BROOKFIELD HIGH SCHOOL Program of Studies 2016 – 2017

Please follow the links on the next two pages to learn about course offerings, programs, and graduation requirements at Brookfield High School. If you have any questions, please speak with your School Counselor or Assistant Principal.

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ACCREDITATION STATEMENT

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

INTRODUCTION

This section provides students and their parents with general information and suggestions regarding the Program of Studies at Brookfield High School. Each counselor and teacher is available to parents and students to assist them in choosing a program of studies. Because selecting a course represents a commitment to remain in that course, students should make their choices carefully. Students and their parents assume the final responsibility of making appropriate course selections.

There are certain subjects that have been established as REQUIREMENTS to be taken by all students because there are areas of knowledge that are of value to every student, regardless of individual abilities. There are other subjects called ELECTIVES designed to meet an individual student's different interests and aptitudes. Because of the sequential nature of certain courses and/or the necessity for establishing a firm foundation for more advanced levels of study, many courses have PREREQUISITES.

REQUIRED COURSE LOAD

Grade 9: minimum of 7 courses
Grade 10: minimum of 7 courses
Grade 11: minimum of 6.75 courses
Grade 12: minimum of 6 courses

Community service or serving as a Teacher Assistant may not take the place of these requirements.

SCHEDULE CHANGES

Every student should pursue a program that will rigorously challenge his/her abilities. The program selected by the student in the spring of each year represents **a final choice of courses** for the following year, with **one** exception. If, through summer school study or a summer make-up exam, a student has satisfactorily completed courses failed or incomplete in June, he/she may apply for a program change during the summer. **A student's schedule is created based on the student's course requests. Schedules will NOT be changed during the first two weeks of school unless there is a clerical error.**

To balance class size, the administration reserves the right to rearrange student schedules.

Schedule changes *will not* be made:

- to create an opportunity for late arrival or early dismissal
- to a different teacher for the same course and level (also called "teacher shopping")

REQUIREMENTS FOR A HIGH SCHOOL DIPLOMA

To meet minimum credits for graduation, students are required to earn **25 credits**. The requirements for graduation reflect the minimum core course requirements. Please consult with your school counselor for the recommended distribution of courses and credits most suited to your educational and career plans.

English	4.0
Social Studies	4.0
Math	4.0
Science	4.0
Fine and Performing Arts Art, Music, or Drama	1.0
Humanities World Languages, English Tutorial, or electives in English or Social Studies (in addition to the 4.0 listed above)	1.5
Career and Technical Education Business, Family and Consumer Sciences, Technology Education	1.0
Physical Education	2.0
Health	0.5
Elective Credits In addition to the requirements listed above	3.0
TOTAL CREDITS	<u>25.0</u>

PROMOTION TO THE NEXT GRADE

In order to be considered students in good standing of the appropriate grade, students will be required to earn a *minimum* number of credits:

Grade 9 to 10 **(6 Credits)**Grade 10 to 11 **(13 Credits)**Grade 11 to 12 **(20 Credits)**

Movement from grade to grade will not be automatic. **Students failing to earn the required credits will be retained.**

COURSE CLASSIFICATIONS

<u>Advanced Placement</u> - the highest level of instruction in the course for college placement and/or college credit.

Honors - the highest level of instruction in the course below Advanced Placement.

<u>Academic</u> - instruction targeted to students who will pursue higher education or career opportunities.

DISTRICT PERFORMANCE STANDARDS

All students must show competency in the district performance standards in five areas: literacy, mathematics, science, social studies, and health, in addition to earning 25 credits. Students may demonstrate competency of the performance standards as follows:

A. Literacy

Students may demonstrate competency on the Literacy Performance Standard on one of the following assessments, by scoring:

- at least 75% on a locally developed literacy assessment, approved by the Department Head..
- at least 18 on both the English and Reading subtests of the ACT.

B. **Mathematics**

Students may demonstrate competency on the Mathematics Performance Standard on one of the following assessments, by scoring:

- at least 75% on a locally developed mathematics assessment, approved by the Department Head.
- at least 18 on the Mathematics sub-test of the ACT.

