Readings in English will introduce students to aspects of Roman mythology, history, religion, family life, and a slave-based economy. Through varied and careful analysis of grammar, students will become aware of fundamental processes of language.

### LATIN II

Grades 10-12      Full Year      One Credit

**Prerequisite: Successful completion of Latin I (or equivalent) with a minimum grade of C**

In Latin II students will continue the study of the forms and syntax of Latin. They will study all fundamental Latin sentence structures, except for those found in subordinate clauses in complex sentences. Readings in English will introduce the students to aspects of Roman urban and rural life, history, government, education, and law. By the end of the second year, students will read selections of unadulterated Latin from several different authors such as Julius Caesar.

### LATIN III

Grades 11-12      Full Year      One Credit

**Prerequisite: Successful completion of Latin II (or equivalent) with a minimum grade of C**

The first quarter is dedicated to a thorough review of all Latin vocabulary, paradigms and syntax already studied, as well as an intense study of the remaining grammar not yet learned. Accompanying this review will be a translation of Petronius' *Satyricon*. In the second, third, and fourth quarters, students will turn to close reading and examination of Latin prose and poetry. The second quarter is devoted to prose authors, including the father of the Latin language, Cicero. In the third quarter, students will be introduced to the alluring world of Latin poetry, with the poets Catullus and Horace. Fourth quarter will be dedicated to the study of the works of Ovid. Translation of these literary greats will be accompanied by vocabulary study and extensive derivative work as well as a periodic review of grammar.

### LATIN III Honors

Grades 11-12      Full Year      One Credit

**Prerequisite: Successful completion of Latin II (or equivalent) with a minimum grade average of 85.**

Honors Latin III will be a component of the regular Latin III class. As such, students are expected to complete, in addition to the above Latin III curriculum, a greater amount of work in greater detail. Such work entails larger blocks of translation and a major research paper. Students must have demonstrated exceptional work in Latin I and II and obtain teacher permission before taking this option.

### LATIN IV Honors

Grade 12      Full Year      One Credit

**Prerequisite: Successful completion of Latin III (or equivalent) with a minimum grade average of 85.**

This course is devoted to reading the epic poem of Rome, Vergil's *Aeneid*. Class work will entail regular translation, close reading, intense discussion of Vergil's techniques, and examination of the poem within the historical framework of the incipient stages of the Roman Empire. Furthermore, the course will also focus on vocabulary, grammar review, mythology, politics, and ancient philosophy. Finally, the class will probe the similarities and differences among and between different Latin poets with regard to their style, message, and background.

## MATHEMATICS COURSES

The Math Department recommends that any student who plans to attend a four year college take as an absolute minimum: Algebra I, Geometry, Algebra II, Functions-Statistics-Trigonometry, or Senior Topics in Mathematics; and strongly suggests the student take Pre-calculus and Calculus. Any student planning to further his/her education after high school should take a math course during his/her senior year of high school. Honors courses are offered in Algebra II, Functions-Statistics-Trigonometry, and Pre-calculus. Teacher recommendation is required. To receive honors credit the student must be in the honors class. You cannot do extra work in a regular class and earn honors credit.

Students planning to attend a vocational school or college should check the math requirements for the school and for the trade they plan to learn. Many vocational or technical courses require Algebra I, Geometry, Algebra II, and a computer course. Students planning to take FST, Pre-calculus and/or AP Calculus should have a TI-83 plus or TI-84 graphing calculator.

### **PRE ALGEBRA**

Grades 9-11      Full Year      One Credit

This course is designed for students who have a solid foundation in basic math skills. Students will be introduced to Pre-Algebra and Pre-Geometry topics. A scientific calculator is suggested.

### **APPLIED MATH I**

Grades 9-11      Full Year      One Credit

Applied Math is for the student who needs help reading, interpreting, and solving problems abstractly. This course includes lab work. The course is for students heading for vocational-technical careers. The course covers problem solving, estimation, graphs, charts, table, data analysis, lines, angles, shapes, and formulas. The course is not open to students who have earned a credit in Algebra I. A scientific calculator is suggested.

### **APPLIED MATH II**

Grades 10-12      Full Year      One Credit

Prerequisite: Applied Math I

This course uses the same approach as Applied Math I. The course covers linear equations, nonlinear equations, probability, statistics, trigonometry, factoring, functions, quadratics, systems of equations, inequalities, and some geometry. Vocational or technical colleges will usually consider the completion of Applied Math II as the equivalent of an Algebra I course. The applied math sequence is designed for students planning to attend vocational or technical colleges.. The course is not open to students who have earned a credit in Algebra I. A scientific calculator is suggested.

### **APPLIED MATH III**

Grades 11-12      Full Year      One Credit

Prerequisite: Applied Math II

This course uses the same approach as Applied Math I. The course covers scale drawings, integer operations, linear and nonlinear equations, functions, inequalities, coordinate plane graphing, and two dimensional and three dimensional geometry. If time allows probability, statistics and trigonometry will be covered. A scientific calculator is needed.

### **ALGEBRA I**

Grades 9-12      Full Year      One Credit

Algebra I is taught from the University of Chicago School Mathematics Project textbook. The course is based on applications and includes some work with Statistics, Probability, and Geometry. Students need a scientific calculator for the course. Topics covered in this course are simplifying expressions, linear sentences, lines, distances, slopes, exponents, and polynomials. If time permits, systems of equations, quadratic equations, and functions will be studied.

## GEOMETRY

Grades 9-12      Full Year      One Credit

Prerequisite: Successful completion of Algebra I

Geometry is taught from the University of Chicago School Mathematics Project textbook. Instruction integrates synthetic, coordinate, and transformation approaches to geometry; reinforces and extends knowledge of algebra; and carefully develops an understanding of proof. Area, volume and three-dimensional work are studied. A scientific calculator is suggested.

## ALGEBRA II OR ALGEBRA II HONORS

Grades 9-12      Full Year      One Credit

Prerequisite: Successful completion of Geometry.

Algebra II is taught from the University of Chicago School Mathematics Project textbook. Students will become proficient in the use of Algebraic expressions and sentences to model real-world situations. The course includes work in linear, quadratic, exponential, logarithmic, trigonometric, and polynomial functions as well as matrices. The honors class covers more materials in great depth. A graphing TI-83 Plus or TI-84 calculator is suggested.

## FUNCTIONS, STATISTICS, AND TRIGONOMETRY OR FST HONORS

Grades 10-12      Full Year      One Credit

Prerequisite: Successful completion of Algebra II

Functions, Statistics, and Trigonometry will enable students to display, describe, transform, and interpret numerical information represented as data, graphs, or equations. Statistical and algebraic concepts will be integrated. The use of functions and statistics to model real-world situations is a major theme of the course. The honors class covers more material in greater depth. Students should have a graphing calculator with statistical capabilities, A TI-83 Plus or TI-84 is needed.

## CONSUMER MATH

Grades 10-12      Full Year      One Credit

Prerequisite: One credit in mathematics

Consumer Math is a course designed for the student who wishes to become more proficient in solving consumer-related problems. The course covers the following topics: banking services, wages, taxes, consumer and retail buying, insurance investments, stocks and bonds, home ownership, special business and farm problems, the metric system, and the electronic pocket calculator. Consumer Math is not considered a fourth year math course for students planning to attend college. Students should have a basic calculator that has at least one memory location.

## PRE CALCULUS

Grade 12 Full Year      One Credit

Prerequisite: Successful completion of FST

This course places greater emphasis on Trigonometry than the honors course. Fewer topics are covered compared to the honors section of the course. This course will give the student necessary preparation to take college Calculus. Students need a graphing calculator; a TI-83 Plus is needed.

## PRE CALCULUS (Honors)

Grades 11-12      Full Year      One Credit

Prerequisite: B or higher in FST

Pre-calculus prepares students for Calculus, which is required for any scientific profession; such as engineering, and computer science. Topics covered in this course are analysis of functions, notions of limit, analytic geometry, and trigonometry. An introduction to calculus and discrete mathematics is included in the course. Students need to have a graphing calculator; TI-83 Plus is needed.

## AP CALCULUS AB

Grade 12            Full Year            One Credit

Prerequisite: B or higher in Pre-Calculus

Calculus is offered as an advanced course in mathematics for students who have successfully completed a course in Pre-Calculus with a B or higher. The course will examine the characteristics of algebraic, trigonometric, transcendental, and hyperbolic functions. Applications of the derivative and the definite integral will be used to solve problems of motion and change. The textbook used will closely follow the recommendations of the committee on Mathematics of the Advanced Placement Program and the University of Southern Maine Calculus program. As long as Project ASPIRE Calculus continues with USM, students will receive four college credits from USM for successful completion of this course. Only C grades or better are transferable to other colleges and universities. Not all colleges or universities accept credits from other institutions. Topics covered by this text meet the requirements set forth in the syllabus of the College Entrance Examination board for the Advanced Placement AB Examination. Students need a graphing calculator; a TI-83 Plus is recommended.

