Dear Students and Parents,

We encourage parents and students to work in cooperation with the school in making decisions on the student's academic program. This Program of Studies booklet has been developed by the administration, school counseling department and faculty in order to provide brief summaries of the programs and courses offered at the high school in addition to course credit and graduation requirements. We hope that this booklet is helpful to you as you make your plans and choose your courses and programs over the years. A student may have a choice for his future already set at the beginning of high school and may want to tailor his/her educational plans in high school according to this goal. However, it is our experience that plans change and students very often aspire to a different program of studies after high school. The best way to approach this is to take a personally challenging program of studies in high school in order to prepare the student to meet his/her educational needs and "ACHIEVE" success.

Regular communication between the home and school is one of the key elements of a student's success in high school. We urge students and parents to contact school counselors on a regular basis to discuss school, as well as career plans. Communications include phone calls, emails, as well as appointments with school personnel including teachers, counselors, and administrators. The high school phone number is 860/828-6577.

Four report cards and four progress reports are given to all students in the course of the year. There are also a number of meetings to which parents are invited including: "Parents Back to School Night" in September, a teacher/parent conference day and evening in October, Parent Info Nights and Developmental Guidance evenings set up by the School Counseling Department. The dates and times for these meetings are published in the Student Handbook which is given to all students on the first day of school. In addition, specific dates are published in the newspapers and through special mailings.

Please ask us if you need any assistance in making your choices for your 2009-2010 courses or programs.

Sincerely,

George J. Synnott Principal

Objective of the Instructional Program Policy of the Berlin Board of Education

The Board of Education has the responsibility to provide the best possible education for students at all grade levels within its resources. The Board and administration, recognizing the varying interests and levels of ability of the students, will provide proper testing and counseling to identify a course of study that will be challenging and meet the needs of the students. The Board of Education directs the administration to develop regulations and procedures which will be submitted to the Board for review and/or adoption on an annual basis.

TABLE OF CONTENTS Berlin High School <u>Program of Studies 2009 - 2010</u>

Principal's Message	First Page
Table of Contents	2
Mission Statement and Expectations	3
Administrative Positions	4
Graduation Requirements	5-7
Alternative Programs	7
Summer School/Tutoring Policy	8
College Preparatory Program	9
School Counseling Department	9-11
CAPT	11
Community Service Recognition	11
UConn Early College Experience (ECE)	11
President's Award/Honors Graduates	11
Honor Roll Qualifications	11
Independent Study Program	12
PE Leadership Program	12
Presidential Classroom	12
Class Rank	12
Honors Citations	13
Senior Writing Portfolio	13
English Curriculum	14-17
Reading Curriculum	17
ESOL Curriculum	17
Social Studies Curriculum	18-20
World Language Curriculum	21-22
Mathematics Curriculum	23-25
Science Curriculum	26-28
Career Technical Education (CTE)	
 ∙ Business 	29-30
 Technology Education 	30-33
 Project Lead the Way Pre-Engineering Program 	33
Family & Consumer Science	34
Art Curriculum	35-36
Music Curriculum	37-38
Physical Education/Health Curriculum	38-39
Learning Center Curriculum	39-40
AAP	40
NET	40
Team Taught Courses	40

BERLIN HIGH SCHOOL

MISSION STATEMENT

Berlin High School is a partnership of students, staff, parents, and community members whose mission is to develop responsible, ethical, and productive citizens and lifelong learners. Together, we are actively engaged in acquiring theoretical, technological and practical knowledge in a secure and supportive environment. Berlin High School challenges students to think both creatively and critically in a rigorous academic setting. We encourage students to understand, accept and appreciate the diverse nature of society. The school community is a positive social environment that affords all students the opportunity to explore their potential as individuals.

Academic Expectations

- Read critically
- Write effectively
- Communicate clearly and persuasively
- Use a variety of resources for academic, technological, and practical purposes
- Solve problems creatively
- Develop an active and healthy lifestyle

Social and Civic Expectations

- Behave responsibly and ethically
- Engage in habits of citizenship and participate in the community
- · Respect the diverse values of others
- · Contribute to a safe and supportive environment

BERLIN BOARD OF EDUCATION

238 Kensington Road Berlin, Connecticut 06037 860/828-6581

Board of Education Members

Gary Brochu, President Julie Erickson Christopher Puzio Anthony Recck Michelle Hartel, Secretary Kathleen O'Donnell-Moss Irene Matulis Michael Baczewski

Administrative Officers

Michael T. Cicchetti, Ed.D. Rena P. Klebart Margaret A. Butler Roman J. Czuchta Linda A. Holian Joseph J. Costa Superintendent of Schools Assistant Superintendent for Curriculum and Instruction Director of Pupil Personnel Services Director of Business Operations Supervisor of Special Education Director of Human Resources

Berlin High School Administration

Principal George J. Synnott

Assistant Principals

Janet P. Parlato James M. Sachs

Department Chairpersons

Athletics James Day, Athletic Director

Career and Technical Education Christopher Wolfe, Chairperson

English Nancy Fabrizi-Miller, Chairperson

School Counseling Deborrah Ramirez, Chairperson

Mathematics Amanda Gagnon, Chairperson **Physical Education** Sheila King, Chairperson

Science Mary Salerno, Chairperson

Social Studies Dr. William Silva, Chairperson

Special Education Katie Cormier, Chairperson

World Language Teresa Dorsey, Chairperson

GRADUATION REQUIREMENTS

In order for a student to graduate from Berlin High School, he or she must earn a total of twenty-three (23) credits. In addition, a student must also meet the established performance standards in reading, writing, math and science.

Credit distribution of required courses:

English	4 credits
Mathematics	3 credits
Social Studies	3 credits (incl. US History – 1 credit and Civics50 credit)
Science	3 credits (incl. Biology – 1 credit)
Physical Education	3 credits (incl. Health25 credit)
Cluster	2 credits
Senior Writing Portfolio	Electives

Required total credits: 23

READING STANDARD

Berlin High School graduates will successfully comprehend, interpret and evaluate pieces of fiction and non-fiction writing. Berlin High School graduates will demonstrate an overall understanding of reading selections, including inferential as well as literal interpretations.

Means of Assessment:

Students will have a variety of opportunities to demonstrate proficiency in the reading standard. Included as evidence of proficiency are one of the following:

- Students who meet standard or who score at the proficiency level of CAPT's Reading Across the Curriculum. Those
 who fail to meet standard in 10th grade will retake the subtest in grade 11.
- Students whose PSAT or SAT verbal scores equal the national average in either test.
- Reading remediation classes will be made available to seniors who have not met standard. Remediation will be offered during Y period in the first semester. A second district-generated and scored CAPT test in reading will be administered in January to all students who have not yet met standard.
- A senior elective will be provided in the first semester of the senior year for students who have not met the proficiency standard. If the senior passes this course, he or she will have met the reading requirement.
- Students who demonstrate proficiency in an Informed Reading Inventory administered in the senior year.
 Students who fail to meet the standard may take a reading course in an accredited program at their parents' expense.
 Upon evidence of successful completion of the program, a diploma will be awarded.

WRITING STANDARD

Berlin High School graduates will produce written texts to express, develop and substantiate ideas and experiences. Berlin High School students will apply the conventions of standard English in oral and written communication.

Means of Assessment:

Students will have a variety of opportunities in which to demonstrate proficiency in the writing standard. Included as evidence of proficiency are:

- Students will complete a satisfactory writing portfolio consisting of four selections. Three academic writing selections
 must be included; the fourth selection is the student's choice. Standards and guidelines for the Senior Portfolio will
 be outlined in the *Berlin High School Senior Portfolio Information* Packet, distributed at the beginning of 12th grade. A
 writing portfolio is mandatory for all students.
- Students who meet the writing standard or who score at the proficiency level of the CAPT Writing Across the Disciplines will be expected to reach the writing standard without intervention.
- Students who score at the intervention level on the CAPT test may need support to complete the writing graduation requirement. Individual student scores will be reviewed and support provided as needed. Eleventh grade students needing additional support to develop proficiency in writing will be offered tutorial sessions during Y period.

MATHEMATICS STANDARD

The student must satisfactorily complete multi-step real world mathematical problems that require demonstration of basic mathematical operations and conceptual understanding in mathematics. The student may be provided with any required formulas and may be permitted the use of a calculator in completing the task. The student will explain in writing, or in a pictorial, graphical, or algebraic representation, how he/she arrived at the answer to the problem.

Means of Assessment:

Students will have a variety of opportunities in which to demonstrate proficiency in the mathematics standard. Included as evidence of proficiency are:

- Achieving the state goal on the CAPT as a sophomore or scoring at the proficiency level. Those students who do not meet goal as a sophomore will be required to retake the mathematics portion as a junior.
- Achieving state/national average on SAT II.
- Achieving state/national average on SAT I.
- Satisfactory completion of district performance task.
- Submission of acceptable Math Portfolio.

Remediation programs available to students who do not meet goal on #1 above would be:

- SAT Review possibly during Y period or after school.
- CAPT Practice possibly during Y period or after school.

Criteria for district performance task:

The district performance task will consist of real world problems that require a student to demonstrate his or her ability to solve problems, to reason mathematically, to communicate mathematical ideas, and to compute and estimate. These real world problems will demonstrate ability in the following content areas:

- Number Sense and Quantity
- Measurement and Geometry
- Spatial Relationships and Geometry
- Statistics, Probability and Discrete Math

Criteria for Math Portfolio:

The Math Portfolio will demonstrate a student's understanding of mathematics in the following content areas:

- Number Sense and Quantity
- Measurement and Geometry
- Spatial Relationships and Geometry
- Statistics, Probability and Discrete Math

SCIENCE STANDARD

The student must satisfactorily demonstrate an understanding of scientific concepts and processes, experimental design and interpretations, and current issues on science affecting society.

Means of Assessment:

Students will have a variety of opportunities in which to demonstrate proficiency in the science standard. Included as evidence of proficiency are:

- Achieving the state goal on the CAPT test as a sophomore or scoring at the proficiency level. Those students who do not achieve proficiency as a sophomore will be *required* to retake the science portion as a junior.
- Achieving state/national average on Biology, Chemistry, or Physics SAT II.
- Satisfactory completion of district performance task.
- Submission of acceptable Science Portfolio.

Criteria for District Performance Task:

The district performance task will consist of real world problems that require a student to demonstrate his or her ability to design and interpret experiments, draw conclusions, and effectively communicate scientific ideas, concepts and processes. Content areas covered by the problems are:

Earth ScienceLife SciencePhysical ScienceExperimentation

Criteria for Science Portfolio:

Students must demonstrate their understanding of science, technology, and society through current problems affecting society. Students must design and carry out an inquiry based experiment and two related Science, Technology & Society (STS) activities. The portfolio will consist of a formal laboratory report and written reports for the STS activities. Content areas covered by the portfolio are:

Earth Science	Life Science	Physical Science	Experimentation
---------------	--------------	------------------	-----------------

EXEMPTIONS TO THE GRADUATION STANDARDS:

- 1. Special Education students may be exempt through the PPT process. The exemption must be written into a student's IEP.
- 2. Students who transfer into Berlin High School in their senior year.
- 3. ESOL students will be evaluated on a case-by-case basis.

N.B. Any extraordinary request for an exemption must be appealed to the building principal for his approval.

A student must be in attendance for four full years of high school and <u>must enroll in a minimum of six credits during each</u> <u>school year</u>. No student may earn more than seven credits towards graduation from any source in an academic year. It is expected that a student will have a minimum of 4 academic subjects each school year.

In the event that a student moves into Berlin during the senior year, the student must successfully complete a minimum of one semester at Berlin High School to be eligible for a BHS diploma. In addition, all minimum credit requirements must be met with the exception of the credit requirements for physical education. In certain situations, a student may request to complete their senior year elsewhere and still be granted a BHS diploma.

ALTERNATIVE PROGRAMS

In certain situations, a student may request to complete their senior year elsewhere and still be granted a BHS diploma.

In order for a student to be eligible to receive a diploma while attending a different institution during their senior year, the student must meet the following requirements:

- Have earned a total of twenty credits before their senior year.
- Have a minimum cumulative GPA of 80 at the end of their junior year.
- Provide two letters of recommendation from BHS teachers.
- Apply in writing to the high school principal. Application must include a detailed description of the program to which the student is planning to attend.
- The program must be an accredited educational program.
- Complete their senior portfolio prior to completion of their senior year.
- Receive approval from the high school principal <u>prior</u> to the start of the program.

A Berlin High School diploma will be issued after review by the principal of credits earned in the program. The principal reserves the right to establish/expand/revise compliance reporting dates for any approved alternative senior year program at any time as part of this review process.

Courses identified by Roman numerals are sequential courses and must be taken in numerical order. For example: English I must be taken and passed before a student may take English II. Failure of a course will require making up the deficiency before going on to the next course in sequence. Two or more courses in the same sequence may not be taken in one school year without the approval of the principal.

One (1.0) credit is given for courses which meet for the entire year. Courses which meet for a semester (1/2 year), earn .50 credits. Quarter year courses meet for one marking period and earn .25 credits.

In order to provide for the needs of students, some courses are ability grouped. Groupings include the following levels: Advanced Placement, UConn ECE, honors, accelerated, academic, general, and special education. All levels do not exist for all courses and many courses are not grouped at all. Assignment to groups is the responsibility of the school counselor who receives teacher recommendations. Many courses are heterogeneous so that students may benefit from a wide range of experiences in a challenging curriculum.

Changes in schedules are not allowed after the beginning of the school year unless the counselor and teacher are convinced they are in the best educational interest of the student. All changes are to be made by September 9th.

Any withdrawal after 2 weeks of class will be recorded as a Withdrawal on the student's transcript, unless otherwise approved by the principal.

<u>Promotion</u>: A student must have earned the following credits by the last Friday of the summer vacation of each year in order to be promoted to the next class:

Grade 10	6 credits	
Grade 11	10 credits	
Grade 12	16 credits	

SUMMER SCHOOL POLICY

- 1. Any student is eligible for Summer School who has failed a course, has not exceeded the limits of attendance allowed in the course, and has received a minimum grade of 50 in the course.
- 2. A student who has withdrawn or has been withdrawn from a course for the remainder of the school year may not make up the work missed in summer school.
- 3. Summer school is 6 weeks in length with a two hour class each day. Homework is an expected aspect of the program and 90% attendance is required.
- 4. Courses for which prerequisite grades are being made up are subject to the same policies as those for which failing grades are being made up.

Berlin High School does not sponsor a summer school program; however, its students may enroll in summer school programs offered in neighboring towns including New Britain, Cheshire, Southington, West Hartford, and Plainville.