C. Science

Students may demonstrate competency on the Science Performance Standard on one of the following assessments by scoring:

- level 4 or higher on the Science subtest of the CAPT
- at least 18 on the Science subtest of the ACT
- at least 75% on a performance-based activity related to environmental issues that is locally developed and approved by the Department Head.

D. Social Studies

Students may demonstrate competency on the Social Studies Performance Standard on one of the following assessments by scoring:

• At least 75% on a document-based assessment that is locally developed and approved by the Department Head.

E. Health & Fitness

Students may demonstrate competency on the Health and Fitness Performance Standard on one of the following assessments by:

- Meeting the state goal on each sub-test of the Connecticut Physical Fitness Test.
- Scoring at least 4 on a 6 point rubric scale on a performance-based learning project that includes self-assessment of fitness levels and eating habits, personal fitness and nutritional goals, and strategies to achieve those goals.

*The Redesigned PSAT and Redesigned SAT were implemented in Fall 2015 and Spring 2016, respectively. The absence of historical student performance data relative to these new assessments prohibits Brookfield High School from determining realistic district performance benchmarks. In the future, with reliable data, PSAT and SAT benchmark scores will likely be added to our Literacy, Mathematics, Science, and Social Studies standards.

HOMEWORK POLICY (6454)

Homework is a vital component of education and is intended to:

- Promote responsibility and self-direction in the learner
- Instill good work habits
- Extend the out-of-school learning resources
- Enrich and extend school research experiences
- Assist students to learn how to budget time
- Provide the necessary practice in developing skills

Homework assignments should have specific objectives that are understood by the student. Homework should be planned, integrated, and relevant to instruction. All homework should reflect or reinforce materials already previewed and explained in class, or introduce students to future lessons or new concepts. Homework should involve follow-up with diagnoses progress and allows the teacher to adjust future learning experiences. All homework should be evaluated and students should be informed of the results of their efforts. The quantity of homework should be reasonable and reflective of the grade and achievement levels of the students to whom it is assigned.

WAIVER OF ATTENDANCE (Early Graduation)

A Waiver of Attendance may be granted under unusual circumstances after a **student has completed seven semesters of school and meets all requirements, under unusual circumstances,** i.e., early admission to college, severe personal needs, or financial need. A request for a Waiver of Attendance will be considered on its own individual merits and must be submitted to the principal at least 60 days prior to the effective date of the waiver. Recommendations will be reported to the Superintendent for final approval.

GRADING SYSTEM - CLASS RANK

Class rank at Brookfield High School is determined by computing the point average based upon all courses taken, both passed and failed. Grades of "Incomplete" which are not changed within the designated period of time will be changed to "F." Class rank is published in deciles with a final ranking occurring based on GPA at the conclusion of seven semesters.

Grade point averages will be determined, using a weighted scale, on the basis of a 4.0 index, with "A" equaling 4.0. Class rank is computed by multiplying the grade point index by the number of credits for each course, adding these figures together, then dividing by the total number of credits taken.

POINT VALUE OF GRADING SYSTEM

Letter Grade	Numerical Equivalent	Academic	Honors	Advanced Placement
A+	97-100	4.33	4.67	5.33
A	93-96	4.0	4.34	5.0
A-	90-92	3.67	4.01	4.67
B+	87-89	3.33	3.67	4.33
В	83-86	3.0	3.34	4.0
B-	80-82	2.67	3.01	3.67
C+	77-79	2.33	2.67	3.33
С	73-76	2.0	2.34	3.00
C-	70-72	1.67	2.01	2.67
D+	67-69	1.33	1.67	2.33
D	65-66	1.00	1.34	2.00
F	0-64	0.00	0.00	0.00

AUD Audit – No Grade, No Credit

FWD Dropped Course with "F"

INC Incomplete

NM No Mark

NP* Not Passed/No Penalty

P* Pass

PWD Dropped Course with "P" **WTR** Withdrawn - Transferred

- * Applies to "Pass/No Pass" Courses Only
- ** All students taking AP weighted classes are expected to take the AP Exam
- *** A student's transfer grades from other schools shall be evaluated by the principal or designee in accordance with this policy and regulations so that all grades shall be properly reflected in the student's grade point average if the student is transferring into the same course. Courses completed at a previous high school will not be included in the Brookfield High School GPA.