## SENIOR TOPICS IN MATHEMATICS

Grades 12            Full year            One credit

**Prerequisite: teacher recommendation and successful completion of Algebra 2.**

This course is designed for seniors who want a 4<sup>th</sup> year of mathematics and want to be better prepared for required math courses at colleges and community colleges. This course includes work in linear, quadratic, exponential, and trigonometric functions, probability and statistics, finance problems, using formulas, and problem solving. Minimum calculator requirement is a scientific calculator; preferred is a TI-83 plus graphing calculator.

## AP STATISTICS

Grades 11 or 12    Full Year            One Credit

**Prerequisite: B or higher in Alg 2 and successful completion of FST**

This course may be taken the same year as Pre-calculus or Calculus.

AP Statistics is offered as an advanced course in mathematics for students who have successfully completed Algebra 2 with a B or higher. The course will examine data collection, data analysis, probability and statistical inference. Student will use graphs and numerical summaries to study and analyze data and study proper methods for data collection. Probability topics include chance, variation and risk. Also, different methods of statistical inference will be studied. The textbook used will closely follow the recommendations of the committee on Mathematics of the Advanced Placement Program and the University of Southern Maine Introduction to Statistics program. As long as Project Aspire Statistics continues with USM, students will receive four college credits from USM for successful completion of this course. Only grades of C or higher are transferable to other colleges and universities. Not all colleges or universities accept credits from other institutions. Topics covered in this course meet the requirements set forth in the syllabus of the College Entrance Examination board for the Advanced Placement Statistics Examination. Student should have a graphing calculator; a TI-83 Plus is recommended. Students must complete summer work; see teacher in the spring for details.

## MUSIC COURSES

*Note: All music courses satisfy the Fine Arts requirement for graduation.*

### CONCERT CHOIR

Grades 9-12      Full Year      One Credit

The Concert Choir emphasizes vocal techniques and the exploration and interpretation of various periods and styles of choral literature. The repertoire varies from year to year so that the course covers a considerable range of literature over a four year span. Concert Choir is open to all students without an audition.

### CONCERT BAND

Grades 9-12      Full Year      One Credit

Concert Band is designed to provide a major outlet for instrumental music students on all brass, reed, and percussion instruments. An exposure to many areas of band music literature from the classics to the present will be included. The band works for a finished product applying musical terms and expressions as they relate to the literature.

### ORCHESTRA

Grades 9-12      Full Year      One Credit

High School Orchestra is a string ensemble for students with several years of playing experience. Class emphasis is on the preparation of music from many different eras and styles. Students will have an opportunity to advance specific skills and techniques.

**Students who chose band, choir, or orchestra are required to participate in many public performances after school throughout the year in order to complete the requirements for the course and receive a grade.**

### BASIC PIANO LAB

Grades 9-12      Half Year      Half Credit

Students will learn note reading, rhythm interpretations, correct keyboard technique, basics of composition and improvisation, how to interpret presets and learn to use MIDI technology. The student will learn to provide simple accompaniments, to play "by ear" simple melodies and will produce a finished composition as a final product. This course will be taught on a Yamaha keyboard and will use Piano Discovery and Score Writer

### ADVANCED PIANO LAB

Grades 9-12      Half Year      Half Credit      Prerequisite: Basic Piano Lab

Advanced piano lab will be a continuation of Basic Piano Lab. Skills will continue to be developed, as well as broadening the student's repertoire. Improvisation and jazz reading will be introduced. Students will have a listening/research project, as well as a final recital performance. The method book used will be Adult Piano Adventures, Book 2, as well as supplementary materials.

### MUSIC THEORY I

Grades 10-12      Half Year      Half Credit

Music Theory I begins with the basic language of music and the symbols used to read and study music. Students will progress to harmonic analysis and 4-part writing. Sight singing, ear training, and rhythmic dictation will be stressed.

## **MUSIC THEORY II**

Grades 10-12      Half Year      Half Credit      Prerequisite: Successful completion of Music Theory I  
Music Theory II is a continuation of Music Theory I. The course will begin with a brief review of basic technology and terminology. Work on advanced skills and the use of them in music analysis, arranging and composition will follow. The course will also contain sections dealing with music history.

## **GUITAR LAB**

Grades 9-12      Half Year      Half Credit  
Students will learn how to tune and string a guitar, the basics of note reading, guitar tablature, chord symbols, chord change patterns, basic finger picking styles, strumming styles and will learn a variety of music. The student will learn to accompany a basic 12 bar blues melody in different keys and produce a finished composition as a final product. This course will be taught on a 6 string acoustic guitar and will use the Hal Leonard method book plus supplementary materials. Students must supply their own 6 string guitar or have access to one for the class. Students must provide their own acoustic guitar or have access to one to use for the class.

## **ADVANCED GUITAR LAB**

Grades 9-12      Half Year      Half Credit      Prerequisite: Guitar Lab  
Advanced guitar lab will be a continuation of Basic Guitar Lab. Skills will continue to be developed, as well as broadening the student's use of styles and chords. Improvised solos and jazz reading will be introduced. Students will have a listening/research project, as well as a final recital performance.

## **MUSIC HISTORY**

Grades 10-12      Half Year      Half Credit  
In this course, students will cover a brief overview of music history, emphasizing the impact on current music by past masters. The student will learn some of the basic forms and styles of the periods of music history – ancient, medieval, Renaissance, Baroque, classical, romantic, and modern and how their influences have affected popular music of the 20<sup>th</sup> century. Music styles that have developed since 1900 in serious and popular music will also be studied, as well as the influence of musical theater.

## **MUSIC INDUSTRY**

Grades 9-12      Half Year      Half Credit  
Music Industry will explore the various non-performance careers available in the field of music, such as music therapy, recording engineering, instrument repair, retail music business, artist management, music publishing, and more. Class will involve research, guest speakers and a final project focusing on one of the available careers. Additional opportunities for job shadowing and field trips may be available

## **FINE ARTS SURVEY**

Grades 9-12      Half Year      Half Credit  
Fine Arts Survey will explore some of the connections between the visual arts, music and drama. A variety of topics will be covered as we explore the effect of history on arts/music/drama. Basic knowledge of art, music and drama will be reviewed, as well as developing a basis for interpreting finished products such as concerts, art displays, and plays. Class will involve research, possible field trips and a final project focusing on an approved topic relating at least two of the fields of art/music/drama.



## HEALTH II

Grade 11-12

One Semester

Half Credit Health

**Pre-requisite – Health and Wellness**

Health Education II is an activity based semester course to meet all the health education standards and content areas. Topics will include wellness concepts, nutritional health, personal health, adolescence growth and development, family life, safety and accident prevention and consumer health.

## LIFE AFTER HIGH SCHOOL

Grades 11-12

One Semester

Half Credit Health

**Pre-requisite – Health and Wellness**

"Life after High School" is a practical course designed to help prepare students for living on their own. This course offers students the opportunity to receive Level II health credit through hands-on coursework. The content areas and activities encourage wise consumerism. Students practice informed decision-making related to health, housing, and relationships. The class is enhanced with class lessons online to help student's access current and reliable information

## FOODS AND WELLNESS

Grades 10-12

One Semester

Half Credit Health

**Pre-requisite – Health and Wellness**

(1/2 Credit toward Health requirement if combined with the Parenting and Child Development class)

Explore the dimensions of wellness in the foods lab! This course gives you practical information and skills for daily life. Coursework includes nutritional meal planning, safety and sanitation, healthy food preparation, personal wellness, and informed consumerism. Students work in groups with an emphasis on collaboration, organization, and management.

## PARENTING AND CHILD DEVELOPMENT

Grades 10-12

One Semester

Half Credit Health

**Pre-requisite – Health and Wellness**

(1/2 Credit toward Health requirement if combined with the Foods and Wellness class)

Physical, emotional, social and intellectual development and how it relates to family is the framework of this course. Students explore the rewards and responsibilities of parenting and practice strategies to foster healthy relationships and strong families. School and community service is an integral part of the curriculum.

## PHYSICAL EDUCATION ELECTIVES

Grades 10-11

One Quarter

One Quarter Credit

**Prerequisite: Freshman Health and Wellness**

Students must take 2 quarters to meet graduation requirements. Each nine-week course will include two activities plus a fitness component including fitness testing. Students can choose activities based on their interest, however, they may not repeat an activity if it is offered a second time in the semester (unless it is a level change).