Summer School at Other Institutions:

- 1. Students may take make up courses at other accredited institutions. Credits accepted will be prorated according to the hours and duration of the courses. A minimum of 50 must have been received in the failed course.
- 2. Approval of the high school principal must be given **in advance** of the summer school program for any credits to be transferred to Berlin High School. Students must sign up with their School counselor before the last day of school.
- 3. Official transcript of credit and grades earned must be submitted for approval on the conclusion of any courses at other institutions.
- 4. If a course is to be used to meet a prerequisite requirement, the final Berlin High School departmental examination must be taken and will be one third of the final grade.

A six credit college course is the equivalent of a one credit high school course.

Tutoring:

- 1. Make-up courses may be completed through tutoring arrangements made by the student's family. Such courses must be approved by the high school principal prior to the beginning of the program. All approvals should be completed by the scheduled first day of summer school. A minimum of 50 must have been received in the failed course.
- 2. Tutors for such courses must have the approval of the high school principal. A tutor must be a certified teacher in the subject being tutored.
- 3. The tutored make-up course curriculum must have the approval of the high school subject department head. It is the responsibility of the family and tutor to make all necessary contacts with the department head.
- 4. Tutored courses must have final examinations. Such examinations must be approved by the high school subject department head and will be valued at one third of the final grade.
- 5. There is to be a minimum of ten graded papers besides the final submitted by the tutor (5 for a semester course).
- 6. Evidence of a minimum of thirty hours of tutoring for a one credit course, fifteen for a 1/2 credit course, must be submitted. These hours must extend over a six week period for a 1 credit course, three weeks for a 1/2 credit course.
- 7. The tutor is to submit all papers and exams completed, a summary of curriculum completed, a final recommended grade, a final examination and credit to be awarded. All papers are corrected by the tutor. The credit and recommended grade are submitted directly to the high school principal.
- 8. Work submitted after the Friday before the return to school will not be accepted.
- 9. It is the student's and/or his family's responsibility to make all tutoring arrangements.

NOTE:

- 1. A student who is completing diploma requirements must do so by August 28th to qualify for his original diploma. If this is not done, the student will receive the diploma for the academic year during which he completes his requirements. In these cases, the requirements of the new class must be met.
- 2. A student with a 50 to 59 in a regular course is considered to have potentially earned 1/2 of the credits of the course. The other half may be made up during the summer. It is only when full credit requirements are met that any credit is allowed to be awarded.

COLLEGE PREPARATORY PROGRAM

A college preparatory program is designed for those students who intend to continue their education beyond high school in a degree granting college. The following sequences are strongly recommended to students with college goals. These guidelines should be used in career planning conferences with parents, counselors, teachers and other resource people.

	Four Year C	College	
<u>Strong</u> <u>Science/Math</u>	Science/Math	<u>Strong</u> Liberal Arts	Liberal Arts
ENGLISH:			
English Accelerated 9-10	Academic English 9-11	English Accelerated 9-10	Academic English 9-10
Junior Honors English	American Studies	Junior Honors English	American Studies
Advanced Placement	Electives	Advanced Placement,	Broadcast Journalism
UConn ECE English		UConn ECE English	•Electives
MATH:			
Honors Geometry	Accelerated Algebra I	Accelerated Algebra I	Algebra IA
Honors Algebra II	Accelerated Geometry	Honors or Accelerated Geometry	Algebra IB
Honors Pre-Calculus	Accelerated Algebra II	Honors or Accelerated Algebra II	Algebra I
 Advanced Placement Calculus UConn ECE Calculus 	•Accelerated PreCalculus or •UConn ECE Statistics & •UConn ECE Discrete Math	•Accelerated PreCalculus or •UConn ECE Statistics & •UConn ECE Discrete Math	 Geometry Algebra II Advanced Math Topics
Math Electives			
SCIENCE:			
Accelerated Earth Science	Accelerated Earth Science	Accelerated Earth Science	Earth Science
Advanced Placement UConn ECE Physics	Accelerated Biology	Accelerated Biology	Biology
Advanced Placement UConn ECE Biology	Accelerated Chemistry	Accelerated Chemistry	Chemistry
Advanced Placement Chemistry	Accelerated Physics	Accelerated Physics	Physics
Science Electives	Anatomy & Physiology	Science Electives	Science Electives
	Science Electives		
WORLD LANGUAGE:			
World Language	World Language	World Language	World Language
(4-5 yrs)	(3 yrs. minimum)	(5 yrs)	(2-3 years)
TECH ED/ENGINEERING:			
Introduction to	Introduction to Engineering	Architecture Technology	Broadcast Journalism
Engineering Design	Design		
Principles of Engineering	Principles of Engineering		Architecture Technology
Tech Ed Electives	Tech Ed Electives	Tech Ed Electives	Tech Ed Electives

Four Year College

Students planning on four or two year programs are strongly encouraged to include business electives according to their own interests. A well-rounded program is encouraged including art, business, technology education, family & consumer science, and music. Students planning to study architecture and engineering are encouraged to include electives in technology education.

SCHOOL COUNSELING DEPARTMENT

The School Counseling Department delivers lessons from a Comprehensive School Counseling Curriculum structured to anticipate and nurture the academic, career, and personal/social growth of all students as they pass through different developmental stages in their high school career. In addition to individual counseling, school counselors teach classes in the areas of learning readiness, school transition and adjustment, school goal-setting and achievement, decision making, individual rights (e.g., problems involved in sexual harassment), and post secondary career and college planning. The mission of the school counseling department is to assist students in maximizing their educational and personal development and self fulfillment. To accomplish this end, the school counseling department works with the entire educational community in a proactive manner providing services for students, parents, and instructional staff. Specific

school counseling programs are made available and presented to all parents of students in grades 9-12, focusing on students' developmental educational issues.

College Admission:

Grades, class rank, difficulty of courses taken, counselors' and teachers' recommendations, activities (athletic, community service) and the SAT's I & II are the most important factors a college considers in deciding upon admissions. Students are urged to meet with counselors and visit colleges with their parents in order to gain more detailed information. Success in a full, challenging program in high school, <u>including senior year</u>, is the best preparation for college admission and eventual college work.

College Requirements:

College Admission Requirement: University of Connecticut (minimum requirements & representing all 10 of UConn's schools and colleges). Total 16:

English 4 Social Science 2 Other: 3

Math 3 (Engineering 3-1/2) (Agriculture, Liberal Arts, Health, Business and Pharmacy recommend 4)

World Language 2 (All strongly recommend 3 years of a single world language - Completing 3 years of world language in high school meets the world language graduation requirements for all 10.)

Lab-Science 2 (Agriculture recommend 4, Health and Pharmacy 3, Engineering requires chemistry or physics.)

Work Study Programs:

Work study provides high school credit for actual work experience. Students attend classes for a minimum of six courses. The amount of credits for the work study will be determined by the length of time worked and the recommendation of the student's counselor. An effort will be made to schedule a student in semester courses if a student becomes temporarily unemployed. Students interested in participating in a work program must complete an application form obtained from their counselor in the spring prior to the year in question.

It is intended that the credited work experience be related to specific areas of study of the student in the high school. Such a coordinated experience is of the most value in a work study program. It is recognized, however, that this is frequently impractical and the credit is awarded on the basis of the overall work experience of the student, including the gaining of skills and acquisition of values such as responsibility and cooperation. The work study program is reserved for students who have demonstrated a need for added motivation to complete diploma requirements or for gaining skills for success in the work place.

<u>SOAR</u>

SOAR is a full year, 1 credit academic support program for students who display academic difficulty but a willingness to work toward improvement. Assistance is provided with homework completion, academic direction and study skills. Selection is determined by school counselors and the principal. Those students who enter the SOAR program are required to sign a contract which describes the course requirements.

Course Selection Form

Every student is given a course selection form at the school counseling registration assemblies. Parents and students are asked to discuss course selections together and indicate final choices by circling courses on the sheets. The course selection sheet should be signed by a parent and brought to the registration meeting by the student.

Course Changes

Students are required to carry a minimum of 6 credits per year based on Board of Education policy. A course may be dropped for a study hall only if the student has 7 credits. Swaps for different courses or elective changes will not be honored once the school year begins. If a student wishes to drop a half-year course, it must be done by the first progress report; if a student wishes to drop a full-year course, it must be done by the end of the first marking period. If a student wishes to drop a course after this point, the student will receive a "W" for withdrawal or a "WF" for withdrawal failure. **Any additional requests should be presented to the building principal for approval.**

Course Level Changes

A course level change is a process that should include a discussion between the teacher and the student, the teacher and parent, the counselor and student, and a signature of the parent in agreement of the change. Students will be asked to bring an Academic Course Adjustment form to their teacher to begin the process.

Career Education:

Information about possible careers is available to students in the Media Center and School Counseling Suite. Students may see school counselors or media personnel in order to make use of the material in these areas. Career/college information and computer search software with printouts is available in the School Counseling Suite and students are

encouraged to use these resources. SAT preparation programs are also available in the Center. Courses of study which provide career or vocational exploratory experiences are available in several departments, including Career and Technical Education, Business Survey, Art, Music and in the Media Center.

School counselors teach a career targets assessment unit to all 9th grade classes as part of a developmental school counseling program. The school counseling department sponsors a career/job fair during the spring semester.

During their junior year, students have the opportunity to schedule career-shadowing programs through the school counseling department. Although these are best scheduled outside of school time, they are also possible during school days or on an early release schedule.

CAPT

The <u>Connecticut Academic Performance Test</u> (CAPT) is administered to all sophomores in the spring. This includes tests in mathematics, writing, reading, and science. Scores are reported in the fall and both given to students and mailed home. A notation is made on the students' permanent record for each test in which the student has met the state standard. All scores are filed in the students' test record.

COMMUNITY SERVICE RECOGNITION

A student who completes 120 hours of approved community service will receive recognition at graduation to include notation on the graduation program and a special citation awarded to the student along with the diploma. The community service must be approved by the person in charge of the related activity and cannot be a "required" service. The community service must be unpaid and voluntary. This can be within the school or in the community. The community service proposal form must be completed prior to the activity and approved by a school counselor, school administrator, class advisor or school advisor of a service organization. The reporting portion of the form must be completed after the activity, signed by the person in charge of the activity, attesting to the hours the student devoted to the service. The school counseling secretary will record the information. At the end of each year, the hours completed for the year will be totaled. The hours for the citation must be completed by the beginning of term 4, senior year, and will be verified at that time.

UCONN EARLY COLLEGE EXPERIENCE (ECE)

UConn Early College Experience (ECE) provides academically motivated students the opportunity to take university courses while still in high school. These challenging courses allow students to preview college work, build confidence in their readiness for college, and earn college credits that provide both an academic and a financial head-start on a college degree.

UConn ECE instructors, who are high school teachers certified as adjunct professors by the University. UConn ECE faculty foster independent learning, creativity and critical thinking – all important for success in college. Berlin High School offers UConn ECE courses in English, Physics, Biology, Calculus, Discrete Math, Statistics, Family & Consumer Science, and Spanish V. To support rigorous learning, University of Connecticut academic resources, including library and online classroom access, are available to all UConn ECE students.

UConn ECE students must successfully complete the course with a grade of C or above in order to receive University credit. University credits are highly transferable to other colleges and universities. Students are charged a \$25 per credit processing fee. For additional program information visit: <u>www.ece.uconn.edu</u> www.ece.uconn.edu.

PRESIDENT'S AWARD/HONORS GRADUATES

The President's Education Award, established by the U.S. Department of Education, recognizes and honors outstanding education achievement. To qualify, the recipient must have the following qualifications: a graduating senior must have a weighted, not rounded, 90% 4 year average calculated as of the term 4 senior year progress report. Two credits must be in honors or accelerated courses.*

*If a graduating senior meets the criteria, he/she is recognized at graduation as both an Honors Graduate and recipient of the President's Education Award—a combined recognition.

HONOR ROLL QUALIFICATIONS

An honor roll is published after the close of each quarter and at the end of the school year. Qualifications (minimum 5 credits per year):

High Honors:91% average with no grade below 85Honors:85% average with no grade below 80

INDEPENDENT STUDY PROGRAM

A student may arrange for a credited (.50 to full credit) independent study program with a teacher advisor. If the advisor is outside the school, the liaison will be a school counselor. Application is made to the Independent Study Program coordinator, Dr. Silva. Approval of the program is required by the principal before it is undertaken. The principal also reviews and grants credit. Independent study programs are intended to enrich students' experiences. They are undertaken in addition to all course requirements and may not replace courses in the regular program. They provide indepth opportunities for study beyond the school's regular offerings in areas where teachers' expertise cannot be accessed in regular programs. Courses from other institutions are not considered independent study programs. High school courses as such may not be replaced through the independent study program. Students must have a total of 6 credits in their schedule before applying for an independent study course. A pass/fail grade is awarded at the conclusion of the study.

PE LEADERSHIP PROGRAM

The PE Department is extremely proud of its Student Leadership Program. Students having a genuine interest in the areas of physical education or in the health field and have a positive history with the physical education staff may apply. For a minimum of one semester, a student works directly with a teacher and class every time the class meets. Activities include observation, officiating, general assistance, set-up, equipment management, drilling, and direct instruction under the supervision of the teacher where special assistance is needed by a group of students or an individual student. In order for a student to participate in the program, he/she would need the approval of both the school counseling department and the PE teacher involved. A student's placement will be based on the teacher's acceptance and the completion of an essay expressing their interest and expectations of the program. A pass/fail grade will be awarded by the teacher at the conclusion of the course and credit is determined according to the length of the leadership experience. The Student Leader Program does not replace Physical Education credit or any course requirement.

PRESIDENTIAL CLASSROOM

Two top students in United States History in their junior year are sent to the Presidential Classroom by the Board of Education during their senior year (The Presidential Classroom is a week long residential study program in Washington D.C.). They are chosen based upon their academic accomplishments and an essay competition. The department sets a U.S. History grade average cutoff to be eligible for the essay competition.

Students learn first hand about the operation of government and attend meetings, seminars and interviews with distinguished appointed and elected leaders in our government.

CLASS RANK

Differentials are added to the following courses in consideration of difficulty for purposes of establishing the student's cumulative grade point average and rank in class. There is also a special notation on the student's permanent record. Note: The points are not added to the grade itself, but computed into the grade points when factoring GPA.