PASS/NO PASS OPTION

Students may have the option of taking up to one credit each year on a Pass/No Pass basis, under the conditions listed below. The purpose of the Pass/No Pass Option is to encourage students to explore certain new or advanced subject areas without fear of achieving a lower grade than acceptable to them. It is also expected that this option will reduce the number of study halls in a student's program. Hopefully, it will also serve to help some students discover new areas of interest.

- 1. It is strongly recommended that students not exercise the Pass/No pass option in courses that a college will consider directly applicable to their intended major. For example, a prospective engineering student should not take science or mathematics on a Pass/No Pass basis.
- 2. No more than one course (.5 Credits) per semester (total of 1.0 Credit) per year may be taken.
- 3. Students will receive full credit towards graduation, if the grade earned is "Pass", but grades of "Pass" will not be included in computing grade point average and class rank. If the grade is "Not Passed" a designation of "NP" will be entered on the transcript.
- 4. Students must exercise the Pass/No Pass Option on or <u>before</u> the midpoint of the 1st quarter (for 1st semester and year-long classes) or 3rd quarter (for 2nd semester classes).
- 5. A student who has elected the Pass/No Pass Option may request a return to the regular letter grade system on or <u>before</u> the midpoint of the 1st quarter (for 1st semester and year-long classes) or 3rd quarter (for 2nd semester classes).
- 6. Approval of the classroom teacher, department chairperson, guidance counselor and parent is required before a student may exercise the Pass/No Pass Option.
- 7. This option is only available for the student's 8th class in his/her schedule (or 7th for seniors). It may NOT be used as part of the student's required course load each year.

ADVANCED PLACEMENT AND HONORS COURSES

Honors and Advanced Placement courses will be given additional weight in computing grade point averages because levels of performance and time demands on students are considerably increased.

<u>Advanced Placement courses</u> are college level courses offered at the high school and are designed to significantly challenge the seriously motivated high school student. The standard of work expected is very high and the time demands stringent. Based on a 4.0 index, an "A" in an Advanced Placement course will be computed as 5.0 in determining

grade point average. *If a student enrolled in an AP course does not take the AP exam, they will receive honors weighting for that course.*

<u>Honors courses</u> are high school courses designed to provide a more challenging and faster-paced curriculum than academic level courses. Based on a 4.0 index, an "A" in an Honors course will be computed as 4.34 in determining grade point average.

A student who selects an Advanced Placement or Honors course should be aware that success in the course correlates to a recommendation for that level from their current teacher in that subject. Such recommendations are based on demonstrated performance and excellent achievement, as well as the ability and willingness to engage in individual research and independent study, to actively participate in class, and to accept responsibility for considerable work beyond class.

The following guidelines explain how current and past grades can be used to predict the possibility of success in Advanced Placement and Honors classes:

- Students currently in Academic classes, looking to request Honors classes, should meet the criteria mentioned above and earn an A-" average for the first semester.
- Students currently in Academic classes, looking to request Advanced Placement classes, should meet the criteria mentioned above and earn an "A-" average for the previous two years. In addition, students in an Academic classes who wish to attempt an Advanced Placement classes should schedule a conference with the teacher of the Advanced Placement classes.
- Students currently in Honors classes, looking to request Advanced Placement classes, should meet the criteria mentioned above and earn an "A-" average for the first semester
- Students currently in Honors classes, who plan on remaining in Honors classes, should meet the criteria mentioned above and earn a "B" average for the first semester.
- Students currently in Advanced Placement or Honors courses earning less than a
 "B" average for the first semester, may be better suited for a different level course.

UNIVERSITY OF CONNECTICUT EARLY COLLEGE EXPERIENCE

The University of Connecticut 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.

ECE instructors are high school teachers certified as adjunct professors by the University. ECE faculty foster independent learning, creativity and critical thinking – all pivotal for success in college. Brookfield High School offers ECE courses in History, English, Math, Science and Music. To support rigorous learning, University of Connecticut academic resources, including library and online classroom access, are available to all ECE students.