Quarter 1

### Archers & Anglers

#### No Child Left Inside

What is physical activity in the 21<sup>st</sup> century? This is a *new* course designed for all skill levels which will offer students the opportunities to enjoy the Maine outdoors through Archery and Fly Fishing. Come learn the basics of fly-casting, fly tying, conservation & fish habitat, and basic archery skills. Students will learn how to organize a fishing trip and a successful archery competition. Through the efforts of the Future Fishermen Foundation and the National Archery in the Schools Program students will be learning on state of the art equipment from L.L. Bean. Field trips along the Pleasant River and other Maine destinations will be designed to provide a final assessment of student learning. Come join us in the pursuit of achieving lifelong wellness.

#### Ultimate Frisbee/Flag Football

Students will be taught the rules and regulations of each sport. Students will also learn to score and referee each event and participate in a competitive setting. Skills and strategies will be emphasized. Remember to dress warm.

#### Golf/Tennis

This outdoor course is designed for all skill levels. Students will learn the importance of patience and concentration in a non-competitive setting. Students will learn various aspects of each sport including techniques, course management, rules and regulations, and equipment care.

#### **Aerobics/Yoga**

Students will be taught a variety of movement forms. Yoga, flexibility, relaxation and strength activities will also be introduced.

#### **Weight Training/Games**

Let us set up a weight training program for your individual needs! This course will be for the students interested in serious weight training.

#### **Ballroom Dance**

Students will learn the basic waltz, fox-trot, Cha-cha, Jitterbug(swing), Polka and Disco. Jonathan Miele from the Maine State School for the Performing Arts will be instructing the classes.

#### **Adventures in the Outdoors**

Team taught Science and PE

Based on Maine's outdoor heritage, it is important to learn outdoor skills. This course accommodates 12 students per each quarter offered and teaches students many diverse outdoor skills and team building concepts. Students will learn kayaking, climbing, Nordic skiing, snow shoeing, and orienteering/navigation skills, as well as topography, nature, team building, and trip planning concepts. Two field trips to utilize the students new skills will also be required as part of the course. The season will determine the field trip destinations and curriculum.

#### **Leisure Activities (quarter 1 and 4 only)**

This course includes a plethora of lifetime activities. Students will have the opportunity to enjoy games such as Bocce Ball, Horseshoes and croquet. Fly-fishing will be an outdoor activity introduced within the quarter. Most activities involve individual as well as team strategies in an outdoor setting

Quarter 2

### **Physical Education Leadership 1**

**Grades 11-12**

#### **Pre-requisite – Permission from instructor**

This class will be for the junior and senior students who are interested in pursuing a career in teaching, coaching or officiating. Students will mentor the physical education staff in the elementary, middle and high schools. Students will work with the head teacher teaching skills to students, assisting in the supervision of cardio & weight rooms and officiating a variety of team sports. An interview is mandatory before acceptance into class.

#### **Aerobics/Yoga**

Students will be taught a variety of movement forms. Yoga, flexibility, relaxation and strength activities will also be introduced.

#### **Speedball/Floor Hockey/Lacrosse**

If you like action and a fast-paced team environment then this is the course for you! Speedball is a sport which combines the skills of soccer, football, basketball, and ultimate Frisbee. Energy and enthusiasm are prerequisites for this course.

#### **Ballroom Dance**

Students will learn the basic waltz, fox-trot, Cha-cha, Jitterbug(swing), Polka and Disco. Jonathan Miele from the Maine State School for the Performing Arts will be instructing the classes.

#### **Weight Training/Games**

Let us set up a weight training program for your individual needs! Students will lift three days a week and on the off days play a variety of games and activities. This course will be for the students interested in serious weight training.

#### **Rock Climbing 101**

Quarter 2 or 4 during period 8

Students will learn all aspects of rock climbing. Come learn the basics of knot tying, rappelling, belaying, top rope climbing, lead climbing, anchor building, and experience the vertical art of climbing. Students will also learn how climbs are rated and will create their own routes on the rock wall. Come and climb on our own climbing wall and solve the vertical puzzles.

## Quarter 3

### **Volleyball/Racquet Sports**

A course where you crave more than just recreation. Emphasis will be placed on the power game of volleyball. Also enjoy the competitive atmosphere of badminton, pickleball, and ping pong. Students will have the opportunity to play in a tournament within the class.

### **Aerobics/Yoga**

Students will be taught a variety of movement forms. Yoga, flexibility, relaxation and strength activities will also be introduced.

### **Speedball/Floor Hockey/Lacrosse**

If you like action and a fast-paced team environment then this is the course for you! Speedball is a sport which combines the skills of soccer, football, basketball, and ultimate Frisbee. Energy and enthusiasm are prerequisites for this course.

### **Weight Training/Games**

Let us set up a weight training program for your individual needs! Students will lift three days a week and on the off days play a variety of games and activities. This course will be for the students interested in serious weight training.

### **Advanced Weight Training**

#### **Pre-requisite Weight training**

This class is an upper level weight training class for students who have already taken weight training.

### **Adventures in the Outdoors (Quarter 1 and 3 only)**

Based on Maine's outdoor heritage, it is important to learn outdoor skills. This course accommodates 12 students per each quarter offered and teaches students many diverse outdoor skills and team building concepts. Students will learn kayaking, climbing, Nordic skiing, snow shoeing, and orienteering/navigation skills, as well as topography, nature, team building, and trip planning concepts. Two field trips to utilize the students new skills will also be required as part of the course. The season will determine the field trip destinations and curriculum.

## Quarter 4

### **Physical Management**

This class is designed for the non-athletic student who needs to work on skills and fitness in non-competitive situations. Emphasis will be placed on lifelong fitness through lab experiences that are geared for improvement rather than achievement. Regular assessments will be given as individual program goals are met.

### **Golf/Tennis/Outdoor Games**

A beginner course to introduce the students to the basics. Emphasis will be placed on mechanics of each activity. Scoring and the understanding of rules will be covered along with an in-class tournament.

### **Athletic Conditioning**

Are you in need of off-season training or do you demand more from yourself physically? This higher level class will prepare you for the athletic excellence you strive for. Weight training, aerobic and anaerobic training, flexibility and nutrition will be the foundation of this class. Your specific goals, hard work and willingness to try new challenges will make your plan successful. Approval from the Department Chair will be required.

### **Aerobics/Yoga**

Students will be taught a variety of movement forms. Yoga, flexibility, relaxation and strength activities will also be introduced.

### **Leisure Activities (quarter 1 and 4 only)**

This course includes a plethora of lifetime activities. Students will have the opportunity to enjoy games such as Bocce Ball, Horseshoes and croquet. Fly-fishing will be an outdoor activity introduced within the quarter. Most activities involve individual as well as team strategies in an outdoor setting.

### **Rock Climbing 101 (Quarter 2 during period 8 or Quarter 4 during period 7 )**

Students will learn all aspects of rock climbing. Come learn the basics of knot tying, rappelling, belaying, top rope climbing, lead climbing, anchor building, and experience the vertical art of climbing. Students will also learn how climbs are rated and will create their own routes on the rock wall. Come and climb on our own climbing wall and solve the vertical puzzles.

### **Climbing and Casting(quarter 4)**

Grades 11 – 12

What is it like to be in tune with yourself, using your mind and muscles, to accomplish a task outdoors? Join us as we share time engaging in technical rock climbing and master the basics of fishing. Come learn the basics of knot tying, rappelling, belaying, top rope climbing, lead climbing, and experience the vertical art of climbing. Work hard to learn how to create/design a climbing/fishing expedition that goes anywhere in the world. During this quarter class you will also experience the art of fly fishing. You will discover information about aquatic life, fly tying, fly casting, spin-casting,

kayak fishing, fish behavior, and fish science. This class gets you outdoors and may include outdoor culminating experiences fishing on the Pleasant River, Casco Bay, or rock climbing in Pownal/Fryeburg. Join Mr. Martin and Mr. Riddle and build skills to “take it outside.”

## FAMILY AND CONSUMER SCIENCE

Meet your required Fine Arts and Health credits in a fun, hands-on environment! Courses in the Family and Consumer Science Department provide diverse options for building lifelong skills. Exposure to practical science, art, and career-related experiences offers students meaningful opportunities to develop the knowledge, skills, and attitudes needed to become responsible family and community members. Students participate in team and individualized learning experiences in which they develop and practice skills in critical thinking, communication, decision making, and time management that allow them to “...wonder, explore, and achieve.”