Honors Courses - 8 points added:

Junior Honors English Advanced Placement, UConn ECE English Advanced Placement, UConn ECE Physics Advanced Placement, UConn ECE Biology Advanced Placement, UConn ECE Calculus Honors Pre-Calculus Honors Algebra II Honors Geometry

Accelerated Courses - 5 points added:

Algebra I Accelerated Algebra II Accelerated Geometry Accelerated Pre-Calculus Accelerated Calculus Accelerated Physics Accelerated Chemistry Accelerated Earth Science Accelerated Biology Accelerated Spanish V, UConn ECE Into to Anthropology Advanced Placement U.S. History Advanced Placement Chemistry Statistics, UConn ECE Discrete Math, UConn ECE UCONN ECE Introduction to Individual & Family Development

French IV Spanish IV Humanities – Man's Search for Meaning American Studies English 9 Accelerated English 10 Accelerated

HONORS CITATIONS

Qualified students are encouraged to become members of the Berlin High School honors program by applying for one of the following citations:

- 1. Academic Honors Citation
- 2. Career Honors Citation

Academic Honors Citation:

This program is designed to motivate academically strong students to enroll in the most demanding high school course offerings and to give recognition to students who achieve high averages in academically demanding courses, an academic honors citation is possible for each student who makes application and meets the requirements. At graduation each qualifying student will receive a special citation identified as academic honors.

General Requirements:

- 1. Average of 85 or above in all courses.
- 2. Average of 85 or better in 10 academic credits as follows:
 - World Language: 2 years Science: Accelerated or Honors Biology and Accelerated Chemistry or AP Chemistry Mathematics: Algebra I, II, Geometry Accelerated English 9, Accelerated English 10, Junior Honors English or American English: Studies, Senior Honors English, or electives.

Social Studies:

The World & Its People I & II, Civics, AP U.S. History or American Studies 3. Completion of an application form to the administration during junior year. Approval for having met the criteria of the program at the point of progress reports, guarter 4, senior year.

Specific Requirements:

- Average of 88 or better in at least two of the following departmental sequences:
- 1. World Language: 5 years in one language (4 years when 5 are not available)
- 2. Science: Accelerated Earth Science, Honors Biology, Accelerated Chemistry, Honors Physics
- 3. Mathematics: Honors Geometry, Honors Algebra II, Honors Pre-Calculus, Calculus or Statistics & Discrete Mathematics
- 4. English: Accelerated English 9, Accelerated English 10, Junior Honors English, or Senior Honors English.
- 5. Social Studies: The World & Its People I & II, Civics, Advanced Placement U.S. History or American Studies, Introduction to Anthropology, or Humanities.

Career Honors Citation (Technology, Business Education, and Family & Consumer Science):

Students who have demonstrated excellence in specific career areas by meeting or exceeding established criteria are awarded a Career Honors Citation in their area of specialization at graduation. This certificate attests to the fact that the student has attained a high level of performance in his/her career area and is unusually well prepared either to further his/her education in the area or to secure gainful employment as may be appropriate.

To obtain this certificate, the student must:

- 1. Submit an application administered through the counseling department during junior year. This must be approved for admittance to the program.
- 2. Complete satisfactorily the prescribed requirements of the career area.
- 3. Receive approval of administration having met the criteria of the program at the point of the progress report. term 4, senior year.

SENIOR WRITING PORTFOLIO

As a culminating event in their school years' writing programs, all seniors are required to complete a writing portfolio by a published date during their senior year. Students must receive a passing grade on the portfolio in order to qualify for a diploma. The final grading of the portfolio is done holistically by a committee using a published rubric. More specific instructions for the portfolio are provided to each student at the beginning of the school year.

ENGLISH CURRICULUM

The English Department strives to support the academic, social, and civic expectations of Berlin High School in all of its courses, particularly emphasizing reading critically, writing effectively, communicating clearly and persuasively, and using a variety of resources for academic, technological, and practical purposes.

Four full years of English (4 credits) are required for a Berlin High School diploma. They must be taken as part of the regular high school offerings as described in this booklet for all students enrolled in the high school. Additional courses or electives may be taken, but there is an expectation that one full credit of Berlin High School English be successfully completed during each year of high school. Students who take more than one English class per year struggle to succeed. Faced with twice as much reading and writing than the year before, students in multiple English courses rarely make up both the credits that they are seeking in the two English classes. In addition, there is a cumulative nature to the English curriculum so that a student who has failed English 9, for example, clearly lacks the skills and content knowledge to take two English courses at the same time. Therefore: 1) Students will not be allowed to take Junior English if they have not passed English 10, 2) Students will be allowed to take Junior English and a Senior elective at the same time in order to graduate with their class.

Writing Requirements

The development of writing skills is an objective of each course in the high school, grades 9-12. To achieve this objective, a certain level of student effort is required. Therefore, in order to receive credit for each course, the student is expected to complete writing assignments in a satisfactory manner. Students who do not meet these requirements may receive a failing grade in the course even though the average of other course work is passing (the senior writing portfolio is a separate grade and a student must receive a passing grade in order to graduate).

Honors and Accelerated Classes

Students are admitted to the English 9 accelerated course by recommendation of Grade 8 teachers and counselors. Students may elect to enroll in the accelerated/honors program in grades 10, 11 and 12 by filling out the program's contract at course registration time. Students who have contracted to be enrolled in honors and accelerated classes are expected to successfully complete an examination of the summer reading assignment. This examination will be administered at the start of the fall semester.

* Indicates an Accelerated level course.

** Indicates an Honors level course.

054 English 9

In this course, attention is given to writing and the development of communication skills including accurate language usage in written and oral form. A wide breadth of literature, primarily British and American, is read and studied. Comprehension and interpretation of fiction and nonfiction texts is a main focus throughout the year. CAPT preparation will begin.

050 *English 9

Prerequisite: Admission by recommendation of grade 8 English teachers and counselors. Students selected for this course work intensively on writing and literature at advanced levels. Considerable writing, including essays and research papers, is required. Critical interpretation skills are a main focus. CAPT preparation will beain.

075 English 10

This academic course introduces a broader concept of literature with examples from several cultures and emphasizes complex communication and comprehension skills. Many independent and cooperative learning projects are included. Preparation for State CAPT is an integral part of the class.

070 *English 10

The students in this course study advanced composition methods and literature representing several cultures. Students are challenged to complete a variety of complex tasks. They are expected to develop a critical approach to the study of literature. Preparation for State CAPT is an integral part of the class.

Full Year 1.00 credit

Full Year 1.00 credit

1.00 credit

1.00 credit

Full Year

Full Year

All students in grade 11 are registered for American Literature I & II (English 11) or American Studies. The focus of the literature studied is American literature. All grade 11 students will conduct research and write a developed MLA style research paper using the writing process approach. Students will participate in many independent and cooperative projects.

200 *American Studies

This team-taught double period course integrates the study of American history and American literature. The course is organized thematically by a U.S. History and an American Literature teacher who coordinate instruction. During the study of each theme, students have opportunities to develop their communication skills, including grammar, writing, oral presentations and discussions, vocabulary, composition, and critical analysis while studying the history, art and literature related to the themes. Research techniques and the development of SAT-level vocabulary, reading comprehension, and writing skills are also emphasized. The objectives of the separate curricula in U.S. History and American Literature are met in this course.

088 American Literature I

1/2 Year .50 credit This course includes instruction in communication skills and literature. There is a strong emphasis on the development of composition using the "writing as a process" approach. Vocabulary and essays are included in this course. American literature up to 1900 is the focus of the reading in this course.

089 American Literature II

This course includes instruction in communication skills and literature. There is a continued emphasis on the development of composition using the "writing as a process" approach. Vocabulary, essays and a research paper are included in this course. American literature after 1900 is the focus of the reading in this course.

080 **English 11

This course is designed for the serious college preparatory student. This full year survey course emphasizes American literature, advanced grammar and composition, significant readings include both classical and contemporary American literature. There will be many critical and analytical papers assigned as well as a research paper. Students in this class may be recommended to continue their English study as seniors in **Advanced Placement, UConn ECE English.

With the exception of students taking **Advanced Placement UConn ECE English (course 090), all grade 12 students will be required to enroll in and pass Senior English Seminar (1 credit).

103 Senior English Seminar

Grade 12 (Required of all seniors except those enrolled in **Advanced Placement UConn English). Senior English Seminar focuses on reading, writing, and thinking skills necessary to succeed in the twenty-first century world. The course will be structured as a reading and writing workshop. Readings will include a wide range of fiction and non-fiction selections, both current and classic; a process writing approach will be utilized as students practice composing in a variety of genres. Emphasis will be placed on the continued development of effective writing skills, critical reading strategies, discussion and speaking techniques, analytical and creative thinking, and intellectual curiosity. Focused research skills and relevant technology will be integrated throughout the course curriculum.

090 **Advanced Placement, UConn ECE English

This course requires substantial and challenging reading, critical thinking, and analytical writing. Readings will include selections from various non fiction as well as fiction genres. Students will consider the readings in light of a variety of critical approaches. Writing will be our primary medium for exploring meaning. Students will study and employ important grammatical, syntactic, and stylistic elements as a strategy to improve their own writing. Students will interact with the writing process across a range of compositional and assessment strategies. Students will satisfy the requirements for English 111, as described in the curriculum handbook of the University of Connecticut. English 111 is a seminar in writing about some of the world's best literature.

Academic Expectations: Advanced Placement, UConn ECE English is a demanding course which will vield substantial benefits to the conscientious student. Everybody involved in this course is expected to demonstrate mature initiative, thorough preparation, and willing cooperation. Students who complete this course with a "C" or better will be awarded University of Connecticut credit. As well, students who complete this course are eligible to take the Advanced Placement examination. We expect each member of this class to achieve University of Connecticut credit, as well as take the Advanced Placement examination. Students are individually responsible for costs associated with University of Connecticut credit and the Advanced Placement examination.

Full Year 1.00 credit

1/2 Year .50 credit

2.00 credits

1.00 credit

Full Year

Full Year

Full Year 1.00 credit

SENIOR ENGLISH ELECTIVES

Senior English Electives may be open to 11th graders depending upon availability of space.

1/2 year

1/2 Year

1/2 Year

1/2 Year

144 Mythology

This course will focus on the various gods/goddesses and stories that form Greek mythology. Time will be spent focusing on the mythology of other cultures as well, including mythical religions from Rome, China, India and the Netherlands. Students will study and read interesting myths about the various deities, analyzing the creation of the gods/goddesses as a means of explaining how/why things happened on Earth. Included will be the study of the epic hero through the research of figures including Hercules, Perseus, Theseus and Jason. Additionally, this course will take an extensive look at religious conceptions of Hell derived from various cultures. Included in this section will be some studies of the various ideas involving creation and the Apocalypse. By the end of course, students will have a clearer understanding of what mythology is, why it was developed, and how it has survived in various forms throughout the centuries. Several writing assignments, a research presentation, videotaped projects, and mythology web quests will be required to successfully complete the course.

112 Creative Writing

This course is designed for students who are imaginative and have a strong interest in writing. It includes the study and writing of the memoir, the short story and its varied genres, and poetry.

123 Introduction to Fantasy/Science Fiction

This course will explore the genres of science fiction and fantasy. It will focus on works by some of the greatest authors of science fiction and fantasy including, but not limited to, Isaac Asimov, Ray Bradbury, Stephen King, H.G. Wells, J.R.R. Tolkien, and Philip Pullman. We will explore the literary value of these works, study related scientific research, draw parallels between their world and ours, and examine their historical and social significance. Novels, short stories, film, and poetry will be essential in exploring these ideas. Students will be expected to create science fiction and fantasy-based works of their own throughout the course.

130 Broadcast Journalism

This course provides students the opportunity to learn multiple aspects of broadcast journalism (television and radio) in three lab settings: the radio studio, the television studio, and the computer lab. With the guidance and knowledge of two teachers, a technology and an English teacher, students will engage in activity-based assignments including preproduction of broadcasting segments (scripting and creating storyboards), production (actual filming and recording), and post-production (revising and editing broadcasts). Students will organize and develop all aspects of the production of the school newspaper, such as writing articles, editing, and developing design and formatting techniques. Additionally, students will learn interviewing skills, examine present investigative and news reporting, and consider ethical matters in broadcasting. Guest speakers and several field trips to local radio and television stations will supplement this course.

132 Speech

This course provides students with a variety of real life speaking situations to help them develop poise and confidence in public speaking. The course includes voice improvement, delivery techniques, oral readings, and critical speaking. Speeches are delivered in a variety of settings, from the classroom to the auditorium. Videotaping of speeches is a regular part of the course.

108 Selections in Literature

This course will include a study of themes such as family, search for self, racism, and war. Selections will be drawn from short stories, essays, poems, articles and films. Literature from a range of historical periods as well as contemporary examples will be explored. In addition to readings and discussions, students will keep response journals, learn to write themes about literature and participate in performance-based group and individual assignments.

100 Humanities

This course covers a study of world religions, Western philosophy, art history, and music. The nature of this class is to survey these areas and then allow students to pursue further interest through reading, writing, or multi-genre research. An emphasis is placed on opening students' eyes to new ideas, subject areas and points of view not covered in traditional fields of study.

094 *Humanities Man's Search for Meaning

(English .50, Social Studies .50) "Who Am I? What Is Life/Death? Why Does Man Create? What Is Our Purpose?" The class will study a variety of disciplines, including philosophy, psychology, religion, and the arts. The Bible, Siddhartha, The Republic, The Prince, and the history of philosophy and mythology will be included in the studies. There are many opportunities for projects and hands on activities in this course.

1/2 Year .50 credit

.50 credit

.50 credit

.50 credit

.50 credit

1/2 Year .50 credit

1/2 Year .50 credit

Full Year 1.00 credit

READING CURRICULUM

The Reading Curriculum provides additional support for students to read critically and write effectively. Instruction is presented in a reading/writing workshop format in which strategies are presented in both individual and whole group settings. Students make use of a variety of reading resources and are instructed to produce written texts that express, develop, and substantiate ideas and experiences.

B098 Remedial Reading

Grades 9, 10, 11 & 12.

This course is for students who are more than two years behind in their reading skills Both individual and group remedial instruction emphasize skills in reading for understanding and writing effectively. Enrollment is determined by a PPT and/or consultation by the Reading and School Counseling Departments.

B102 Developmental Reading 9/10

Grades 9 & 10.

Students in grades 9 & 10 who are reading approximately one year behind or not reading up to their own potential are scheduled for a full year in reading. These students are referred by their English teachers or counselors. Reading scores, results of the Connecticut Mastery Test and Connecticut Academic Performance Test will be taken into consideration. Classes focus on individualized and group instruction in reading for understanding and writing effectively.

B104 Developmental Reading 11/12

Grades 11 & 12. Students in grades 11 & 12 who are reading approximately one year behind or not reading up to their own potential are scheduled for a full year in reading. These students are referred by their English teachers or counselors and the referrals are supported through group and/or individualized testing. Strategies that help students "read to learn" and write effectively are included in the class. Both group and individualized reading and writing instruction are included.