Students must successfully complete the course with a grade of "C" or better and pay a fee in order to receive university credit. University of Connecticut credits are transferrable to many colleges and universities.

UCONN ECE Course Offerings 2016-17

Grade	Course
9	No available courses
10-12	Music Appreciation II (3 credits) Biology - Advanced Placement (4 credits per semester or 8 credits for full year) Western Traditions before 1500 - Honors (3 credits) Modern Western Traditions - Honors (3 credits) European History - Advanced Placement (3 credits)
11-12	Discrete Math (3 credits) Statistics - Advanced Placement (4 credits) US History - Honors (3 credits per semester or 6 credits for full year) US History - Advanced Placement (3 credits per semester or 6 credits for full year)
12	English IV - Advanced Placement (4 credits)

ENROLLMENT IN COURSES WITHOUT RECOMMENDATION

In the event a student wishes to take a course for which he/she has not received a teacher's recommendation, the student should select the desired course through the Powerschool Scheduling Portal. Parents/guardians must approve of the selection through the portal by reviewing the course requests and following the online prompts.

Brookfield High School encourages all students to challenge themselves throughout their academic program. However, it is important to understand that neither the rigor of the course nor the pace will be adjusted to accommodate an individual student. When students select courses at the honors or AP level, they are committing to do their utmost

to meet all requirements of the course. These efforts should include after school help with the teacher, meetings with the school counselor, peer tutoring and/or private tutoring, and other strategies for success.

After the start of the school year, a scheduling change to adjust student levels will only be made if all efforts have been exhausted and the student is still struggling. Additionally, the master building schedule must accommodate such a change.

After the scheduling portal closes at the end of April, all requests for changes in placement must submitted by email to the student's School Counselor. In the event a student withdraws from a course after the issuance of the first marking period grades, a "W" will be recorded on the student's transcript if he/she changes levels, and a "WF" or "WP" will be recorded if the student drops the course entirely.

SEX DISCRIMINATION - TITLE IX

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

The Brookfield Board of Education agrees to comply with Title IX of the Education Amendments of 1972 and regulations promulgated pursuant thereto. The Board designates the Supervisor of Special Education as school systems Compliance Officer. The Board shall, at the opening of school each year, notify all students, parents and employees of the name, address and phone number of the Compliance Officer and procedures for processing individual or group grievances.

All individual or group complaints shall be addressed, in writing, to the Compliance Officer who shall be responsible for investigating all complaints. Upon investigation, the Compliance Officer shall effectuate any changes deemed necessary to eliminate any discrimination practices and shall inform the individual or group complainant, in writing, of this action within fifteen working days of the receipt of such complaint.

If the complainant is not satisfied with the actions of the Compliance Officer, within fifteen days the complainant may appeal the actions of the Compliance Officer, in writing, to the Board of Education including the remedy sought. The Board of Education shall hold a hearing within thirty days, and shall decide what, if any, remedies are necessary to eliminate the practices deemed discriminatory. The Board shall notify the complainant, in writing, of its decision within five working days after such hearing.

The Compliance Officer shall determine that a notice shall appear on all public announcements, bulletins, catalogues, application forms, and transcripts of the Brookfield School System that the Schools do not discriminate on the basis of sex. The Compliance Officer may be contacted by telephone at: 203-775-7748 and written grievances may be sent to Brookfield Board of Education, 100 Pocono Road, Brookfield, Connecticut 06804.

BROOKFIELD IS AN EQUAL OPPORTUNITY AND AFFIRMATIVE ACTION EMPLOYER AND DOES NOT DISCRIMINATE AGAINST ANY PERSON ON THE BASIS OF RACE, COLOR, RELIGION, NATIONAL ORIGIN, GENDER, SEXUAL ORIENTATION, AGE, OR PHYSICAL DISABILITY.

SPECIALIZED PROGRAMS

Brookfield High School recognizes the fact that its student body is composed of students with a variety of interests, aptitudes, and abilities, and that no single program, regardless of its excellence, can do justice to all. In appreciation of this fact, we have a series of alternatives or options designed to meet the needs of our students and capitalize on the strengths of our faculty.