### LIFE AFTER HIGH SCHOOL

Grades 11-12

One Semester

Half Health Credit

**\*\*This class may be taken as a health elective with permission of instructor if Health requirements have been met**

**Pre-requisite – Health and Wellness**

“Life after High School” is a practical course designed to help prepare students for living on their own. This course offers students the opportunity to receive Level II health credit through hands-on coursework. The content areas and activities encourage wise consumerism. Students practice informed decision-making related to health, housing, and relationships. The class is enhanced with class lessons online to help student’s access current and reliable information

### FOODS AND WELLNESS

Grades 10-12

One Semester

Half Credit

**\*\*This class may be taken as a health elective if requirements have been met**

**Pre-requisite – Health and Wellness**

(1/2 Credit toward Health requirement if combined with the Parenting and Child Development class)

Explore the dimensions of wellness in the foods lab! This course gives you practical information and skills for daily life. Coursework includes nutritional meal planning, safety and sanitation, healthy food preparation, personal wellness, and informed consumerism. Students work in groups with an emphasis on collaboration, organization, and management.

### PARENTING AND CHILD DEVELOPMENT

Grades 10-12

One Semester

Half Credit

**\*\*This class may be taken as a health elective if requirements have been met**

**Pre-requisite – Health and Wellness**

(1/2 Credit toward Health requirement if combined with the Foods and Wellness class)

Physical, emotional, social and intellectual development and how it relates to family is the framework of this course. Students explore the rewards and responsibilities of parenting and practice strategies to foster healthy relationships and strong families. School and community service is an integral part of the curriculum.

### CULINARY ARTS

Grades 10-12

One Semester

Half Credit Class

**Pre-requisite – Foods and Wellness or permission of teacher**

Impress your friends and family with your food preparation skills and prepare for a possible career in the hospitality industry! Learn from one another and from visiting chefs. Students will work in teams to prepare a variety of foods such as yeast breads, poultry, meats, vegetables, vegetarian dishes, and baked products. Students will also explore foods and cooking techniques from other cultures in an independent International Foods project. Throughout the course emphasis will be on healthful eating and food preparation methods and responsible environmental habits.

## FIBER ARTS

These courses are designed for students who want to express their creativity by doing their own sewing and design while earning art credit. Students develop skills that can be applied in their daily lives and in careers such as fashion design, fashion merchandising, and interior decorating.

### FIBER ART I

Grades 9-12

One semester

Half Credit Fine Arts

Fiber Art I is an introductory art course in which the element and principles of design are incorporated in textile projects. Students who prefer hands-on work will enjoy this class. Coursework includes: selection and care of fabrics, reading and following pattern directions, and safe use of tools and equipment. Students will express themselves in Fiber Art I as they demonstrate a variety of skills through individual performance and projects.

### FIBER ART II

Grades 9-12

One semester

Half Credit Fine Arts

Prerequisite: Fiber Art I

Fiber Art II encourages students to apply the characteristics of art and practice skills through the design and construction of fiber and textile art. Students continue to work independently and to express themselves through art projects. Some projects include clothing items, home decorating items, and accessories.

### FIBER ART AND DESIGN

Grades 10-12

One semester

Half Credit Fine Arts

Prerequisite: Fiber Art or permission of teacher

Fiber Art and Design is a study of fibers, fabrics and interior spaces as an art form. Students explore their own creativity as they identify strategies they may use to plan and design projects and creates appealing surroundings. Students will plan projects based on their particular interests and skill levels. Through their projects they apply the principles and elements of design to improve their apparel and surroundings.

## SCIENCE COURSES

The science curriculum is a course of study designed to meet the individual student's educational needs as they relate to science. Emphasis is placed on the process of scientific inquiry by the students so they can discover and interpret scientific knowledge, develop desirable attitudes, interests and appreciation related to science, the work of scientists, and the relationship of science to our society. The student is encouraged to develop behaviors that can be applied to the solution of current and future problems of the scientific age in which they live. Inquiry is stimulated through various means, using the laboratory as a focal point for learning. Individual laboratory experiences as well as small group projects are the main focus of most science classes. With block schedules, all science courses are lab courses.

All students are required to successfully complete courses in Earth Science, Biology, Chemistry and Physics. Three credits in Science are required for graduation.

## STANDARD EARTH SCIENCE

Grades 9            Full Year            One Credit

Prerequisite: Passing Grade in 8<sup>th</sup> grade science course.

Earth Science is designed to help students develop an understanding of the planet Earth and its place in space. The general topics of investigation will be geology, meteorology, astronomy and oceanography. Students will study the impact of human and other activities on the type of pace of change in ecosystems and learn the importance of resource management, controlling environmental impacts and maintaining natural ecosystems in our community, in the state and in the world.

## ACADEMIC EARTH SCIENCE

Grades 9            Full Year            One Credit

Prerequisite: Passing Grade in 8<sup>th</sup> grade science course, recommendation of 8<sup>th</sup> grade Science Teacher.

This course requires a higher level of reading, writing and math skills than the Standard level. Earth Science is designed to help students develop an understanding of the planet Earth and its place in space. The general topics of investigation will be geology, meteorology, astronomy and oceanography. Students will study the impact of human and other activities on the type of pace of change in ecosystems and learn the importance of resource management, controlling environmental impacts and maintaining natural ecosystems in our community, in the state and in the world.

## HONORS EARTH SCIENCE

Grade 10            one semester            One half credit

This Earth science course is designed for students who enter high school taking the honors Biology class. These students need to take this course to get the exposure to the earth science curriculum needed to be successful on the MEA exam and to meet the standards for earth science for graduation. It is an intense study of Earth Science designed for the honors student only.

## STANDARD BIOLOGY I

Grades 10-12      Full Year            One Credit

Prerequisite: passing grade in Earth Science

Biology is designed to meet the acceptance requirements for a post secondary technical school. Most standard biological concepts will be covered with some lab activities. Topics covered will include: classification, ecology, evolution, cells, disease, plant and animal reproduction, human biology, and genetics.

## ACADEMIC BIOLOGY I

Grades 10-12      Full Year            One and One Half Credits

Prerequisite: 80 average in Earth Science and Science Teacher recommendation

This course is designed to meet the lab science requirement for most colleges. This is a course will include use of microscopes and dissection. Other topics may include genetics, microbiology, anatomy, physiology, conservation, ecology and botany.

## HONORS BIOLOGY I

Grades 9-12        Full Year            One and One Half Credits

Prerequisite: 93 average in 8<sup>th</sup> and 9<sup>th</sup> grade science, teacher recommendation and a recommended Reading score of at least 238 and a recommended Math score of at least 253 on the 8<sup>th</sup> Grade NWEA Test. (Students must demonstrate not only honors level ability, but also proper attitude and work ethic). **All Freshman Students taking Honors Biology I must take either Honors Earth Science or Academic Earth Science in their Sophomore year.**

Honors Biology is a fast-paced, in depth Biology course for students who want to get the most out of their high school science experience. Many students who take Honors Biology do so with the intention of pursuing biologically related careers. Honors Biology also serves as a Pre-A.P. Biology course for students planning on taking Advanced Placement Biology in their junior or senior year. To excel in Honors Biology, students must have not only the academic ability to keep up with the coursework, but must also have the maturity, motivation, and discipline to work independently and take full advantage of all learning opportunities offered. Strong organizational skills are also an invaluable asset to the Honors Biology student. Material covered will include the full spectrum of biology from biochemistry to ecology.

### **ADVANCED PLACEMENT BIOLOGY II (AP)**

Grades 10-12      Full Year      One and One Half Credits

Prerequisites: : A grade of 85 or better in Honors Biology I or 93 or better in Academic Biology I, an 85 or better in Academic or Honors Chemistry I, and approval of the Instructor. Completion of Academic or Honors Physics, or taken concurrently. (Students should demonstrate a high degree of autonomy, excellent work ethic, and above average math skills.)

Biology II is designed for those students who are considering a career in the Biological sciences or health field. Students who are taking this class will develop an understanding of the molecular basis of life, the workings of biological systems, and the process of scientific inquiry. This will be accomplished through class discussions, labs, lectures, student designed research and peer critiques of research designs. Major topics will include molecules and cells, heredity and evolution, and organisms and population.- Students are encouraged to take the A.P. exam at the conclusion of the course.

### **ACADEMIC CHEMISTRY I**

Grades 10-12      Full Year      One and One Half Credits

Prerequisite: A grade of 80 or better in Earth Science, Biology and Algebra I

This course will provide solid training in working with chemical equations, chemical reactions, problem solving and atomic structure. This is integrated with laboratory experiments that illustrate and make practical application of the theory. Students learn to use laboratory equipment and have an opportunity to practice laboratory techniques.

### **HONORS CHEMISTRY I**

Grades 10-12      Full Year      One and One Half Credits

Prerequisite: A grade of 85 or better in Earth Science, Biology and Algebra I, and Teacher recommendation.