ESOL CURRICULUM

The ESOL Department provides instruction and support to English Language Learners (ELL's) developing English proficiency for success in both social and academic settings. The ESOL Department assists ELL's in comfortably integrating within the school community, and is committed to ensuring they become responsible and productive members of society.

133ESOL EnglishFull Year1.00 creditThis skill-centered course focuses on developing reading, writing, listening, speaking and critical thinking skills within
context. Reading strategies are explicitly taught and practiced through examination of many different types of fiction and
nonfiction text. Grammar and vocabulary lessons stem from readings. Skills for effective writing are developed and
practiced.

134 ESOL Social Studies

This course develops reading, writing, listening, speaking and critical thinking skills through the examination of U.S. history, geography, and other social studies content. Students build academic vocabulary and practice reading skills with a focus on nonfiction and historical fiction texts.

135 ESOL Study Support

This course provides one-on-one or small-group assistance with a focus on study skills and reading strategies applied to classes outside the ESOL Program. There is no credit awarded for this support class.

Full Year1.00 credit

1.00 credit

1.00 credit

Full Year

Full Year

Full Year

Full Year 1.00 credit

No credit

SOCIAL STUDIES CURRICULUM

The Berlin High School Social Studies Department is committed to the mission of developing responsible, ethical, and productive citizens and lifelong learners. Departmental courses actively engage students in the acquisition of theoretical, technological, and practical knowledge; rigorously challenge students to think creatively and critically, and encourage students to understand, accept, and appreciate the diverse nature of society. In particular, departmental courses prepare Berlin High School students to read critically, write effectively, and communicate clearly and persuasively. In this way, the Social Studies Department, its faculty and its courses, provides students the skills to achieve and to fulfill the expectations of their school and community.

204 The World and Its People, Part I

Grade 9.

The World and Its People I curriculum focuses on the history, cultures and geography of major regions of the world. Students enrolled in the full-year Grade 9 course will study Africa, the Middle East, South Asia and East Asia (particularly India, China and Japan). The study of these regions addresses a critical need for exposing students to historical and cultural aspects of key parts of the world that are socially and culturally different from our own. It is the goal of the course to impart to students a set of enduring understandings about human beings and their interactions, both past and present. to prepare them for life in a globalized society.

222 The World and Its People, Part II

Grade 10. This course is a continuation of the Grade 9 study in global history. Specific regions of the world—Western Europe and Russia/Eastern Europe—are studied with emphasis on history, culture, geography and contemporary issues of that part of the world. A variety of instructional approaches is employed. All students in Grade 10 are assigned to this course.

Grade 10. Students will study the historical and contemporary conflicts of constitutional principles. They will investigate the rights and responsibilities of citizens, take positions on current issues and participate in civic projects. Investigations of local, state and federal governments will help prepare students to become active citizens in the present and future. Civics is a state-required course for graduation. Students are required to complete a performance-based assessment through the Civics course.

238 United States History I

Grade 11.

242 Civics

All students in Grade 11 enroll in United States History I & II, Advanced Placement U.S. History, or American Studies. The most important aspects of United States history from the 1880's to modern times are studied, with an emphasis on major social, cultural, political and economic developments of the time period.

239 United States History II

Grade 11.

All students in Grade 11 enroll in United States History I & II, Advanced Placement U.S. History, or American Studies. The most important aspects of United States history from the 1880's to modern times are studied, with an emphasis on major social, cultural, political and economic developments of the time period.

230 **Advanced Placement U.S. History

Grade 11.

The Advanced Placement United States History program is designed to provide students with the analytical skills and factual knowledge necessary to deal critically with the problems and materials in United States history. Students will learn to assess historical materials-their relevance to a given interpretive problem, their reliability and their importance-and to weigh the evidence and interpretations presented in historical scholarship. Admission to an Advanced Placement course should depend upon a student's commitment to the subject as well as high aptitude. Student responsibility for reading and digesting material is a must. It is expected that student will take the Advanced Placement exam in May.

200 *American Studies

Grade 11. This team-taught double period course integrates the study of American history and American literature. The course is organized thematically by a U.S. history and an American literature teacher who coordinate instruction. During the study of each theme, students have opportunities to develop their communication skills, including grammar, writing, oral presentations and discussions, vocabulary, composition, and critical analysis while studying the history, art and literature related to the themes. Research techniques and the development of SAT-level vocabulary, reading

1/2 Year (Sem 1) .50 credit

1/2 Year (Sem 2) .50 credit

1.00 credit

2.00 credits

Full Year

Full Year

1.00 credit

.50 credit

.50 credit

Full Year

1/2 Year

1/2 Year

comprehension, and writing skills are also emphasized. The objectives of the separate curricula in U.S. History and American Literature are met in this course. SOCIAL STUDIES ELECTIVES

094* Humanities Man's Search For Meaning (English .50, Social Studies .50) Full Year 1.00 credit Grade 12.

"Who Am I? What Is Life/Death? Why Does Man Create? What Is Our Purpose?" The class will study a variety of disciplines, including philosophy, psychology, religion, and the arts. The Bible, Siddhartha, The Republic, The Prince, and the history of philosophy and mythology will be included in the studies. There are many opportunities for projects and hands on activities in this course.

262 Introduction to Law Grade 12.

In this course, students will examine the reasons why one should know law and how it applies to our everyday lives. Concepts such as jurisdiction (federal, state and local), preparation for a trial, jury selection, types of courts, types of laws (criminal and civil) will be studied.

246 Introduction to Sociology

Grades 11 & 12.

The Introduction to Sociology curriculum is designed to allow students insight into and appreciation of the basic concepts of human relationships, their causes and consequences. This course will provide students with an understanding of these relationships through observation, research, readings and discussions regarding topics such as self, school and town community, American culture and society, group dynamics, pop culture and mass media, social problems, social institutions and human development.

254 **Introduction to Anthropology

Grade 12.

Anthropology is the cross-cultural study of human societies.

This course is taught at the college level and a sophisticated level of student participation is expected. The course covers a wide range of societies worldwide and suggests what we might learn about ourselves based on an intensive examination of people whose cultures differ from our own.

276 Introduction to Psychology

Grades 11 & 12.

Can you really have a "great personality?" What does "smart" mean? How do we define insanity? This course will examine ideas such as personality, intelligence, emotion, human development, and psychological disorders such as depression and addiction. Readings and films will include both literary and historical sources.

264 Sports in American Society

Grades 11 & 12.

Students in this course will examine American history, society, and culture through the perspective of sports. Major topics of the course, including economic, ethnic, gender, and contemporary issues, will be explored through literature, film, research, and activities. Additionally, students will become familiar with social interaction, sports organization, social and psychological aspects of sports, team behavior, and the culture of sports at the professional, collegiate, high school, and youth levels.

266 "Reel History" I

Grades 11 & 12.

This course offers students the opportunity to study various historical events and issues through the eye of the camera. This one semester course presents movies ranging from Gladiators and Braveheart to Schindler's List and Thirteen Days. The course provides the context of the movie through reading and discussion. Assessment ranges from guizzes on the movies to an occasional paper. Students may take either or both "Reel History I" and "Reel History" II.

267 "Reel History" II

Grades 11 & 12. This course offers students the opportunity to study various historical events and issues through the eye of the camera. The semester length course presents movies ranging from Forest Gump and American Graffiti to Malcolm X and Quiz Show. The course provides the context of the movie through reading and discussion. Assessment ranges from guizzes on the movies to an occasional paper. Students may take either or both "Reel History" I and "Reel History" II.

1/2 Year .50 credit

1/2 Year

1/2 Year

1/2 Year .50 credit

1/2 Year .50 credit

1/2 Year .50 credit

.50 credit

1/2 Year

.50 credit

.50 credit

256 The History of Conflict in the Middle East

1/2 Year .50 credit

Grades 11 & 12.

This course will explore the causes, effects, and meanings of warfare in an important region of the contemporary world. It will focus on analyzing and understanding the origins, history, and cultural aspects of ongoing conflicts in the North Africa, the Middle East, Central and Southern Asia, and U.S. policies toward them. Wars and civil conflicts in Iraq & other Persian Gulf states, Afghanistan, and Israel/Palestine will be examined in detail so that students may gain an understanding of both how and why current threats to homeland security have come about. Students will be required to read and analyze materials from primary and secondary sources (speeches, translated documents, reference and history books, newspapers and newsmagazines, online resources), to view broadcasts of world news on a regular basis, to conduct a series of mini-research projects, and to present their findings to the class.

208 Current Events/Contemporary Issues

1/2 Year .50 credit

1/2 Year

.50 credit

Grades 11 & 12

This course will examine current local, national, and global issues and events by analyzing relevant historical and cultural perspectives to illuminate the present. An enhanced awareness of contemporary issues will allow students to gain broader and deeper insight into local, state, and national connections to events occurring around the globe and to more thoroughly and thoughtfully understand the world today. By investigating and monitoring significant events, their origins and outcomes, and their respective historical and cultural contexts, this course will provide students with a greater appreciation for contemporary events. The role of the media, foreign policy decisions, international relations, economic changes, political maneuvering, military operations, cultural perceptions, and other relevant aspects of major current events offer a backdrop for course lectures, primary source analysis, discussion, and debate.

209 Wars that Changed the World

Grades 11 & 12

This course will consist of an in-depth study of military engagements that have influenced World and United States history. This study will include a thorough evaluation of the causes and objectives of historical occurrences of armed conflict, analyze tactics and results, assess the impact such events had on the course of history, and infer how these events might affect future economic, political, and social issues. The content of this course varies, however, the main areas studied include, but are not limited to, Ancient-Medieval-Napoleonic Warfare, the U.S. Civil War, WWI, WWII, Vietnam, the Cold War era. A heavy emphasis will be placed on current issues. For each war we will investigate causes, technology used, strategy, tactics, and the life of the common soldier, the impact of the war on civilians, and the impact of the war on the world.

This course will examine the way countries work together to solve conflicts and look at the major wars around the world and how they have impacted history. Historical and contemporary examples of international warfare, revolutionary movements, civil war, and resource competition and refugee activity will be used to analyze conflict management and resolution. All aspects of war will be studied including military, economic, social, and political. The primary goals of this course are to have the students understand how these conflicts began and how they affected the nations and peoples involved.

The course will require extensive reading, writing and critical thinking from students. Methods of study will include the reading of first-hand accounts, historical novels and non-fiction works of the students' choosing; class discussion; library and archival research; lecture; playing tactical war games; and studying artifacts. Students will be expected to engage in a critical analysis of the significant themes of military history and be able to analyze and synthesize previously unseen historical data. This course will develop skills necessary to arrive at conclusions based on an informed judgment and to present reasons and evidence clearly and persuasively.

WORLD LANGUAGE CURRICULUM

The BHS World Language Department is committed to the acquisition of skills set forth by The National Standards for World Language. These standards are the backbone of our curriculum and are based on the "Five C's" (communication, cultures, connections, comparisons and communities). Students in a World Language class will read critically, write effectively, and communicate clearly in the target language in accordance with their level of proficiency. Performance based assessments are utilized as part of the evaluative process in all levels.

* Indicates an Accelerated level course ** Indicates an Honors level course

300 Spanish I

Grades 9, 10, 11 & 12

This is an introductory course in which students will begin to develop listening, reading, writing, and speaking skills in Spanish, as well as explore the diverse cultures of the Spanish-speaking world. Multimedia resources are utilized to offer a variety of opportunities to hear and respond to native speakers. Cooperative learning and thematic writing activities are employed.

308 Spanish II

Grades 9, 10, 11, & 12

The skills of listening, speaking, reading and writing Spanish are further developed within the context of real-life situations. Spanish language writing exercises are assigned to provide practice in the use of grammatical construction and vocabulary. Communicative activities and texts are used to encourage an interest in and an appreciation for the language and diverse cultures of the Spanish-speaking world. By course completion, students are expected to have significant improvement in oral communication and listening comprehension.

312 Spanish III

Grades 10, 11, & 12

This course is a continuation of the skills and concepts presented in Spanish II. There is an enhanced focus on speaking and listening skills with a concentration on communicating in the past tense. Students will continue their study of the diverse cultures of the Spanish-speaking world.

316 *Spanish IV

Grades 11 & 12

This course is a rigorous study of advanced Spanish grammar in order to acquire strong skills in the reading, writing, speaking and understanding of the Spanish language. There is extensive conversation in the target language to help the students develop their ability to speak and to listen. There is a review of previously taught grammar and advanced grammatical concepts and verb tenses are introduced. Spanish history, art and literature are included in various readings and projects.

320 **UConn ECE Spanish V

Grade 12

This course is offered in conjunction with the University of Connecticut Early College Experience Program. College credit will be granted by the University of Connecticut upon successful completion of the course (Grade of C).

The National Standards for World Language Instruction, also known as the "Five C's" (communication, cultures, connections, comparisons and communities), are the continuing focus of the Level V class, Spanish civilization will be studied through contemporary readings and class discussions with religion, politics, and the family used as the basis for both written and oral presentations. Work with advanced grammar/vocabulary and assigned writings will be the foundation of the course. Oral proficiency will be stressed.

Note: Students may also choose to take the Advanced Placement, UConn examination in the spring. These students should see their Spanish teacher for information and preparation for this examination.

330 French I

Grades 9, 10, 11 & 12

This is an introductory course in which students will begin to develop listening, reading, writing, and speaking skills in French, and will explore the diverse cultures of the French-speaking world. Multimedia resources are utilized to offer a variety of opportunities to hear and respond to native speakers. Cooperative learning and thematic writing activities are employed.

Full Year 1.00 credit

Full Year 1.00 credit

1.00 credit

1.00 credit

Full Year 1.00 credit

Full Year 1.00 credit

Full Year

Full Year

Full Year 1.00 credit Grades 11 & 12 French art, history and literature are introduced. 350 Russian I 1.00 credit Full Year Grades 9, 10, 11 & 12 This is an introductory course in which students will begin to develop listening, reading, writing, and speaking skills in Russian, and will explore the culture of the Russian people. Multimedia resources are utilized to offer a variety of opportunities to hear and respond to native speakers. Cooperative learning and thematic writing activities are employed.

354 Russian II

Grades 10, 11 & 12

The skills of listening, speaking, reading and writing Russian are further developed within the context of real-life situations. Russian language writing exercises are assigned to provide practice in the use of grammatical construction and vocabulary. Communicative activities and texts are used to encourage interest in and appreciation for the language and culture of the Russian peoples. By course completion, students are expected to have significant improvement in oral communication and listening comprehension.

358 Russian III	Full Year	1.00 credit
362 Russian IV	Full Year	1.00 credit
366 Russian V	Full Year	1.00 credit

As a student progresses in their study of Russian language and culture, a more refined, individualized program is developed for the student by the teacher. There is a continuation of the skills and concepts presented in the beginner levels along with an enhanced focus on speaking and listening skills. Advanced grammatical concepts are introduced. Russian history, art, and literature are included in various readings and projects.