Alternatives described in this section are designed with the intent of providing the most meaningful programs possible. Since needs change and problems take on different dimensions, we plan to make these alternatives flexible and responsive and will add, delete, or modify them as needed.

COOPERATIVE WORK EXPERIENCE

The cooperative work experience program is a vocational education program for students, who through a cooperative arrangement between the school and employer, receive systematic, organized training on the job and related vocational instruction. The school and job experiences will be planned and supervised by the school supervisor and the employer. The school and the employer will contribute to the student's education and employability.

ALTERNATIVE EDUCATION PROGRAM

This is a program designed to meet the academic needs of the educationally disadvantaged and the at-risk-student at the high school level. The program provides a systematic integration of career, personal and academic skills in order to aid each student in developing effective ways to function in society and become a contributing member of the community. This program requires an application process through the School Counseling department.

ONLINE LEARNING OPPORTUNITIES

Brookfield High School students are encouraged to explore online learning opportunities to further interests in subjects, recover lost credit, or enhance the educational experience by exploring alternative classes not available in our Program of Studies. Interested students should speak with their School Counselors to explore options available to them.

SPEECH AND LANGUAGE SERVICES

The Speech/Language and Hearing Pathologist assumes the responsibility for identifying, assessing and providing a program for the remediation of speech and language problems found among high school students. This includes conferences with parents, teachers and other school personnel, diagnostic teaming and coordination with community agencies on individual cases.

SCHOOL COUNSELING DEPARTMENT

An important phase of the school program consists of the counseling services provided by the School Counseling department. The Brookfield Public Schools' comprehensive school counseling program is student-centered and sequential, addressing three primary domains: academic, career and personal/social development. The developmental approach is founded on the belief that individuals experience general stages of academic, career and personal/social growth and that delivery of services must be structured to anticipate and fulfill those needs. Counselors work closely with staff members in identifying student needs and problems and collaborating about viable constructive measures. Counselors also assist students in planning for post-high school education and careers.

Students are assigned to their counselor according to alphabetic distribution in order to provide continuity of services within families. Proactive and responsive services are provided to students on an as-needed basis for:

- Academic consultation and support
- Personal issues concerning home, school or social difficulties
- Counseling groups for students with common needs

In addition, the counselors deliver the following grade-level curriculum covering the following themes:

FRESHMAN YEAR:

Transition to high school Learning styles/study skills

Career exploration

SOPHOMORE YEAR:

College and career exploration
Transcript review and goal setting
Resume development

JUNIOR YEAR:

Post high school planning College search and exploration Resume development

SENIOR YEAR:

Post high school planning College application process Financing college Transition to post high school path

CAREER PLANNING

All students need opportunities to acquire the competencies and attitudes necessary for becoming economically self-sufficient and productive throughout their lives.

In pursuit of this goal, all Brookfield High School students have an opportunity to:

- acquire self-assessment, career planning, career decision-making and employability skills
- make the transition from education and training to work
- maintain marketability of current job skills in an established occupation
- develop new skills that help him/her move away from declining occupational fields and focus on new and emerging areas
- obtain and use information on financial assistance for post secondary education and career/vocational job training
- study and review options for college and post secondary education.

Preparation for College

School counselors work closely with students and their families to help to develop a career plan throughout the high school years. The School Counseling Department uses a web-based program, Naviance, to do college searches, invite students to college

representative visits, and to track the application process. If college is the objective, students should expend every effort to meet entrance requirements. Requirements vary for different colleges, but there are basic requirements most college admission authorities agree on.

- 1. Students must graduate from an approved secondary school such as Brookfield High School.
- 2. Students should have completed course work in the following areas:

a. English 4 yearsb. Mathematics 4 yearsc. Science 4 yearsd. Social Studies 4 years

e. World Language 2 to 3 years (of the same language)

3. It is difficult to predict precisely what course requirements a particular college or university will expect. However, as a general rule, colleges require that students take the MAXIMUM number of academic courses that they can successfully complete. If a student is capable of four years of mathematics, science, world language, etc., it is recommended that he/she complete this type of sequence.