This is a very demanding, theoretical chemistry course. The course uses a college text, which incorporates an algebraic approach to all topics that are covered. Laboratory experiments that illustrate theories and demonstrate important laboratory techniques are incorporated in the course. This course prepares students for A.P. Chemistry.

### **ADVANCED PLACEMENT CHEMISTRY II (AP)**

Grades 11-12      Full Year      One and One Half Credits

Prerequisite: A grade of 85 or better in Biology at the Academic or Honors level, an 85 or better in Honors Chemistry I and approval of the Instructor. Completion of Academic or Honors Physics or taken concurrently.

A.P. Chemistry covers the same material as a college chemistry course for students interested in majoring in a science or engineering. The topics of Chemistry I are reviewed, and additional topics in reaction rates, equilibrium, spontaneity of reactions, electrochemistry and organic chemistry are covered. Demanding, theoretical laboratory experiments illustrate topics throughout the course.

### **STANDARD INTRODUCTION TO CHEMISTRY AND PHYSICS**

Grade 11              Full Year              One Credit

Prerequisite: passing Grade in Earth Science and Biology

Standard Introduction to Chemistry and Physics is a course designed to meet the needs of students that are planning on going to a technical college or going directly into the work force. It will meet the graduation requirement for a course in Chemistry and Physics. This course will acquaint the students with the basics in these two areas of science. In chemistry, the structure of the atom, basic chemical processes, and applications of chemistry to everyday life will be studied. In physics, Newtonian mechanics, work, waves and electricity will be among the topics considered. (This course will use a conceptual approach with basic of math applications)

### **ACADEMIC INTRODUCTION TO CHEMISTRY AND PHYSICS**

Grade 11              Full Year              One and One Half Credits

Prerequisite: passing Grade in Earth Science, Biology and Algebra I (or equivalent)

Academic Introduction to Chemistry and Physics is a course designed to meet the needs of students that are planning on going to college but not majoring in a science. It will meet the graduation requirement for a course in Chemistry and Physics. This course will acquaint the students with the basics in these two areas of science. In chemistry, the structure of the atom, chemical processes, and applications of chemistry to everyday life will be studied. In physics, Newtonian mechanics, work, waves and electricity will be among the topics considered. (This course will use a conceptual approach with math applications.)

### ACADEMIC PHYSICS I

Grades 11-12 Full Year One and One Half Credits

Prerequisite: A grade of 80 or better in Earth Science, Biology, Chemistry and Algebra II

Physics is concerned with two basic ideas: matter and energy. The laws of physics are basic to all other sciences. Specific topics covered include methods of measurement, motion and its relationship to force and mass, properties of materials such as density, heat expansion, electrical conductivity, energy and work, electromagnetism, relativity and current areas of research in the field. Problem solving is an important part of this course.

### HONORS PHYSICS I

Grades 11-12 Full Year One and One Half Credits

Prerequisite: A grade of 85 or better in Earth Science, Biology, Chemistry and Algebra II, and Teacher recommendation.

Honors Physics covers the same topics as **Academic** Physics I. The problems and assignments are more rigorous. It is recommended that a student entering this course also be taking a high-level math course (FST or Pre-Calculus) to compliment this advanced level of Physics.

### ADVANCED PLACEMENT PHYSICS II (AP)

Grades 11-12 Full Year One and One Half Credits

Prerequisites: Completion of AP application, a grade of 85 or better in Biology, Chemistry and Physics (all at the Academic or Honors level), and approval of the instructor.

Physics II is an advanced study course intended for students interested in careers in engineering, Chemistry or Physics. The curriculum in the course is enhanced with concepts in rotational kinematics and dynamics, kinetic theory, thermodynamics, magnetism, particles and waves, nuclear physics, alternating current, heat transfer and transformers. Students are encouraged to take the AP Physics exam

### HUMAN ANATOMY AND PHYSIOLOGY

Grades 11-12 Full Year One Credit

Prerequisites: An 85 or better in Biology, and Chemistry and Physics (Physics may be taken concurrently) or Academic Chemistry/Physics. Permission of the instructor.

This course is devoted to a study of the structures and functions of the systems of the human body. The basics of medical terminology will be introduced. The dissection of a cat is included. Human Anatomy and Physiology is highly recommended for those students who are entering health related fields. .

### ENVIRONMENTAL SCIENCE

Grades 11-12 Full Year One Credit

Prerequisite: passing grade in Earth Science and Biology (minimum grade of 77)

Environmental Science is an ecological approach to understanding the environment. It encourages the exploration of the complex relationship between the living and non-living world. A focus will be on the unique ecosystems found in Maine. It will include both marine and terrestrial locations. Another focus will be the impact of human beings of the environment. This course is open to all levels of ability.

### SOCIAL STUDIES

**The Social Studies curriculum is changing from previous years. Students who are juniors or seniors will be doing the curriculum as it was presented when they entered the high school so they do not repeat or lose content.**

Phases:

**Honors:** Students are expected to possess a strong work ethic, the ability and interest to analyze and evaluate information from diverse sources, as well as a superior ability to express their ideas clearly both orally and in writing. Honors students should have excellent study skills and be able to learn independently. The recommended NWEA score in reading is 238 or above.

**Academic:** Students are expected to be reading on grade level. These students will be prepared for post-secondary schools or training experiences. Most students will be in this phase. Academic level students are recommended to have achieved a minimum of a 220 on the NWEA reading test.

Standard – for students who are reading below grade level. These classes so students can receive support in learning the content and bringing their reading skills up to grade level. Students with an NWEA reading score below 220 are appropriate for this phase.

9<sup>th</sup> Grade:

**Foundations of History**

One Year                      One Credit    Honors, Academic & Standard Phases

The first semester of this course will focus on understanding 8 themes of social studies as well as research and writing skills. The department will work with freshmen English teachers to align the research and writing expectations in the two content areas.

\*\*Beginning with the class of 2013, students will go from 9<sup>th</sup> Grade Foundations to: 10<sup>th</sup> Grade World History semester 1 & US History: A Nation Emerges semester 2.

11<sup>th</sup> Grade US History: American Identity & US History Foreign Policy & Equity

12<sup>th</sup> Grade: Senior Topics in Personal Finance & Civic Involvement

10<sup>th</sup> Grade:

**Revolutionary Ideas - Grade 10 Standard phase:** One Year                      One Credit

Students will study a variety of topics including the Renaissance, Enlightenment, Global Exploration and Colonization, Revolution, Development of Democracy, Concepts of Nationalism, Militarism, Socialism, Communism, Capitalism, Imperialism. There will be a focus on improving literacy skills.

**Academic & Honors Choices for Grade 10 Semester 1:** Students should choose one of the World History options for first semester and all students will take the second semester U.S. History course.

**World Humanities**

One semester                      Half Credit

Topics will focus on philosophies, scientific & cultural developments and economics.

**World Politics and Foreign Policy**

One semester                      Half Credit

Topics will focus on development and interaction of modern nations.

**Academic & Honors Grade 10 Semester 2:**

**U.S. History: A Nation Emerges**

One semester                      Half Credit

This course will include a brief review of exploration & colonization, an emphasis on the formation of the U.S. government from the Revolution through the implementation of the Constitution, and then continue through the Civil War & Reconstruction.

11<sup>th</sup> Grade

**Standard U.S. History:** One Year                      One Credit

This course will take a thematic approach to U.S. history while emphasizing literacy skills.

**Academic & Honors U.S. History Core:**                      One Semester                      Half Credit

This course will include a brief review of exploration & colonization, an emphasis on the formation of the U.S. government from the Revolution through the implementation of the Constitution, and then continue through the Civil War & Reconstruction.

**Academic & Honors Choices:** Students choose one.

**The U.S. in the Modern World:** Half Year                      Half Credit

This course will focus on the development of the U.S. as a world power. Political and military history is the emphasis. Topics will include world conflicts from the Spanish-American War through Vietnam.

**The U.S. at Home:** Half Year Half Credit

This course will focus on social and economic developments in the U.S. from the Civil War to the 1960s. Topics will include the transition from agriculture to industry, the effects of urbanization and immigration, and the extension of civil rights to women and minorities.

**Advanced Placement U.S. History** One Year One Credit

**Prerequisites:** B or better in World History honors level or teacher recommendation **and** teacher permission.

This course is offered for students capable of doing college level historical analysis and writing. It is the only AP course where a student does the equivalent of two semesters of college work in one year of high school. Students are expected to be highly motivated, responsible, and independent learners. Students taking the AP exam in May are eligible for **6 college credits**.

Electives

#### A.P. EUROPEAN HISTORY

One year 1 credit

The Advanced Placement course and exam in European History since 1450 are intended for students who wish to complete classes in high school which are equivalent to college introduction courses in European History.