334 French II Grades 9, 10, 11 & 12

The skills of listening, speaking, reading and writing French are further developed within the context of real-life situations. French language writing exercises are assigned to provide practice in the use of grammatical construction and vocabulary. Communicative activities and texts are used to encourage an interest in and an appreciation for the language and diverse cultures of the French-speaking world. By course completion, students are expected to have significant improvement in oral communication and listening comprehension.

338 French III

Grades 10, 11 & 12

This course is a continuation of the skills and concepts presented in French II. There is an increased focus on speaking and listening skills. Students will communicate in French about such topics as the family, school and travel. Students will also continue their study of the diverse cultures of the French-speaking world.

342 *French IV

This is a study of advanced French grammar needed to acquire strong skills in reading, writing, speaking and understanding of the language. There is extensive conversation in French to help the students develop the ability to speak and listen. There is a review of previously taught grammar and advanced grammatical concepts are taught.

1.00 credit

1.00 credit

Full Year

Full Year

Full Year 1.00 credit

MATHEMATICS CURRICULUM

The Mathematics Department offers courses encompassing a wide range of student abilities and pursuits. Each course emphasizes a variety of problem-solving methods and strategies, and integrated into each course are applications to reallife situations utilizing "real" data and current technology. Students are encouraged to solve problems creatively and to communicate their results clearly and persuasively. It is a requirement that each student have a scientific calculator for any mathematics course at Berlin High School. The department recommends a TI-30XIIS or TI-30XIIB calculator.

* Indicates an Accelerated level course. ** Indicates an *Honors* level course.

400 Integrated Math I

This course is not open to students who have successfully completed Foundations of Algebra and Geometry A, Algebra IA, or Algebra I. This course addresses the basic mathematical concepts, principles, facts, and skills needed to solve real-world problems, with stress on the learning process, real mastery, and good workmanship. Included is an intensive review of the four basic operations with whole numbers, fractions and decimals, a study of percent and related problems, and units on banking, perimeter, area, and practical applications. A comprehensive CAPT preparation component is included.

404 Foundations of Algebra and Geometry A

This course is designed to prepare students for success in future mathematics courses. There is an emphasis on realworld problem solving and the development of topics covered in Algebra and Geometry. Computer technology, scientific calculators and graphing calculators are utilized. Topics covered include: working with data, probability, real number properties and operations, solving linear equations, area and perimeter, and the Pythagorean Theorem. A comprehensive CAPT preparation component is included.

408 Foundations of Algebra and Geometry B

Prerequisite: successful completion of Foundations of Algebra and Geometry A, Algebra I, Algebra IB or Geometry (only with teacher recommendation)

This course is designed to prepare students for success in future mathematics courses. There is an emphasis on realworld problem solving and the development of topics covered in Algebra and Geometry. Students will study solving multiple-step linear, quadratic, and exponential equations and real-world applications that involve use of these. Ratio, proportion, and similarity among various geometric figures are also considered applied in different contexts (including basic trigonometry). Students will also study the surface area and volume of three-dimensional figures. Several types of transformations of two-dimensional figures are also considered. A comprehensive SAT preparation component is also included.

412 **Consumer Mathematics**

Prerequisite: successful completion of Foundations of Algebra and Geometry B, Geometry (less than 70 average), or Algebra II (less than 70 average)

This course emphasizes practical mathematics topics. Units of instruction include part-time and full-time jobs, checking and savings accounts, credit, automobile expenses, taxes, housing and personal finance.

432 Algebra IA

Prerequisite: successful completion of 8th grade mathematics

This course includes a study of real numbers and the solving, graphing and writing of linear equations and linear inequalities. Successful completion of both this course and Algebra IB is equivalent to Algebra I. A comprehensive CAPT preparation component is included.

436 Algebra IB

Prerequisite: successful completion of Algebra IA

This course includes a study of systems of equations and inequalities, exponents and exponential functions, quadratic equations and quadratic functions, operations on polynomials and rational expressions, and an introduction to coordinate geometry. Successful completion of both this course and Algebra IA is equivalent to Algebra I. A comprehensive CAPT preparation component is included.

424 Algebra I

Prerequisite: successful completion of 8th grade mathematics or Foundations of Algebra and Geometry B This course includes a study of the real number system, first degree equations and inequalities and an introduction to guadratic expressions and equations. Problem-solving and applications to real-life situations is emphasized. The curriculum utilizes real data and technology to help visualize the material. A comprehensive CAPT preparation component is included.

Full Year 1.00 credit

1.00 credit

1.00 credit

Full Year

Full Year

Full Year

Full Year

Full Year

Full Year 1.00 credit

1.00 credit

1.00 credit

1.00 credit

Prerequisite: successful completion of Algebra IA This course emphasizes the concepts of Plane Geometry which are developed through hands-on activities. Topics of study include angles, polygons, transformations, circles, perimeter, area, volume, congruence, and similarity. Algebra

450 Geometry Prerequisite: successful completion of Algebra I

This course includes the topics listed for course 438, but the topics are covered in greater depth. Algebra skills are reinforced with geometric concepts. A comprehensive CAPT preparation component is included.

skills are reinforced with geometric concepts. A comprehensive CAPT preparation component is included.

This course includes the topics listed for course 424, but the topics are covered in greater depth.

454 *Geometry

428 *Algebra I

438 Basic Geometry

Prerequisite: successful completion of Algebra I Accelerated or 8th grade Algebra I and teacher recommendation This course includes a study of deductive and inductive reasoning, parallel lines and planes, congruent triangles, guadrilaterals, similar polygons, right triangles, and circles. Algebra skills are reinforced with geometric concepts. A comprehensive CAPT preparation component is included.

458 **Geometry Full Year 1.00 credit Prerequisite: successful completion of Algebra I Honors (8th grade) and teacher recommendation This course includes the topics listed for 454, but the topics are covered in greater depth. Additional topics include coordinate geometry and transformations. A greater emphasis is given to logic and more rigorous treatment is given to deductive proof and critical thinking. Algebra skills are reinforced with geometric concepts. A comprehensive CAPT preparation component is included.

440 Algebra II

Prerequisite: successful completion of Algebra I and Geometry

A continuation of Algebra I with emphasis on the concepts of real numbers and their properties, solutions of first and second degree sentences, graphs of functions and relations, determinants, ratio, proportions, variations, exponents, radicals, complex numbers, problem solving data analysis and technology.

444 *Algebra II

Prerequisite: successful completion of Algebra I Accelerated and Geometry Accelerated (428 and 454) and teacher recommendation

A continuation of Algebra I Accelerated with emphasis on the concepts of linear, guadratic, and exponential functions, polynomials, rational expressions, radicals, irrational numbers, complex numbers, problem solving, data analysis, and technology.

446 **Algebra II

1.00 credit Prerequisite: successful completion of Algebra Honors (8th grade) and Geometry Honors (458) and teacher recommendation

This course includes the study of all topics listed for courses 440 and 444 with more rigorous treatment. A comprehensive CAPT preparation component is included.

490 Advanced Mathematics Topics

Prerequisite: successful completion of Algebra I, Geometry and Algebra II

This course includes the study of functions, linear and quadratic equations, complex numbers, polynomial functions, triangle trigonometry, combinatorics, probability, and statistics. This course is recommended to students who will continue their education but will not major in mathematics. The intent of the course is to prepare students for math courses at the college level. Students are expected to provide a scientific calculator for their use in this course. Students who are enrolled in Pre-Calculus or have received credit for Pre-Calculus are not eligible for this course.

470 *Pre-Calculus

Prerequisite: successful completion of Algebra II Accelerated and teacher recommendation This course includes the study of polynomial, rational, exponential, and logarithmic functions. There is a concentrated study of trigonometry. Additional topics studied are complex numbers, series, and systems of equations. Graphing calculators will be provided and used. Students must have a scientific calculator of their own, preferably a TI-30XIIS.

Full Year Prerequisite: successful completion of 8th grade Pre-Algebra and teacher recommendation

Full Year 1.00 credit

1.00 credit

1.00 credit

Full Year 1.00 credit

Full Year

Full Year 1.00 credit

Full Year

Full Year

Full Year 1.00 credit

1.00 credit

1.00 credit Full Year

474 **Pre-Calculus

Prerequisite: successful completion of Algebra II Honors and teacher recommendation This course includes a rigorous, in-depth study and application of linear, guadratic, higher degree polynomials, rational, exponential, logarithmic, and trigonometric functions. Vectors, laws of trigonometry, conic sections, and polar coordinates are also studied and used to solve various application problems. Additional topics include sequences, series, and threedimensional coordinate geometry.

Prerequisite: successful completion of Pre-Calculus Accelerated or Pre-Calculus Honors and teacher recommendation This course provides a comprehensive development of the concepts of functions (including trigonometric, logarithmic and exponential), limits, continuity and differentiation. Some topics in integration are also considered. Students must have at least a scientific calculator for this course.

478 **Advanced Placement, UConn ECE Calculus

AP Calculus, UConn Calculus (UConn Math 1131Q and 1132Q) Prerequisite: successful completion of Pre-Calculus Accelerated or Pre-Calculus Honors and teacher recommendation This course is offered in conjunction with the University of Connecticut Early College Experience (ECE) program. College credit will be granted by the ECE program upon successful completion of the requirements. This advanced course in mathematics provides a comprehensive and rigorous development of the concepts of function (including trigonometric, logarithmic and exponential), limits, continuity, differentiation, integration, infinite series, and vectors. Calculus also has one additional class period per week. This course will provide the background needed for any student who desires to take the Advanced Placement, UConn AB Examination in Calculus. A graphing calculator (preferably a TI-83 plus) is required for this course. Students who have received credit for *Calculus are not eligible for this course.

498 ****UConn ECE Discrete Mathematics** (UConn Math 1030 Q) 1/2 Year (Sem. 1 only) .50 credit Prerequisite: successful completion of Pre-Calculus Accelerated or Pre-Calculus Honors or Accelerated Algebra II The students will learn and utilize problem-solving strategies. The topics of: simultaneous linear equations, sequences, counting principle and probability, graph theory, deductive reasoning, axiomatic method, finite geometrics and number systems are emphasized in this course. (College credit will be granted by UConn upon successful completion by accepted students with a C or better.

494 ****UConn ECE Statistics** (UConn STAT-1100 QC) 1/2 Year (Sem. 2 only) .50 credit Prerequisite: successful completion of Pre-Calculus Accelerated or Pre-Calculus Honors or Accelerated Algebra II and teacher recommendation

The student will learn and utilize standard and non-parametric approaches to statistical analysis: exploratory data analysis, elementary probability, sampling distributions, estimation and hypothesis testing, one and two sample procedures, regression and correlation. Learning to do a statistical analysis using technology is an integral part of this course. Students should consider the purchase of a TI-83 calculator. (College credit will be granted by UConn upon successful completion by accepted students with a C or better.)

477 *Calculus

Full Year 1.00 credit

Full Year

Full Year 1.00 credit

1.00 credit

SCIENCE CURRICULUM

The Science Department strives to support the academic, social and civic expectations of Berlin High School in all of its courses. A greater emphasis is placed on reading critically, solving problems creatively and developing an active and healthy lifestyle.

Three years of Science (3 credits) are required for a Berlin High School diploma, including one year (1 credit) in Biology. The Science sequence begins with Earth Science in grade 9. Students lacking strong math skills may opt to take two semester (0.5 credit) science electives instead of a full year of Chemistry in order to complete the three credit graduation requirement.

* Indicates an Accelerated level course.

** Indicates an Honors level course.

Science Core Classes

500 Earth Science

Grade 9.

Earth science is a one year science course that covers the study of the physical and chemical components of the Earth. Units of study include the Chemistry and Composition of the Atmosphere and Weather, Surface Processes and Plate Tectonics, Energy and Earth Resources and Oceanography. Throughout the year, the scientific method and problem solving are stressed in class demonstrations and laboratory activities. Students develop an understanding of interactions and interdependence within and between Earth systems and changes in Earth systems over time. Earth science also addresses environmental concerns and CAPT lab preparation.

504 *Earth Science

Grade 9.

Prerequisite: successful completion of or concurrent enrollment in Algebra I, Accelerated Algebra, and science teacher recommendation.

This course is intended for students with an interest and ability in science and a strong math, reading and writing background. Detailed study of concepts, theories, and laws in geology, chemistry, oceanography, and meteorology are covered. Emphasis is placed on extending student learning through the integration of higher order thinking strategies. Earth science also addresses environmental concerns and CAPT lab preparation.

530 10th Grade Biology

Grade 10.

Prereguisite: Recommendation of science teacher.

A general biology course emphasizing biology in every day life. Topics include cell structure and function, genetics, DNA and related technology, evolution, plant anatomy and photosynthesis, cellular respiration, and ecology. The Scientific Method will be reviewed and stressed throughout the course along with CAPT Science preparation skills.

574 Chemistry

Grades 10 (may also be taken in grades 11 & 12 after fulfillment of math prerequisite)

Prerequisite: Successful completion of Algebra I or concurrent enrollment in Algebra 1B. An introductory course in chemistry for the college-bound student who does not intend to enter a health, technology, or science-oriented field. The course utilizes as much mathematics as is necessary for the basic material and offers the application of chemistry to everyday life. Laboratory reports utilizing a technical writing format will be required. Concepts include water, metals, petroleum, radioactivity, gases, and food. CAPT labs and practice activities will be included.

578 *Chemistry

Grades 10 (may also be taken in grades 11 & 12 after fulfillment of math prerequisite)

Prerequisite: Successful completion of Algebra 1* and teacher recommendation.

This is a full year lab course in the principles of modern chemistry for college preparatory students with strong math backgrounds. Units include properties of matter, atomic structure, periodicity, chemical bonds and formulas, types of reactions, stoichiometry, gas laws, acids and bases, and organic chemistry. Problem solving and critical laboratory report writing will be required. This course may include one double lab per week depending upon the schedule. CAPT labs and practice activities will be included.

Full Year 1.00 credit

1.00 credit

Full Year

Full Year

Full Year

1.00 credit

1.00 credit

Full Year 1.00 credit

534 11th Grade Biology

Grade 11.

Prerequisite: Chemistry or recommendation of science teacher.

A general biology course with an emphasis on observation and the application of the scientific method. Topics include cell structure and function, genetics, DNA and related technology, evolution, plant anatomy and photosynthesis, cellular respiration, and ecology.

538 *11th Gr. Biology Accl.

Grade 11.

Prerequisite: Accelerated Chemistry or recommendation of science teacher.