It is important to remember that the college admissions process is highly competitive. No student knows in advance with whom he/she is competing; therefore, it is imperative that each student take the most rigorous academic program that he/she is capable of successfully completing.

Many colleges require results of a standardized test as part of their admissions process. These scores, in combination with high school courses and grades, are often used as a means of predicting a student's readiness for college. The most widely used tests are the Scholastic Aptitude Test (SAT) administered by the College Board and the American College Tests (ACT). Other tests include the National League of Nursing Examination (NLN), additional specialized tests, or tests designed and administered by individual colleges. SAT and ACT scores will not be sent by BHS. Students are responsible for requesting that scores are sent directly from the College Board or ACT.

Students should read the current college catalogs or consult with the college admissions office to determine which tests the college requires. Students are urged to become acquainted early with the specific requirements of the colleges of their choice. College catalogus are available in the School Counseling office and online. College websites give information on deadlines: early decision, early action, and regular decision. See the college cataloges or college websites for information concerning academic requirements

and preferred times for taking the admission tests.

Most colleges will be interested in the following information:

- Grade point average
- Academic record how strong an academic program the student carried
- SAT's and/or ACT's
- Teacher recommendations
- Counselor recommendations
- Co-curricular, school and community activities, community service, positions of leadership
- Unusual experiences, e.g., living abroad, special honors, unusual hobbies, travel, etc.
- Resume

Options at other high schools

Students who plan to enter the workforce following graduation will find it extremely valuable to select electives and sequences of courses at Brookfield High School that can provide basic knowledge and skills for entry-level positions.

If a student is interested in specific areas such as clerical, merchandising, keyboarding/data processing, clerical, graphics, woodworking, automotive-auto body repair, auto mechanics, hairdressing, cosmetology, machine tool, plumbing/heating, and drafting they can apply to Henry Abbott Regional Technical School.

If a student is interested in specific areas such as agriculture production, agriculture mechanics, floriculture, horse management, landscaping, and veterinary science they can apply to the Ellis Clark Regional Vocational Agriculture Center at Nonnewaug High School.

SCHOOL TO CAREER

School-To-Career is a national initiative for grades K-14. Its purpose is to engage students by creating opportunities that allow formal education to become more relevant and meaningful to students. It connects the classroom, students, and teachers to businesses and organizations in the community. Some of the activities that are available for students to participate in while they attend Brookfield High School include:

■ **Industry and College Tours** - Every year field trips that tour various businesses are offered to enable a student to see all of the jobs and career pathways that exist in that company industry. A trip to Naugatuck Valley Community College in

- Waterbury for students to tour the campus and learn about the various programs that they have to offer is also scheduled.
- **Job Shadowing -** Students may shadow an individual for a day to see if that career is of interest to the student.
- **Paid Internships** Students are allowed to participate in a regional paid internship program that is managed by Education Connection in Danbury. Currently we have internships in the medical, business and educational fields.
- **Taking classes in high school for college credit** Participating in programs that allow a student to take classes for dual credit (high school and college credit).
- Career Cluster Certificate (CCC) Students may earn a CCC in the career cluster of their choice.
- **Interdistrict Grants** Brookfield participates in many interdistrict grants that are managed by Education Connection. An example is the Information Technology Leadership Academy.
- Information Technology Leadership Academy Education Connection, in collaboration with two urban priority districts, several suburban districts, one community college, and several local and international businesses has developed the ITLA (Information Technology Leadership Academy) program to prepare students for job opportunities in the information technology industry. The Information Technology Leadership Academy is designed to develop student academic research, engineering design and leadership skills. Students gain knowledge and experience in information technology industry careers through the completion of a comprehensive Information Technology (IT) Research and Design (R&D) project.
- Robotics –FIRST (For Inspiration and Recognition of Science and Technology)
 Robotics Program is an international program that was founded over a decade ago by inventor Dean Kamen and MIT Professor in Mechanical Engineering, Woodie Flowers. The purpose of the program is to get high school students interested in science, technology and math. Regardless of what career the team member chooses to pursue, the student will learn not only more about technology but will learn more about "gracious" professionalism" (the soft employable skills) that both employers and colleges look for in their applicants. Students also will have an opportunity to learn other skills such as fundraising, public relations, photography, web design, and animation to name a few.