AP European History since 1450 will introduce students to cultural, economic, political and social developments which have played a part in shaping today's world. Students will develop an understanding of the context of development of contemporary institutions, the roles of continuity and change in modern society and politics, and the growth of current forms of artistic impression and intellectual discourse.

#### ECONOMICS

One year 1 credit

This course is designed as an introduction to the study of economics. Microeconomics and Macroeconomics are both studied with a heavy emphasis on practical application and theory. This course will look at economics on an international, national, state and local level and connect to the level of personal impact. Topics include supply and demand, opportunity cost, comparative advantage, fiscal and monetary policy among others. The course will include a variety of assessments including a local business case study, investigation into federal budgets, an international trade simulation and a public policy paper. Students will have the option to contract for this to be at the A.P. level.

#### SENIORS ONLY

Grade 12

One Semester

Half Credit

Using real-world simulations and hands-on activities, this course will help students maneuver the bumpy road to financial and civic responsibility. Students will analyze potential careers, set financial goals, create a budget, investigate the advantages and disadvantages of living independently, practice money management (balancing checking accounts, etc.), explore financial services (insurances, etc.), learn the skills to protect themselves financially and be responsible, involved citizens. Students will explore opportunities for volunteerism and service learning. This will be an ACTIVE course where students will be expected to research and follow through with projects related to the key topics.

### CONTEMPORARY ISSUES

Grades 11 & 12    One Semester    Half Credit    \*\*Requires Parental Permission\*\*

**Prerequisites:** Success in Social Studies courses AND permission of the instructor.

The goal of Contemporary Issues is to enhance students' knowledge of the world around them. The course will engage students in inquiry, research, debate, and public speaking. Critical thinking, essay writing, and class discussion skills are vital to success in this class.

### SOCIOLOGY

Grades 11 & 12    One semester    Half Credit

**Prerequisites:** C or better in CP or Honors Social Studies courses AND permission of the instructor

Sociology is the study of groups of people and their laws, customs, morals, and institutions. Critical reading, essay writing and class discussion skills are vital to success in this course.

### PSYCHOLOGY

Grades 11 & 12    One semester    Half Credit

**Prerequisite:** C or better in CP or Honors Social Studies courses AND permission of the instructor

This course is designed to provide an overview of general psychology with an introduction to vocabulary, research methods, brain development and learning, and mental health issues. Class discussion skills are vital to success in this course.

### MAINE STUDIES

Grade 12            One Semester            Half Credit

**Prerequisite:** Success in Social Studies courses and permission of instructor

An in depth study of Maine's past and its direct impact on the Maine we know today.

Geographical features, economic opportunities, cultural and social events will be discussed. Mapping, video analysis, and teamwork will be featured in the class. Outside speakers and field trips will be utilized to gain a deeper understanding of Maine history.

### LAW AND YOU

Grades 11 & 12    One Semester            Half Credit

This one semester course serves a dual function. The early part of the course is designed to give the students a better understanding of law and how our legal system functions. It will also discuss the legal rights, and duties of citizens both as adults and minors. The second part of the course focuses on issues that are of importance to the students.

### CONTEMPORARY ISSUES IN SPORTS

Grades 11-12    One Semester    Half Credit

Students will be actively engaged in this discussion centered class, which will simulate a first year college seminar experience. Topics to be discussed: the Sociology and Psychology of Sport, high school and college athletics, Sport Deviance, Sport Logic - race and gender issues and Title IX - the female athlete. The class is designed to improve students' critical thinking, discussion, research and writing skills in preparation for college. Students will be required to develop a portfolio that will contain, but not be limited to, one page responses from mandatory attendance at athletic events, outlines and reflections from leading the class in panel discussions, a mid term and final exam and a research paper on a related topic of the student's choice.

## SPECIAL EDUCATION DEPARTMENT

The Special Education program at Windham High School offers a continuum of services for students with special needs as determined by the pupil evaluation team. These special needs include: mental retardation, hard of hearing, deaf, speech and language impairment, visual impairment, behavioral impairment, orthopedic impairment, other health impairment, learning disabilities, deaf/blind, multi handicapped, autism or traumatic brain injury. All services are provided based upon the results of a pupil evaluation team meeting. Special education students are integrated into regular education classes to the fullest extent possible as recommended by the P.E.T. Special education teachers within the classroom provide services.

### LEARNING LAB

Grades 9-12            Half or Full Year            Half or Full Credit

This course is offered to students referred by a pupil evaluation team. It is specifically designed for those students who are mainstreamed without the support of a special education teacher in the regular classroom. The student will receive help in the area of his/her academic need. Student's goals and objectives from their IEP, which are developed at the PET meeting, are monitored in the Learning Lab.

#### **FUNCTIONAL LIVING SKILLS**

Grades 9-12          Half or Full Year          Half or Full Credit

The functional living skills program is offered to those students who are referred by the Pupil Evaluation Team. This program is designed to meet individual needs and to increase each student's ability to function independently. The curriculum focuses on career choices, consumer information, money management, good nutrition, healthy life styles and the responsibility of citizenship. Math skills are emphasized.

#### **ADAPTED PHYSICAL EDUCATION**

Grades 9-12          Half or Full Year          Half or Full Credit

This course is offered through the Physical Education Department to students referred by a Pupil Evaluation Team. Topics covered include healthy physical activities and proper conditioning. A variety of games are utilized to develop coordination and good sportsmanship. The curriculum is designed to meet the unique physical needs of each participant.

#### **BASIC COMPUTER TECHNOLOGY**

Grades 9-12          Full Year          One Credit

Admission to this class is by the Pupil Evaluation Team only. This course is a brief introduction to the six components of the computer proficiency requirements, which are: Fundamentals/Keyboarding, Word Processing, Database/Information Management, Spreadsheet/Analysis and Functions, Internet/Telecommunications and Media Presentations. Modifications will be made based on the individual needs of the student.

#### **RESOURCE ROOM COURSES**

The Special Education Department will offer courses in the resource room as deemed necessary per recommendation by the Pupil Evaluation Team.

### **PARTICIPATION IN THE VOCATIONAL CENTER PROGRAMS**

Vocational and technical education programs are available on a part-time basis in Portland and Westbrook. These are excellent electives for students not only entering the work force but those going on to post-secondary programs as well. Vocational centers are established by the state to extend the program offerings of the schools in areas where only limited vocational and technical programs are available. They have as their primary purpose the provision of vocational and technical training for students in grades 11 and 12 who are planning to enter the workforce upon graduation from high school as well as for post-secondary educational programs. Students must complete a separate application to attend either school.

Arrangements are made through Ms. Bubier in the student services office, who will work with interested students to work out the best program. Because of the time involved in transportation between schools, it is not possible to earn more than 7 credits per year while participating in these regional programs. Therefore, a student who plans to take advantage of regional centers' offerings should have a minimum of ten credits at the end of his/her sophomore year. If you have an interest in any of the programs listed below, you should talk with your counselor.

The school provides transportation to and from the vocational centers

Westbrook Regional Vocational Center provides the following programs to student attending from surrounding high schools. It is our primary center, when programs are offered at both WRVC and PATHS, Windham students will attend Westbrook. Each course is designed to provide the necessary knowledge and skills for successful entry into the occupational field of choice, as well as background for education and training beyond high school. All students who participate in Westbrook programs will earn one or two additional credits with options in Math, English, and US History or School-to-Work transition.

**Automotive Technology:** challenging and exciting program that explores the intricacies of diagnosing and repairing complex modern automobiles.

**Building Trades:** designed for students who are interested in preparing for a career in carpentry or related fields.

**Business Management:** designed to give students an opportunity to look at managing their own businesses. Students are given an understanding of costs, budgeting, and the financial aspects of the small business.

**Business Technology:** this program is to introduce students to the various software used in business today, provide an opportunity to acquire the knowledge, skills, and abilities for entry-level office positions, upgrade technology skills, secure employment, and obtain Microsoft Office Certification.

**Commercial Driver's License (Truck Driving):** a two-year program open to all students who are/or will be 17 years of age or older. Students must hold a valid Maine driver's license and have a clean driving record. Upon successful completion, students will be eligible to test for a Class B license or Class A after the second year.

**Computer Programming:** first-year students are exposed to several programming languages such as Macromedia Director and Microsoft Visual Basic. The second year is designed to prepare students for the Advanced Placement Computer Science exam.

**Computer Repair and Networking:** the first year of this program introduces students to basic computer repair and networking skills congruent with the CompTIAA+ Essentials exam. During the second year, students focus on Networking Technologies and preparing for the CompTIAA+ Technician exam.

**Culinary Arts:** provides the student the opportunity to gain vocational emphasis during their school years in such food areas as industry, school lunch programs, restaurants, hospitals, motels and catering services.