This course is for the student with a sincere interest in biology and above average reading and writing ability. Topics include in depth discussions of the following: cell structure and function, genetics, DNA and related technology, evolution, plant anatomy and photosynthesis, cellular respiration, and ecology. Critical thinking and applications will be emphasized along with formal laboratory reports and long term projects.

542 **Advanced Placement, UConn ECE Biology

Grades 11 & 12.

Prerequisite: Successful completion of *Chemistry with a recommended average of 88 or above and teacher recommendation.

Students enrolling in this class must be aware that this is a college level course and will be taught as such. Topics covered are consistent with UConn Bio 1107 & 1108 and with the AP Biology Development Committee. Topics covered include biomolecules and cells, genetics and evolution, evolutionary history of biological diversity, plant and animal form and function, and ecology. Students use the college level text Biology (AP) 7th ed, Campbell 2005. Students electing to enroll in this course must participate in field trips, fetal pig dissection, and complete a research assignment. Students are expected to take the AP Exam in May. There are two double lab periods scheduled per week.

590 *Physics

Grade 12.

Prerequisite: Geometry and Algebra II. concurrent enrollment in Advanced Mathematics, Pre-Calculus, Discrete Mathematics or Elementary Statistics and science teacher recommendation.

A full year lab course in the principles of physics and problem solving for college preparatory students with strong math backgrounds. Topics include measurement, mechanics, hydrostatics, aerodynamics, optics, sound, electricity, and an introduction to modern physics.

594 **Advanced Placement, UConn ECE Physics

Grade 12.

Prerequisite: Science teacher recommendation. Must be concurrently enrolled in Honors Math class and have successfully completed Pre-Calculus Honors.

A full-year lab course in the principles and applications of physics, requiring extensive use of mathematics. Topics include mechanics, hydrostatics, thermodynamics, optics, sound, electricity, magnetism, and an introduction to modern physics. The course includes two double labs per week. Students admitted to the University of Connecticut Early College Experience Program may earn UConn credits in non-calculus physics (PH1201Q & PH1202Q) with a grade of "C" or better.

Science Electives

522 Forensic Science

Grades 11 & 12.

Prerequisite: Successful completion of Biology.

The course will seek to investigate basic concepts in Biology, Chemistry, and Physics while solving crimes through handson experimentation. Topics covered in this course will be the analysis of crime scenes, blood, fingerprints and bodily fluids. Recent advances in human genetics will be emphasized in the production and analysis of DNA fingerprints as well as the recognition of protein patterns found in fibers and cells left at a crime scene. This is an elective course that may be used towards filling graduation requirements in science.

524 Environmental Science

Grades 11 & 12.

Prerequisite: Successful completion of Biology.

Environmental science is both relevant to students' personal experiences as well as vital to the future of our planet. In this semester course students will gain a better understanding of human impact on the environment by expanding on

Full Year 1.00 credit

1.00 credit

1.50 credits

Full Year

Full Year

Full Year 1.00 credit

> Full Year 1.50 credits

1/2 Year .50 credit

1/2 Year .50 credit ecological issues presented in biology. Some of the topics that will be covered include resource depletion and shifting to a more sustainable use of resources, and different types of pollution and their causes and solutions. Course work will involve lecture, reading of and assignments from the text "Environment" Third Edition by, Raven & Berg, as well as laboratory activities.

548 Biotechnology

Grades 11 & 12.

Prerequisite: Chemistry, Biology or currently enrolled in Biology, and science teacher recommendation. The themes of this single semester course are fermentation, microorganisms and DNA manipulation. Using up-to-date laboratory methods and technology, students will explore our ability to engineer DNA to enable harmless forms of microbes to produce useful products. The inquiry-based course includes the history of biotechnology, techniques in DNA science, microbiology, fermentation, genetics, forensics and related societal issues. This course is highly recommended for serious juniors and seniors who plan to major in the biological or medical fields in college

564 Marine Biology I

Grades 11 & 12. (Semester 1)

Prerequisite: Successful completion of any Biology or Chemistry course.

Students will study the physical, chemical and biological aspects of the marine environment. Heavy emphasis will be on the chemistry of sea water and the ecology of estuaries. An introduction to the ecology of coral reefs and deep sea hydrothermal vent communities will also be provided. Marine aquariums will be maintained and science field investigations in Long Island Sound, using Project Oceanology, will be done.

568 Marine Biology II

Grades 11 & 12. (Semester 2)

Prerequisite: Successful completion of Marine Biology I. Students will study the anatomy and physiology of representative animals. Emphasis will be placed upon the structure of the organism sand how they are adapted to their particular habitat. Dissections are included. Field trips are planned in association with Project Oceanology.

526 Anatomy and Physiology

Grade 12.

Prerequisite: Successful completion of Biology and Chemistry and science teacher recommendation. A detailed study of human anatomy and physiology for the student with a sincere interest in the biological/medical field. The course is designed to introduce the students to the structures and functions of the human body. Each student is required to dissect a domestic cat, perform other dissections, and become involved in various physiological experiments.

586 ** Advanced Placement Chemistry

Grades 11 & 12

Prerequisites: Successful completion of a full year of *Chemistry (Accelerated) with an average of 88 or above and a science teacher recommendation. Must be concurrently enrolled in *Algebra II Accelerated or higher math course. Concurrent enrollment is Physics is strongly suggested. Completion of a summer problem set is also required.

Students enrolling in this class must be aware that this is a college level course and will be taught as such. Topics covered are consistent with the AP Chemistry Development Committee (and with UConn CHEM 1127Q and 1128Q). Topics covered include: properties/states/structure of matter, measurement, stoichiometry, solution chemistry, electron behavior and the quantum concept, covalent and ionic bonding, thermochemistry, gaseous/acid-base/precipitation equilibrium, spontaneity and rate of reaction, electrochemistry, and nuclear chemistry. Students use the college level text: Masterton, William H., and Cecile N. Hurley. <u>Chemistry: Principles and Reactions</u>. 4th ed. Philadelphia: Harcourt College, 2001. This course includes two double lab periods per week. Students electing to enroll in this course are expected to take the AP Exam in May.

Full Year 1.50 credits

Full Year 1.00 credit

1/2 Year

1/2 Year

1/2 Year .50 credit

.50 credit

.50 credit

CAREER TECHNICAL EDUCATION (CTE)

Career Technical Education includes the Business Department, the Technology Education Department, and the Family & Consumer Science Department

All courses in CTE (Business, Tech Ed and F&CS) are open to male and female students, without exception.

Business Department The Business Department curriculum is fully aligned with *The National Standards for Business Education* which is based on the conviction that business education competencies are essential for all students. Students have an opportunity to explore the basics of personal finance, the decision-making techniques needed to be wise consumers and ethical employees, the economic principles of an increasingly international marketplace, and the processes by which businesses operate. In addition, these standards provide a solid educational foundation for students who want to successfully complete college programs in various business disciplines.

630 Accounting I

Grades 10, 11 & 12.

A course designed to introduce students to accounting, the "language of business." Students will complete accounting forms and prepare accounting reports for both proprietorships and partnerships. Manual and automated accounting methods will be explored. This course is an excellent preparation for students who are pursuing a business degree at the college level.

637 Accounting II

Grades 11 & 12. Prerequisite: Completion of Accounting I

This course further develops financial accounting skills and concepts mastered in Accounting I. Automated accounting, departmentalized accounting, and corporate accounting will be covered. This course is highly recommended for students who are pursuing a business/accounting degree at the college level.

654 Marketing Management

Grades 10, 11 & 12.

An introductory course into the exciting field of marketing with an emphasis on sports and entertainment marketing. Students will complete hands-on activities such as creating advertisements, setting up window displays, conducting market research, and exploring careers.

616 Business Law

Grades 10, 11 & 12.

This course offers students an understanding of business and personal law as it applies to consumers, citizens, and employees/employers. The study of torts, contracts, business ethics and other legal situations encountered in daily endeavors will be covered.

610 Computer Applications "A"

Grades 9, 10, 11 & 12. (Not a prerequisite for Computer Apps "B")

A one-semester course that introduces students to *Microsoft*® *Word* and *Excel*. While developing computer competency, students work through task-oriented applications around a business theme. This program is self-paced and tutorial in nature...a must for ALL students.

611 Computer Applications "B"

Grades 9, 10, 11 & 12. (Computer Applications "A" is **not** a prerequisite) A one-semester course that broadens students' knowledge of *Microsoft*® applications including *Access* and *PowerPoint*. Students will have the opportunity to design and deliver electronic slide shows and explore web page design and desktop publishing.

622 Economics and Personal Finance

Grades 10, 11 & 12.

This course utilizes the Junior Achievement Applied Economics program which provides students interested in a business career or college degree in business an opportunity to explore economic principles and business management techniques. Volunteers from the business community and a computerized management simulation are included in the program. Students also explore basic financial literacy.

1.00 credit

.50 credit

.50 credit

.50 credit

.50 credit

Full Year

1/2 Year

1/2 Year

Full Year 1.00 credit

1/2 Year

1/2 Year

1/2 Year

.50 credit

641 Business Communications

Grades 10, 11 & 12.

No skill is more valuable than communication. Whether applying for a job, preparing a presentation, or persuading others, effective communication is vital. Students will engage in hands-on activities that integrate a wide range of skills from team building to listening and public speaking, to preparing business correspondence and creating multi-media presentations.

646 Business Survey

Grade 9.

This introductory business course uses an interactive, multimedia computer laboratory system, *Business Center 21*. Students explore units in Marketing, Business Law, Economics & Personal Finance, Accounting, International Business, Management, and Entrepreneurship based on the National Standards for Business Education. Each unit also incorporates activities in *Microsoft*® *Office*, career development, and communication skills.

652 Survey in Business

Grade 12.

This course is designed to give college-bound seniors an introduction to business through the interactive multimedia laboratory system, *Business Center 21*. Students will explore business topics (of their choice) as well as careers and *Microsoft*® *Office* applications. See <u>Business Survey</u> course description for topics.

626 **E-Commerce/Entrepreneurship** Grades 10, 11 & 12.

The E-Commerce course is designed to introduce students to the world of E-Commerce while developing academic, creative thinking and problem solving skills through the completion of a comprehensive E-Commerce business project. Students will develop and maintain a fully functioning online store. This course will be taught in a *blended* classroom environment where much of the course work will be presented online through Moodle. Students will have the opportunity to interact with other students through forums and blogs and keep online journals of personal work. This course is designed with the "digital native" in mind!

B070 Transition 12

Grade 12.

Transition 12 is a fall semester course for seniors who are in need of exploring opportunities after high school. Employability skills and attitudes along with necessary post-secondary academic habits for those interested in continuing school will be stressed. A portfolio will be compiled that will include such things as a resume, sample applications, and college essays. Students will do mock job interviews, tour Tunxis Community College, Central Connecticut State College, and a local technical school. Students are encouraged to do at least one Job Shadow. Curriculum materials for the course include teacher selected texts and web sites, guest speakers, and interactive field trips.

Technology Education Department

Courses in the **Technology Education Department** include topics in the following areas: transportation, construction, communication and manufacturing. These courses are activity based (hands on) and encourage development of problem-solving skills. Students following college preparatory, technical, business or general programs of study are encouraged to include technology education courses in their schedules. Students taking courses in technology education will become more aware of technology and its impact on society and the environment. Tech Ed links math and science to real world problem-solving, teamwork, and applications. Courses are standards based.

732 World of Technology

Grades 9 & 10. Have you ever wondered how airplanes fly? How you get MTV on your television? How bridges are built or how mountain bikes are mass produced? These and other intriguing problems will be explored in World of Technology. Technology is the technical means people use to improve their surroundings without harming the environment. World of Technology includes studies in the following areas: communications, construction, manufacturing, transportations and electricity. Lab periods will include extensive hands on activities which emphasize problems solving skills. Tech Ed teachers rotate in the teaching of this full-year course for boys and girls.

706 Intro to CADD & Drafting Technology

Grades 10, 11 & 12. This course introduces students to the mechanical design and drafting process. You will learn to brainstorm, sketch preliminary ideas, and then formalize them into 3 dimensional CADD models. The CADD models are then used to make a variety of engineering drawings including sub-assemblies, final assemblies, parts lists, exploded assembly drawings and more. Then, students will build an actual scale model and prototype of a product that they design. In this course, students learn that using computers to produce two dimensional and three dimensional drawings can be fun and exciting.

1/2 Year .50 credit

Full Year1.00 credit

Full Year1.00 credit

Full Year 1.00 credit

Semester 1 only .50 credit

1.00 credit

.50 credit

Full Year

1/2 Year

The images produced on the screen are then printed or plotted with amazing quality and accuracy! Try this course--you'll enjoy it!

720 Architecture Technology

Grades 10, 11 & 12.

Would you like to learn how houses are designed and built? Would you like to design your own home some day? What would you change if you could redesign your house? What does an architect do and what are the career opportunities for an architect today? What does a surveyor do? This course will help you answer all these questions and more. You will learn why our houses are designed and constructed the way they are. You'll learn about building codes, zoning, and community planning. You will also learn about standards of drawing and construction using a professional CADD (Computer Aided Design & Drafting) system.

714 Graphic Communication Technology

Grades 10, 11 & 12.

This course is a hands-on introduction to the field of Graphic Communication. Units of study will include printing methods, Photography, Digital Imaging, Video Production and Editing, Desktop Publishing, Graphic Design, and Paper Manufacturing. Student activities will involve the student in each of the units. School service projects and class projects will be used to supplement individual activities.

790 Photography I

Grades 10, 11 & 12.

This hands-on course is open to all students who own a film camera and have an interest in photography. Students are introduced to the history of photography, cameras, lenses, films, development, printing, enlarging pictures and Digital Photography. Student activities will involve the student in each of the units. Emphasis is placed on consumerism, composition and corrective techniques.

792 Digital Media & Movie-Making

Grades 10, 11 & 12.

This course will develop and enhance academic skills, creative thinking, digital media literacy, and film making skills. Students will be involved with story development, script writing, computer animation, digital audio and photography, digital video production, and editing. Students will complete movie production projects while working as teams, developing valuable film industry production and management skills.

764 Electrical Systems

Grades 10, 11 & 12.

From iPods to plasma screen televisions electronic circuits surround us! This half year course teaches the theory and practical application of electrical systems through the design and construction of a variety of electrical projects. Activities include: wet and dry cells, electric motors and the designing of an actual wind generator. Topics covered include electrical safety, electrical terminology such as voltage, current and resistance, sources of electricity and the use of basic measuring devices such as a multimeter.

768 Electronic Communication

Grades 11 & 12.