**Drafting:** two-year sequential program that explores the concepts of Mechanical and Architectural drafting through sketches and CAD – Computer Aided Drafting.

**Early Childhood Occupation Education:** program designed for students preparing for careers involving children.

**Electricity:** designed to provide entry-level skills into the electrical field. Students learn to install wiring systems from blueprints and according to the National Electrical Code.

**Heavy Equipment Operation:** includes basic construction safety, introduction to site and road layout and basic operation and maintenance of heavy equipment, skid steer dozer, front end load and excavator.

**Marketing Education:** designed to prepare students for continuing education and entry-level employment in marketing and retail-related fields.

**Medical Occupations:** students are able to investigate and learn about different professions within the healthcare system. Students will learn medical terminology as well as anatomy and physiology of the human body and basic health care skills.

**Public Safety:** program is geared to the student interested in exploring opportunities in the Fire, Police, and Emergency Medicine fields.

**Web Page Design:** links together areas of computer programming, graphic design, Multi-media and project management. Introduces areas of XHTML, Graphic Design, Flash (animation and multi-media), javascript, and project concepts.

## PORTLAND ARTS & TECHNOLOGY HIGH SCHOOL (PATHS)

### GENERAL INFORMATION

Portland Arts & Technology High School (PATHS) is open to all students in grades 9-12. PATHS courses are designed for all students who are serious about gaining new skills and knowledge through applied "minds-on/hands-on learning".

These classes are designed for career bound and college (post-secondary) bound students and are an extension of their high school schedule. PATHS classes count toward graduation as any other high school class. Classroom theory and instruction, extensive labs, shop projects and community-based internships combine to give students real life experience in career directions. **Although all PATHS classes are two years in length, most PATHS classes offer introductory "Semester Classes" or one year opportunities (see last page of this catalogue).**

PATHS follows the Portland Public Schools calendar and offers two sessions a day: Session 1 (8:00 - 10:25 AM) and Session 2 (11:00 AM - 1:30 PM). Students are bussed to and from PATHS by their sending school.

Students successfully completing a sequence (semester, 1 year or 2 year) of an approved program may be eligible for Integrated Studies credit. Sending schools can award an Integrated Studies credit (Math, Science, Fine Arts) in place of the elective/vocational credit - not as additional credit. Students interested in receiving integrated studies credit should talk with their PATHS teacher and sending school Guidance Counselor.

**NOTE:** All PATHS programs follow national curricula standards and have been aligned with the Maine Learning Results (MLR).

#### VISITOR & APPLICATION PROCEDURES

- Student gives completed visitor/application form to their Guidance Counselor. Visitor/Application forms available in sending school Guidance Office.
- Guidance Counselor arranges for student to visit PATHS (874 – 8165).
- Student visits a specific program and with the help of the PATHS teacher decide whether to enroll in the class for the following year (or semester).

It's as simple as that !!!

Parents, Guidance Counselors, and Teachers are always welcome to visit PATHS.  
Call 874-8165 to schedule a visit.

#### **Course Descriptions**

##### **Auto Collision Technology - (Mark Law: [lawm@portlandschools.org](mailto:lawm@portlandschools.org))**

From damaged to dynamic! Learn the skills necessary to bring that automobile back to showroom condition. Students will learn the skills necessary to use a frame machine, spray guns, and some of the state-of-the-art techniques like adhesive panel replacement, paint blending and specialty paintwork like striping and flaming. Basics in welding, wiring, front end alignment and basic mechanics will also be covered. Through their affiliations with national paint companies and curriculum developers students will have the opportunity attend seminars and workshops.

**Career Opportunities:** Auto Collision Technician, Frames Specialist, Refinish technician, Refinish Prep Specialist, Insurance Estimating, and Paint Mixing Specialist.

##### **Dance (Session 2 Only) - (Lisa Hicks: [hicks1@portlandschools.org](mailto:hicks1@portlandschools.org))**

The dance program is designed to develop the young dancer through Classical and Modern technique. Students acquire skills and participate fully in ensemble performance. In addition, all dance students study dance history, composition and improvisation. Sample offerings within the Dance Department include: Beginning and Advanced Modern Technique, Beginning and Advanced Ballet Technique, Composition, Improvisation, Conditioning, Tap, Yoga for Dancers, History of Dance, World Dance History, and Contemporary Dance Workshop.

##### **Fashion Marketing - (Jane Krasnow: [krasnj@portlandschools.org](mailto:krasnj@portlandschools.org))**

Fashion Marketing offers an introduction to the "business" of Fashion. Learn the components of customer service, designing fashion displays, composing effective advertising, the basics in fashion design and garment construction. Students will present seasonal sales promotions and will manage a new school store. Students also present a fashion show each year. Students are encouraged to be involved in a national marketing organization called DECA. Students may participate in a hands-on internship and will have the opportunity to intern in a local business, to gain experience and knowledge about the field of fashion merchandising and marketing.

**Career Opportunities:** Advertising, Visual Merchandising, Store Management, Fashion Buying, Retail Merchandising and Fashion Designer.

**Fast Foods - (Phil Divinsky: [divinp@portlandschools.org](mailto:divinp@portlandschools.org))**

The Fast Food Service Program prepares students for entry-level employment in the food service industry. This self-contained program offers real life experiences through the operation of a student run café. Students receive a varied hands-on education in food preparation, equipment usage, sanitation, personal hygiene, customer relations, teamwork, attitude, initiative and independence.

**Career Opportunities:** Prep Cook, Wait Person, Dishwasher, Cashier, Clerk, Sandwich Prep, Fast Foods Worker

**Graphic Arts and Printing - (David Nichols: [nichod@portlandschools.org](mailto:nichod@portlandschools.org))**

Gain the basic knowledge and skills needed for entry into the graphic arts and printing industry. Design and print your own T-shirts and create vinyl graphics for vehicles, signs and other applications. You will print a number of products while learning how the different printing processes are done. This class uses Adobe™ CS3 (InDesign, Photoshop, Illustrator and Acrobat) as a design and production tool to create dynamic graphics used in the printing industry. **Career Opportunities:** Estimator, Graphic Designer, Pre-Press Imaging Specialist, Press Operator, Bindery and Finishing Technician, Shipping and Distribution Assistant, Sales/Account Representative, Customer Service Representative and Supervisor/Manager.

**Health Sciences - (Mary Brennan: [brennm@portlandschools.org](mailto:brennm@portlandschools.org))**

The first year introduces the students to careers in health sciences. Students study anatomy, physiology, nutrition, diet therapy, and complete a medical research project through field trips, demonstrations, and classroom instruction. The second year prepares the student in basic health science skills, body mechanics, aseptic techniques, and medical terminology. Students are placed in clinical experiences of their choice during the second semester. The Health Science Careers Program also serves as a foundation for further education in a technical school or college. Health Occupations Students of America (HOSA) is an integral part of the program. Articulation Agreement with SMCC. **Career Opportunities:** Personal Service Specialist (P.S.S.), Certified Nursing Assistant (C.N.A.), Dental Aide, Veterinary Aide, Physical Therapy Aide, Rehabilitation Aide, and many other health science careers. Meets State Requirement for certification as a Nurse Assistant.

**Landscape Management - (Bob Francis: [francb@portlandschools.org](mailto:francb@portlandschools.org))**

This exciting program provides students the opportunity to work in PATHS largest classroom – 40 acres. You get to experience retail and wholesale marketing techniques through the management of our 3,000 sq. ft. greenhouse. Students will work in our display beds, the arboretum, our community perennial garden and the extensive grounds of our campus. Landscape design, equipment use, turf management and greenhouse management are emphasized. Floral Students learn to identify, grow, and care for trees, shrubs, and flowering plants. **Career opportunities:** Greenhouse or Nursery Worker, Garden Work, Gold Course, Landscaping Design, Parks Department.

**Manufacturing Technology - (Joseph Bolduc: [bolduj@portlandschools.org](mailto:bolduj@portlandschools.org))**

This course offers knowledge, skills, and experience in the production of precision metal products. Students learn how to manufacture and measure a variety of metals used to produce metal products. By making specified products, students learn how to read blueprints, do shop math, layout their work, select, set-up, and safely operate lathes, milling machines, drill presses, and grinding machines. Advanced students learn how to program, set-up, and operate CNC lathes and milling machines. Computer Aided drafting (Auto Cad), and Robotics Manufacturing are also covered. Articulation Agreements with SMCC and CMCC. **Career Opportunities:** Machine & CNC Operators, Inspectors, Layout and Set-up Technicians.