Electronic communications is a far-reaching and powerful information tool for participating in today's global marketplace. In this half-year course students will learn about a variety of communication technologies including both radio broadcasting and audio/video production. Students will write, produce and broadcast their own radio show using the high school's educational radio station, WERB, 94.5 FM as well as write and produce an audio/video production in the high school's television studio located in the Berlin High School Media Center. In addition students will build communication devices including an FM wireless transmitter and an FM radio receiver.

776 Basic House Wiring

Grades 11 & 12.

This course is the study of residential and commercial wiring systems. Basic House Wiring is offered to all students who have an interest in working with electricity and enjoy working with both their hands and their heads. The course covers the fundamentals of residential wiring for students who are career bound or those students who wish to learn how to perform their own electrical work. The student will understand terminology, switches, circuit protection devices, outlets and fixtures, maintaining and upgrading existing wiring, tools of the trade and career opportunities. This half year course will cover not only the "how" but also the "why" of safe household wiring. Hands on and classroom participation activities are stressed.

1/2 Year .50 credit

1/2 Year .50 credit

1.0 credit

.50 credit

.50 credit

1/2 Year .50 credit

1/2 Year

.50 credit

2 Year .50 c

Full year

1/2 Year

1/2 Year

1/2 Year

757 Introduction to Power Transportation Systems Grades 10, 11 & 12,

This is an introductory course with both lecture and activity based lessons designed to develop a student's awareness of small engine fundamentals and safety. This course introduces students to various types of two and four cycle small engines, such as those used of lawn and garden equipment. Students will have hands on opportunities to discover the relationships between exhaust, intake, compression, power, electrical / ignition, cooling, carburetion and lubrication of internal combustion engines. Furthermore students will investigate other power systems such as Bio Fuel, Diesel, Electric Motors and Hybrid Vehicles. Students will learn the basics of small engine theory, repair, maintenance and safety.

758 Automotive Transportation Systems

Grades 11 & 12. Prerequisite: Introduction to Power (757) and valid driver's license This course introduces students to automotive power systems. It encompasses automotive safety, tools and measuring devices, basic engine cooling, lubrication, fuel, electrical, emissions, brakes, suspension and steering systems. This is an introductory course with both lecture and activity based lessons designed to develop a student's awareness of automotive power system fundamentals and safety. Students will investigate other power systems such as; Bio Fuel, Diesel, Electric Motors and Hybrid Vehicles. Students will learn the basics of automotive power system theory, repair, maintenance and safety. Students wishing to perform basic maintenance of their own vehicles must pass safety exam and present: valid registration in parents or their name, valid driver's license, proof of insurance and signed hold harmless statement.

746 Alternative Energy Vehicle—Electrathon

Grades 11 & 12. Prerequisites: Must have driver's license prior to Oct. 1, 2009 Previous Tech Ed experience suggested

This grade 11 and 12 hands-on course will provide students with an opportunity to learn about technology and how it affects their lives. This course encourages the development of team building, communication and problem-solving skills. Students will work on a long term open ended alternative energy vehicle design and build project with a common goal of producing a vehicle capable of competing at the state sponsored Electrathon race. Each student is responsible to identify and apply individual skills to achieve the common class team goal. The ultimate class product is the design, construction and testing of an Electrathon vehicle. Students will apply engineering concepts and problem solving techniques to complete the competition vehicle.

740 Manufacturing Technology

equipment and methods. Student activities will involve the student in each of the units. Student activities during this course will include: Sheet metal fabrication, machining methods, mass production, forge and foundry operations and a variety of combining methods. School service projects and class projects will be used to supplement individual activities.

780 Wood and Plastic Technology

Grades 10, 11 & 12.

This hands-on course will provide the student with an introduction to both wood and plastic technology. No prior knowledge of subject is required. Student activities will involve the student in each of the units. The course covers areas such as safety, use of tools, materials, finishing and designing and manufacturing projects out of both wood and plastic. School service projects and class projects will be used to supplement individual activities.

730 Construction Technology Grades 10, 11 & 12.

Construction covers a wide variety of areas; bridges, roads, skyscrapers, office buildings, and houses. This course focuses on standard residential construction. The class will explore all the aspects of home construction including; fasteners, materials, building practices, and building codes.

760 Transportation Technology

Grades 10, 11 & 12.

Students will discover and explore transportation systems dealing with air, space, land and sea travel. Activities such as model building, brainstorming, computer simulations, and problem solving will be stressed.

Grades 10, 11 & 12.

This hands-on course will provide the student with an introduction to Manufacturing Technology using metals processing

798 PC Build and Repair

Grades 11 & 12.

This course is a hands-on introduction to the field of computer hardware and software. If you are interested in building, repairing, or just upgrading your PC, this course is for you. The course will cover the following topics: How PCs work, how to install hardware and software, how to diagnose common computer problems, and basic networking. In addition, an overview of A+ certification will be included.

1/2 Year .50 credit

1/2 Year .50 credit

.50 credit

.50 credit

.50 credit

.50 credit

1/2 Year

1/2 Year

1/2 Year

Full Year

1.0 credit

1/2 year .50 credit

742 Bicycle Technology

Grades 11 & 12.

This team taught (PE/Tech Ed) course will involve the student in almost every aspect of biking. While learning the physiology of biking efficiency, each student will also design and build a bicycle to use by the end of the course. This hands-on course will provide the student with an introduction to a unique mix of topics such as biking physics, bicycle history, design, frame manufacturing and assembly. Field trips are planned and riding will take place during class time. Because there is welding involved in this course, students must be at least 16 years old by the beginning of the course.

744 Basic Firefighting

Grades 11 & 12. Prerequisites: Must be 16+ years old. Priority given to fire explorers. This course is the study of firefighting and its related systems. The course is correlated to the 2002 edition of NFPA 1001. Standard for Fire Fighter Professional Qualifications, Levels I, widely accepted as the standard of knowledge and skills measurement for all firefighters in North America. Basic Firefighting is offered to all students who have an interest in working in the fire service and enjoy working with both their hands and their heads. The course covers the fundamentals of firefighting for students who have fire service career interests or those students who wish to learn as a precursor to community involvement at a volunteer fire department. A firefighting class would provide most of the training in the classroom with a variety of hands-on labs. During their academic coursework, students study and make connections to English, Physics, Chemistry, Mathematics and Fire Science in relation to real-life fire situations. To be effective problem solvers and keep up good communication on the job, a firefighter needs to be well-rounded.

Project Lead the Way Pre-Engineering Program

About the Project Lead the Way (PLTW) Program

Project Lead the Way is the leading high school program of study for students who are interested in exploring and/or preparing for a high demand, exciting, high wage career in Engineering or Engineering Technology. The PLTW graduate will be better prepared to succeed in engineering programs in college or technical school. PLTW meets national standards for mathematics, science, and technology education. It also offers a complete career/technical concentration by linking mathematics and science to real world engineering technology. Students will learn problem solving, application of math and science, latest computer software and equipment, teamwork, communication skills, and improved performance in academic work.

Note: Project Lead the Way courses offer the student an opportunity to earn college credits through an articulation agreement with The University of New Haven.

728 Introduction to Engineering Design (PLTW)

Grades 9 & 10. Prerequisite: 80% or better grade in Algebra I. This is the first course of the Project Lead the Way series. This is an introductory course that develops the student's understanding of the engineering design process. Problem-solving, teamwork, oral and written communication, and drawing and sketching are stressed. Training and use of a professional 3D CADD (computerized design & drafting)

system is included. This course is activity-based and provides strong application of mathematic and scientific principles.

738 Principles of Engineering (PLTW)

Full Year 1.00 credit Grades 10, 11 or 12. Prerequisite: 80% or better grade in Introduction to Engineering Design or Intro to Drafting & CADD. Also an 80% or better grade in Algebra I is required.

This is the second course of the Project Lead the Way series. This is a broad-based survey course to help the student understand engineering concepts, prepare for college and identify career opportunities. Topics include mechanisms, thermodynamics, fluids, electrical systems, control systems, statics, strength of materials, reliability and kinematics. All topics are reinforced with interesting and fun hands-on activities, projects and problem exercises.

33

Full Year 1.00 credit

1/2 year (Sem. 2) .50 credit

.50 credit

1/2 year

Family & Consumer Science Department

All the classes that are offered in the Family & Consumer Science Department promote that students become responsible, productive citizens and lifelong learners that will result in healthier and informed consumers in the future. Students will learn to solve problems creatively and continue to write effectively.

800 Foods and Nutrition I

Grades 10, 11 & 12.

Here is an opportunity to learn the how and why of food preparation while preparing food favorites of teenagers, with ease of preparation and clean-up. Also included is a survey of nutrition, with emphasis on its importance and relationship to today's teenagers and their selection of foods for healthier living. The vocabulary of foods, in preparation and dining, as well as an awareness of the tools used in the skill of food preparation is encouraged.

802 Foods and Nutrition II

Grades 10, 11 & 12.

Prerequisite: Foods and Nutrition I. Expanding upon the basics of food preparation, this course deals in depth with the members of the Food Pyramid. Main emphasis is given to preparing widely known foods in different ways as well as unfamiliar foods, thus enlarging one's appreciation and experience with foods. The use of small kitchen appliances and specialty tools is encouraged. Students interested in a third level in Foods are urged to see their teacher to set up an independent study program.

806 Cooking For A Crowd

Grades 10, 11 & 12,

This course will offer students a career oriented experience in planning, purchasing, preparing and serving food to others as well as themselves. Basic business (restaurant) skills will be included. The class will provide an experience in serving breakfast, luncheons and will do catering when needed and possible. Students may enroll in both 802 & 806.

810 Child Development

Grade 12 ONLY.

By studying the growth of a child from conception to early childhood, the student gains an awareness and appreciation of the influence of environment and heredity on human development. Physical, social, emotional and intellectual development is studied. Consumer awareness of foods, clothing, toys, and books and their influence on development is stressed. A playschool is an important part of this learning experience. Students have the opportunity to work firsthand with pre-school age children.

808 Food for Fitness

Grades 10. 11 & 12.

The Food for Fitness course is a "hands-on" program that emphasizes the knowledge and skills necessary for students to look and feel their best. This class stresses nutritious, tasty, eating choices for optimal health. Students participate in food labs preparing high-carbohydrate, low-fat foods such as sorbet, pasta, breads, soups, chili, salads, pizza, low-fat protein sources, and a sampling of vegetarian dishes. Students also use a variety of personal assessments to evaluation their current nutritional and fitness habits. Additional class topics are weight management, eating disorders, sports nutrition, and stress management.

809 Cultures and Cuisines

Grades 10, 11 & 12,

Students focus on their own eating experiences as they gain basic cooking skills through the selection and preparation of healthy foods from their own and other cultures. Using the USDA Food Pyramid, students analyze the commonalities and uniqueness of eating patterns across cultures. Students plan, prepare, and taste dishes from around the world to make connections with the historical events that helped ingredients travel around the world. Careers relating to ethnic cuisines in the food industry are investigated.

812 **UConn ECE Introduction to Individual and Family Development Full Year 1.00 credit

Grades 11 &12. (UConn HDFS 1070)

The course is an introduction to the field of Human Development and Family Relations and is part of the Early College Experience (ECE) Program at the University of Connecticut. This course is designed as an introduction to the field of Human Development and Family Science and will provide students with an understanding of individual and family development over the life span. The course focuses on the developing individual within the context of the family system and the changes that occur in family systems over time. The course also includes an internship component (college credit will be granted by UConn upon successful completion of the course).

1/2 Year .50 credit

1/2 Year .50 credit

.50 credit 1/2 Year

1/2 Year

.50 credit

.50 credit

1/2 Year .50 credit

1/2 Year

ART CURRICULUM

The <u>Art Department</u> encourages students to use careful observation and knowledge of fundamentals to engage in creative problem solving to promote a more imaginative and conceptual society. As creativity and invention grow, our ability to communicate is enhanced and we find ways to use our natural and intellectual resources responsibly.

820 **Freshmen Art Survey** Grade 9.

Freshmen will rotate through three different art experiences with three instructors during this year-long course. They will have the opportunity to explore painting, drawing, printmaking, and 3-D design/sculpture in a hands-on, creative visual arts studio program. Emphasis will be on developing self-expression and artistic skill.

844 Painting

Grades 10, 11 & 12.

This course focuses on color theory through illustrative painting based on observation/reference, as well as expressive non-objective studies, with historical references to the great masters. We will investigate transparent and opaque media such as Water Color, Acrylic and Tempera. Students should have taken Drawing I or have some drawing foundational skills coming into the class. Some of the concepts we will explore might include still life and self-portrait as subject matter.

840 Drawing I

Grades 10, 11 & 12.

Drawing can be said to be at the root of all artwork. Students taking this drawing course will develop the skills to accurately record visual observations from life using a variety of drawing media, papers and size. The goal for this course is to offer a strong foundation for all other art courses. Some of the concepts we will discuss include still life, self-portrait and gesture drawing.

841 Drawing II

Grades 10, 11 & 12. Prerequisite - Drawing I

This course is an extension of Drawing I that requires the student to apply the skills previously learned to problem-solve different scenarios where personal expression is a key ingredient. An example concept may be to draw a scene from a bird's eye view versus an ant's eye view. Media continues to be explored as more choice of media is offered. Regular inprogress critiques promote students' proficiency in the use of visual language and terminology and the development of refining their skills.

830 Techno Art I

Grades 10, 11 & 12.

Students learn the basics of creating art on the computer. An introduction to image-manipulation, photo retouching, flash animation and creating graphics will be emphasized. This class will concentrate on experimenting with Photoshop, Illustrator and Flash graphics software. No prior computer knowledge needed.

834 Techno Art II

Grades 10, 11 & 12. Prerequisite Techno Art I

Students continue to explore the possibilities of computer assisted and enhanced design. Students will use 3D software to create art and graphic representations. 3D animation will be introduced as well as techniques like subdivision modeling, UV mapping, texture mapping and NURBs modeling. This course is very challenging and for the student who is serious about using the computer as an artistic tool.

858 Special Topics in Art

Grades 10, 11 & 12.

Students will learn to blend both form and function in their 3-D design, using traditional media (such as copper, glass, stone, and wax). Topics will explore the art history behind time-honored crafts, such as enameling, soldering, and plaster-casting; while also delving into some modern methods, such as mixed and alternative media. Due to the advanced nature of this course, it is strongly recommended that students have previously taken a high school level art course prior to coming into this class.

870 Pottery I

Grades 10, 11 & 12.

Students will learn about the properties of clay and how to prepare it for use. This course will focus on hand building techniques such as Pinch, Coil and Slab as well as introduce students to the potter's wheel. Students will learn basic throwing skills and be able to create common forms like bowls and cylinders. Ready-made glazes will be used to complete projects. <u>No previous experience with clay is needed.</u>

Full Year1.00 credit

1/2 Year .50 credit

.