**Masonry - (Matt Wentworth: [wentwm@portlandschools.org](mailto:wentwm@portlandschools.org))**

Fireplaces, Barbecue pits, steps, planters and columns for lighting applications are only a few of the projects you'll undertake in this exciting program. Design and layout of projects using brick, block, dry stone (wall construction), decorative pre-cast concrete and repair of existing masonry structures are all part of the skills you'll acquire. Students are instructed in shop and job safety practices and procedures. Students receive related instruction in blueprint reading, layout work, measurement, sketching and estimating.

**Career Opportunities:** Mason, Mason tender, Bricklayer, Contractor, Tile Setter.

**Music - (Victoria Stubbs: [stubbv@portlandschools.org](mailto:stubbv@portlandschools.org))**

The music program is designed to offer student musicians a diverse experience in the music industry. There are 3 main components of the music program at PATHS. Students study the Theory and Ear/Rhythm training of music, they practice their solo and ensemble performing skills in our 'classroom theater', and they learn Audio recording, editing and mixing in our Recording Studio. Some other examples of work we do here are: Song writing, the Business of Music, and Music History. This program requires a student audition, essay, and teacher recommendation prior to enrolling.

**Career Opportunities:** Performer, Music Educator, Composer, Song Writer, Music Producer, Audio Engineer, Recording Engineer, Sound Mixer, Digital Workstation Editor, Post Production Engineer, Mastering Engineer, MIDI Engineer, Music Scoring (Studio Manager, Music Video Production, Special Event Lighting/Sound Presentation, Digital Video, Sound Design)

**Plumbing/Heating - (Ed Huggins: [huggie@portlandschools.org](mailto:huggie@portlandschools.org))**

Plumbing is the craft of installing and repairing all necessary pipes and fixtures for bringing water to buildings and disposing of the waste and water from fixtures. This two-year course emphasizes plumbing in year one and heating in year two depending on when student attends. Each may be taken as a one-year stand-alone program. Both years use nationally accredited curricula from National Center for Construction Education and Research (NCCER) and National Oil Heat Research Alliance (NORA). Class work includes safety, blueprint reading, plumbing math, materials and design. Students will design and install hot water tanks, toilets, sinks, lavatories, tubs and showers and have opportunities to work with other trades on building projects. Heating is the craft of installing and repairing all necessary appliances and fixtures to heat a building. The focus in this course will be on oil heat. Course work includes: burner maintenance, cleaning, heating calculations tanks, controls, tune-ups, venting, basic electricity and design. Students will install hot water boilers, steam boilers, hot air furnaces, oil fired hot water tanks, radiators, baseboard and in-flooring heating.

**Career Opportunities:** Plumber, Plumber Apprentice, Water Treatment Installer, Oil Heat Installer, Oil Heat Serviceperson, Plumbing/Heating Sales and Warehouse Worker.

**Recreation/Marine Repair - (Gerald Gherardi: [gherag@portlandschools.org](mailto:gherag@portlandschools.org))**

If you like the thrill of hearing a finely tuned marine engine run or troubleshooting why a 4-wheeler is skipping, than this program is for you. Students will learn all about small engines and how they operate. You will diagnose and repair small engines for all marine and recreational equipment including motorcycles, inboard/outboard boat motors, snowmobiles, lawnmowers, snow blowers, ATV's and more. Students will also do fiberglass repair projects on boats, as well as preparing all small engines for winter storage. **Career Opportunities:** Small engine mechanic in motorcycle, snowmobile, ATV or boat businesses; general work in boat yard; fiberglass boat repair.

**Telecommunications: Voice/Data/Video - (Richard Portwine: [portwr@portlandschools.org](mailto:portwr@portlandschools.org))**

This course offers students the opportunity to focus on the exciting and growing electronic communications industry. Learn about wiring cable TV, security systems, fire alarm systems, telephone systems and so much more. The class also provides students with the basic skills and knowledge to make minor electrical installations or repairs around the home and car. Alternate energy sources such as wind and solar power, photovoltaic and others will be studied and demonstrated through fun hands-on projects. Students successfully completing the 2-year sequence will be able to receive industry-recognized certifications and are eligible to receive one of three industry provided \$1,000 scholarships to college. **Career Opportunities:** Telephone or cable company employee, security & fire alarm installer, Internet cabling installer.

**Video Technology/Multimedia - (David Beane: [beaned@portlandschools.org](mailto:beaned@portlandschools.org))**

In this program, students will apply theoretical and artistic knowledge in such areas as lighting, sound, computer graphics and composition. Students will obtain skills related to the operation of a variety of pre & post-production equipment. Produce public service announcements, music videos, documentaries and thought provoking talk show format programs are just some of the projects that you'll participate in. Through collaborative work, students will create a variety of multi-media productions. Essential components of this program will include expanding computer knowledge and developing and using effective communication skills. **Career Opportunities:** Production Assistant, Equipment Operator, Camera Operator, Computer Graphics Programmer, Multi Media Programmer, Web & Audio Video Programmer.

**Web Programming - (Valerie Green: [greenv@portlandschools.org](mailto:greenv@portlandschools.org))**

This course covers computer programming languages used for all aspects of Web development, as well as an introduction to structured programming in Java with an emphasis on game programming. The curriculum is very diverse, allowing students to improve their creative thinking, artistic proficiency, and logical reasoning. Web Programming students create 2-D games and professional quality Web pages using modern design and coding techniques. Languages covered include Java, HTML, CSS, MySQL, and PHP. No prior experience in computer programming is required, but students should have a basic understanding of algebraic equations in order to be successful. After taking this course, students often go to work in the Web design trade, apprentice as a programmer at companies such as UNUM, start their own companies, or attend a 2- or 4-year college to earn a degree in Computer Science or Information Technology. **Note:** Web Programming is now taught in 4 semesters. Please see the current semester course catalog for details on this year's offerings and any prerequisites. **Career Opportunities:** Web Designer, Webmaster, Web Application Developer, Software Tester

**Welding and Metal Fabrication - (Bill Presby: [presbw@portlandschools.org](mailto:presbw@portlandschools.org))**

This course includes instruction in the safe operation of oxygen/acetylene gas welding, brazing and cutting. The first year students will be taught Shielded Metal Arc Welding (S.M.A.W.), Flux Core Arc Welding (F.C.A.W.), and Gas Metal Arc Welding (G.M.A.W.). Second year students will be involved in projects that will include but will not be limited to: utility trailers, snowmobile trailers, landscape trailers, various metal craft projects by your own design, and outside projects for individuals or schools. First and second year students will have the opportunity to attempt the structural plate test limited to 3/4 inch thickness after they have proven their basic proficiency in the S.M.A.W. process. Pipefitting and pipe welding techniques will be taught, which will include Gas Tungsten Arc Welding (T.I.G.), 5P root and 7018 to cover. Carbon Arc Cutting, Plasma Arc Cutting and Aluminum Welding will also be introduced. Basic math computations including addition and subtraction of fractions, converting decimals to fractions and basic Geometry will be taught. Blueprint reading and sketching will be practiced regularly. Articulation Agreements and dual enrollments with SMCC and EMCC. **Career Opportunities:** Certified Welder, Welder's Helper, Pipe Fitter, Fabrication Shop Specialist operating automated cutting and welding equipment, owner/ operator of welding/metal fabrication shop, Quality Control Weld Inspector. The opportunities in the steel trades are endless.

**Woodworking - (Joseph Robinson: [robinjo@portlandschools.org](mailto:robinjo@portlandschools.org))**

Make a Shaker-style table, table lamps, magazine racks and a host of other interesting projects produced in this program. Woodworking is a supported program where students will learn about tools, joinery, turning, fasteners, abrasives, and finishes. Students make individual, group, and class projects from a variety of woods. They will be exposed to community service, artistic techniques, manufacturing, and custom craftsmanship through fieldtrips and shop projects. Math covered in the program includes measurement, fractions, area, and volume. Students will also learn how to read shop plans and write using woodworking terminology.

**Career Opportunities:** entry level in Carpentry, Cabinetry, Woodworking, Mill Work, Building Supplies Store, and post graduate 2 and 4-year schools.

**PATHS Semester Classes**

PATHS Semester Classes are designed for students interested in PATHS, but can't attend PATHS for a full two-year program due to a busy schedule. The Semester Classes enable you to choose an elective class where you can learn important technical skills and career opportunities through fun hands-on project in your favorite PATHS technical class. Fall semester is mid-September to the end of the second quarter (January). Spring semester is from late January to the end of the fourth quarter (June).

Credits are awarded on ALL Semester Classes and count toward graduation.

\*\*\* PATHS Semester Class offerings vary from semester to semester. \*\*\*

For more information and a list of Semester Class offerings contact your Guidance Counselor or call: John Marcigliano at PATHS (874 – 8165) or [marcij@portlandschools.org](mailto:marcij@portlandschools.org)