Full Year 1.00 credit

Full Year

Full Year

1/2 Year

1/2 Year

1/2 Year

1.00 credit

1.00 credit

.50 credit

.50 credit

.50 credit

realistic and abstract, and several finishing methods.

866 Sculpture II

Grades 10, 11 & 12. Prerequisite: Sculpture I This course is a continuation of Sculpture 1. All areas of sculpture will be explored on an advanced level, with special emphasis on both conceptual and technical development. Expect to use both traditional media (such as clay, paper, wood, wire and plaster) along with some modern unconventional materials (such as found-objects and recycled junk-art).

wire and plaster. Students will learn about art history while utilizing both additive and subtractive techniques to create

850 2D-Design I

Grades 10, 11 & 12,

This course focuses on the use of Elements of Art (color, line, shape, form, value, texture, space) and Principles of Design (balance, unity, emphasis, proportion, variety, rhythm, movement, contrast). As our world is continually becoming more visual, this course will focus on the skills to become more visually literate as well as the ability to communicate visually. Creating a hierarchy of ideas will play an important role when considering for instance typography and advertising. A variety of media may be incorporated including gauche, paper, printmaking, markers and computer programs such as Photoshop.

851 2D-Design II

Grades 10, 11 & 12. Prerequisite: 2D-Design I

This course is an extension of 2-D Design I. It requires the student to apply the skills previously learned to problem solve different scenarios where personal expression is a key ingredient. An example concept may be to develop and analyze contrasting compositions based on set criteria. Media continues to be explored as more choice of media is offered. Regular exchanges of feedback with the teacher as well as other students in the class through in-progress critiques, promote students' proficiency in the use of visual language and terminology and the development of refining their skills.

838 Senior Art Grade 12.

A class for those students who wish to work on portfolios for college; students who wish to work independently in art and yet have close guidance from the instructor; students who wish to combine art study with another subject area, such as art-math (computer designs); art-science (op-art); art-English (creative illustration, book-binding, etc.). This class is for the serious artist who wishes to further their artistic skills and talents.

842 Art History

Grades 10. 11 & 12.

Art History is an introduction to the art and architecture of various times and geographical areas from around the world. The course will provide foundational skills (tools of analysis and interpretation) as well as general, historical understanding. We will consider the way works of art function as aesthetic objects, functional objects and as cultural artifacts reflecting the world around us. Occasional hands-on projects will be included to support the reading and lecture material.

1/2 Year .50 credit

1/2 Year .50 credit

> 1/2 Year .50 credit

.50 credit

1/2 Year .50 credit

Full Year

Full Year 1.00 credit

artworks in both relief and sculpture-in-the-round. A wide variety of sculptural procedures will be explored, including both

1/2 Year .50 credit

The student explores more advanced hand building and wheel throwing techniques. The course will have a concentration on wheel use as well as more complex glazing and decorative procedures.

Grades 10, 11 & 12. Prerequisite: Pottery I.

862 Sculpture I

874 Pottery II

Grades 10, 11 & 12. Students will design both form and texture while building in clay, along with a variety of other media, such as paper, wood,

MUSIC CURRICULUM

Full Year 1.00 credit

1.00 credit

1.00 credit

1.00 credit

.50 credit

.50 credit

Full Year

Full Year

Full Year

1/2 Year

1/2 Year

The course is designed for those students who wish to enjoy more fully, through active participation, group music experiences. Through the plaving of an instrument, the student studies a variety of types and styles of music for various performances, from The Redcoat Marching Band to Symphonic Band. Attention to the technical development of musicianship is stressed. Participation in all band performances and activities is a requirement of this course and includes football games, concerts, and practices.

912 Chorale

This course is a year of training and transition for the first year chorister and is mandatory for students who want to continue singing in Grades 10-12 in mixed chorus. Through the use of appropriate exercises and choral literature, emphasis will be on developing a foundation of healthy vocal production technique, instilling musicianship through performance and the study of basic theory and fostering a sense of community within the chorus through mutual respect and support. Attendance at performance is a requirement of this course.

916 Concert Choir

Grades 10, 11 & 12.

This course is designed for the student interested in group vocal experiences through participation in the high school chorus. A variety of vocal experiences will be provided to develop the student's ability and provide worthwhile choral participation. Participation in chorus performances is a requirement of this course.

920 Advanced Chorus

Grades 10, 11 & 12. Prerequisite: Permission of instructor through audition. This course is designed to improve the individual student's quality of singing with emphasis on breathing, diction, musicianship, style and interpretation. In addition, advanced choral experiences will be provided and all students in this course will be members of the high school chorus. Participation in chorus performances is a requirement of this course.

930 Music Technology I

Grades 9, 10, 11 & 12.

This course is designed to explore music through the study of modern technology. This course will examine the history of music technology as well as the practical uses of sound producing and recording equipment. Synthesizers, sequencers, and tape recorders will be made available for student projects.

934 Music Technology II

Grades 9, 10, 11 & 12. Prerequisite: Music Technology I. Students will receive advanced instruction on equipment in the music lab. New equipment studied will include computers with voice editing, sequencing, and librarian software, synthesizer voice modules, and a vocoder. More complex music compositions are created using this technology.

941 Music Theory I

Grades 9, 10 11 & 12.

This course is a beginning study of the elements of music, designed for students with a desire to learn how to read music, or read music better. Study is made of basic music reading elements such as notes, rhythms, clefs, key signature, time signature, and other music notation. This knowledge will be applied to keyboards.

943 Music Theory II

Grades 9, 10, 11 & 12. Prerequisite: Music Theory I.

The course is an advanced study of the elements of music. It is designed for those students desiring to learn chord structure and composition. The course is geared for those who are pursuing a further study of music after high school or who wish to study music on a higher level.

914 Piano Class I

Grades 9, 10, 11 & 12,

This course is designed for the student interested in learning basic keyboard techniques. Active participation will be encouraged by using a "hands on" keyboard technique that lets the student learn by doing. Simple chording and piano techniques will be studied.

1/2 Year .50 credit

1/2 Year .50 credit

1/2 Year .50 credit

900 **Band**

Grades 9, 10, 11 & 12.

Grades 9, 10 & 11.

915 Piano Class II

Grades 9, 10, 11 & 12. Prerequisite: Piano Class I.

This course is a continuation of Piano Class I, with emphasis placed on advancing keyboard skills along with more advanced progressions and rhythms.

PHYSICAL EDUCATION/HEALTH CURRICULUM

Each student will be required to complete 2.75 credits in Physical Education and .25 credits in Health Education for graduation. The Physical Education credit may be waived for medical reasons. Students receiving waivers for the full year (grades 9 and 10) or semester (grades 11 and 12) must schedule another subject to make up the credit.

Required Dress: All students must wear sneakers, shorts, and shirts, sweat suits or warm-up suits.

Each student will be issued a combination lock in grade 9 and be assigned to a locker. Should the lock be lost, the student must pay \$6.00.

The P.E. curriculum is designed to promote and reinforce a healthy and active life style. The curriculum also aims to develop responsible, ethical and productive citizens. Individual and group instruction in a positive social setting encourages students to accept and appreciate diversity while allowing each student to explore their own potential.

The grade 9 health curriculum is designed to develop critical thinking skills about today's ever changing societal issues. Emphasis is placed on the importance of living a long healthy life style. Its purpose is to supply the students with practical and theoretical knowledge which will allow them to make smart choices, promoting sound personal, ethical and moral character.

950 Physical Education 9

Grade 9.

Emphasis is placed on skill development in the following activities: Soccer, team handball, flag football, weight training, basketball I, volleyball I, speedball, softball, floor hockey and ultimate Frisbee. A physical fitness standard test is administered to each student twice during the school year.

951 Health

Grade 9.

Topics to be addressed are assertiveness training and decision-making, substance abuse, nicotine, nutrition, mental health, infectious diseases, AIDS education and sex education.

960 Physical Education 10

Grade 10. Emphasis is placed on developing advanced skills and game strategies in the following activities: volleyball, basketball, flag football, ultimate Frisbee, weight training, softball, pickle ball, badminton, speedball, soccer, floor hockey and team handball.

A fitness standard test is administered to each student twice during the school year.

970 Physical Education 11/12 Grades 11 & 12.

As part of the P.E. program, health topics are offered with emphasis on stimulating critical thinking regarding substance abuse, smoking and AIDS education. Activities offered at this level are designed to develop an interest in physical fitness and leisure time activities. Individual activities such as tennis, badminton, pickle ball, weight training, aerobics and golf may be scheduled. Team activities of floor hockey, volleyball, softball, and flag football will also be offered. A fitness standard test is administered to each student once during the semester.

981 PE Elective—Bicycling

Grades 11 & 12

This class is for students who want to learn more about personal health and the rewards of a lifetime activity other than competitive or team sports. Bicycles and helmets will be provided, but you are encouraged to bring in your own. This class will teach you all aspects of road and mountain biking. This is an introductory course and all levels of cyclists are welcome to join in the fun!

1/2 Year .50 credit

3/4 Year .75 credit

Full Year 1.00 credit

.50 credit

1/2 Year .50 credit

1/4 Year .25 credit

1/2 Year

982 PE Elective—Fitness Walking Grades 11 & 12

This class will start on the track then gradually go to 1 or 2-mile loops around town. The second guarter will consist of weight training three days a week and cardio two days a week. Classroom instruction time will be for cardio-respiratory endurance, muscular strength and endurance, flexibility, body composition, target heart rate and nutrition. The goal of this class is to offer a moderate intensity exercise that you can participate in for a lifetime of enjoyment.

1/2 Year

Full Year

Full Year

LEARNING CENTER CURRICULUM

The Learning Center classes are designed for students found eligible for special education services. In these courses, teachers assist and encourage students to challenge themselves to ACHIEVE (Academic Success, Community Involvement, Healthy Lifestyle, Individual Responsibility, Ethical Citizenship, Value Creativity, and Explore Potential) in the least restrictive environment considered to be academically and/or socially appropriate. Academic expectations focus on increasing students' abilities to communicate clearly and persuasively, solve problems creatively, read critically and write effectively.

B084 Academic Assistance

The purpose of this course is to offer students an opportunity to receive assistance and remediation instruction in their area(s) of need which will enable them to be successful in their classes. The class will be individualized to meet each student's needs. In addition, all students will receive direct instruction on increasing their ability to read for information.

B086 Academic Support

The purpose of the course is to provide a structured study hall and/or time for remediation in the area(s) of need for a student three times a week.

B024 Learning Center Math

Concentration of instruction is placed on each individual's needs which could include an intensive review of the four basic operations with whole numbers, fractions and decimals, percents, geometry, practical math skills essential to every day living and specific vocations or trades. Pre-algebra skills are offered for the advanced students.

B028 Functional Math

This course is structured to meet the individual needs of each student. Functional math skills required to function in the real world are targeted. Emphasis is on money management skills. Modifications that increase independence are a central component to this course.

B004 Learning Center English

This course is structured for students who need to improve their knowledge and usage of basic English and written expression skills. Areas addressed may include spelling, vocabulary, grammar, word usage, paragraph development, creative writing, reference/research skills, and literature.

B008 Functional English

This course is structured to meet the individual needs of each student. Functional English skills required to function in the real world are targeted. Emphasis is on reading and writing for real world application. Students are also exposed to literary classics at their own level, such as Tom Sawyer. Comprehension and basic writing skills are addressed throughout the school year. In addition to group lessons, students are provided with individual sight words to practice in order to improve fluency.

B094 Learning Center Reading

This course is for students who struggle significantly with decoding. In order to improve decoding skills, the course focuses on a systematic phonetic approach to reading. It also incorporates instruction to improve fluency, comprehension, and basic writing skills.

B034 Learning Center Social Studies

Full Year 1.00credit This course uses a multi-modality instructional approach in exploring the periods of early American civilization through the present era. Instruction in learning strategies is also offered.

B014 Learning Center Science

This course is structured for students who need a multimodality instructional approach. The course will explore the practical applications of science to everyday life.

Full Year 1.00 credit

Full Year

Full Year 1.00 credit

Full Year 1.00 credit

Full Year

1.00 credit

1.00 credit

Full Year 1.00 credit

.50 credit

1.00 credit

.50 credit

B064 Careers/Vocational Education

This course is an overview of what employers are looking for in an employee. It includes skills necessary for seeking and maintaining employment. Students will practice filling out job applications and do mock interviews on videotape. Careers speakers will be brought in based on students' areas of interest. Job shadowing experiences are available and strongly encouraged. Students will participate in hands-on vocational work situations within the school building and will participate in running the Cookie Store together as a class. Appropriate social skills at work will be a central theme throughout the year. Some students may participate in the work-study program and may work within the building, as well as in the community.

B076 Life Skills

This course is structured to meet the individual needs of each student. Emphasis is on increasing independence for activities of daily living. Areas covered in class include Nutrition, the Human Body, Exercise, Family Living and Building Self-Confidence. Students learn about the Food Pyramid and developing healthy menus. Students have opportunities to shop in the community and prepare their lunch at school using microwave-picture recipes. Other self-care skills are addressed on an individual basis as indicated in the IEP.

B072 Social Skills for Life

This course is being offered as an elective for 1.0 credit to special education students whose exceptionality impacts their ability to socialize and communicate with others at an age appropriate level. The curriculum will cover the following units:

- Emotions
- Stress/Stress Management
- Communication Skills (verbal and non-verbal)
- Problem Solving
- Friendships/Relationships
- Time Management
- Life Skills driving/directions/maps; laundry, hygiene, banking, death and loss

<u>AAP</u>

The Alternative Academic Program offers a more structured educational experience for students who are eligible for special education services but are having difficulty earning credits in the traditional school setting. Placement in AAP is done through the PPT process.

<u>NET</u>

The Non-Traditional Education Training (NET) Program offers a comprehensive educational experience for students who are eligible for special education services but have experienced difficulties in the traditional school setting. Placement in NET is done through the PPT process.

TEAM TAUGHT COURSES

The following courses are currently team taught by a regular education and a special education teacher. The curriculums adhere to the course descriptions listed under each discipline, but have a much smaller student/teacher ratio. IEP modifications are infused into the curriculum so as to make the subject matter accessible to students with disabilities. The team taught courses which are offered may change due to the needs of the students.

SOCIAL STUDIES:World & People I, World & People II, Civics, U.S. History I & IISCIENCE:General Biology, Earth ScienceENGLISH:English 9, English 10, American Literature I & II, Humanities, Senior SeminarMATH:Foundations of Algebra and Geometry A, Foundations of Algebra and Geometry B, Algebra IA,
Algebra IB, Algebra, Geometry

Full Year 1.00 credit

1.00 credit

Full Year 1.00 credit

Full Year