SPECIAL SERVICES

To meet the individual needs of a diverse population of students, the Special Services Department provides a continuum of services for identified students. An Individual Education Program (IEP) is designed at a Planning & Placement Team meeting (PPT) for each student based on the student's needs, diagnosed disability, and current level of functioning. Special Education teachers serve as case managers and work collaboratively with regular education teachers to monitor students' progress.

#9921 Academic Support

Full Year 1.0 Credit

Selected students in need of additional assistance will develop literacy/numeracy skills and receive guided instruction in a resource room on a small group basis. Student interest, aptitude and academic need determine the nature of the work covered and the amount of time working with a teacher.

<u>Prerequisite</u>: selection by Special Services staff

#3020 Applied English

Full Year 1.0 Credit

Specialized English course designed for students who are identified as in need of more direct instruction to improve reading comprehension and fluency using texts that are found through the 9-12 English courses.

Prerequisite: selection by Special Services staff

#9909 English Tutorial

Full Year 1.0 Credit

Selected students in need of additional assistance to develop literacy skills are provided guided instruction in a resource room on a small group basis. Student interest, aptitude and academic need determine the nature of the work covered and the amount of time working with a teacher. The Read 180 program is available to all students who demonstrate need. A diagnostic and instructional reading program is integrated into the content of the course. *Prerequisite: selection by Special Services staff*

#9926 English Tutorial II

Full Year 1.0 Credit

Selected students in need of additional assistance will continue to develop literacy skills are provided guided instruction in a resource room on a small group basis. Student interest, aptitude and academic need determine the nature of the work covered and the amount of time working with a teacher. The Read 180 program is available to all students who demonstrate need. A diagnostic and instructional reading program is integrated into the content of the course.

Prerequisite: selection by Special Services staff

#9919 Math Tutorial I

Full Year 1.0 Credit

Selected students in need of additional assistance will develop numeracy skills are provided guided instruction in a resource room on a small group basis. Student interest, aptitude and academic need determine the nature of the work covered and the amount of time working with a teacher. Web-based math programs may be used by students as part of their work in this course.

<u>Prerequisite</u>: selection by Special Services staff

#9931 Math Tutorial II

Full Year 1.0 Credit

Selected students in need of additional assistance will continue to develop numeracy skills in a resource room on a small group basis. Student interest, aptitude and academic need determine the nature of the work covered and the amount of time working with a teacher.

<u>Prerequisite</u>: selection by Special Services staff

#9888 Social Studies Applied

Full Year 1.0 Credit

Specialized Social Studies course designed for students who are identified as in need of more direct instruction to improve reading comprehension and fluency using texts that are found through the 9-12 Social Studies courses.

<u>Prerequisite</u>: selection by Special Services staff

CAREER AND TECHNICAL EDUCATION (CTE) BUSINESS

Grade Level	Course
9-12	Introduction to Business Computer Applications Sports and Entertainment Marketing
10-12	Marketing I
10-12	Accounting I Business Law Business Management
11-12	Economics E-Commerce Entrepreneurship Marketing II Math Essentials I & II

The Business Education Department offers courses and programs designed to meet the educational interests and needs of a variety of students. Accounting, computer applications, economics, management, marketing, and law courses are all available for students to choose from. These courses provide students with the opportunity to explore future career decisions before graduating high school as well as lay a solid foundation for college. Students will develop skills and behaviors that will build character and leadership. Further applications of materials learned in class can be found by participation in DECA, a marketing and business club. Competitions are offered in the spring semester to further expand student experiences and to showcase student achievement.

#4065 Accounting I (10-12) Full Year 1.0 Credit

During the first semester of this course you will learn what business transactions are and how accountants use double entry systems (debits and credits) to record transactions. You will then study the complete accounting cycle, financial statements, and how to close the books. During the second semester you will explore how to computerize accounting records, how to interpret the data and communicate the findings to management. This course prepares students for post-secondary accounting courses and should be taken by all students expect to major in any area of business in college.

NOTE: This course qualifies for credit in either Mathematics or Business sequences. <u>Prerequisite</u>: Mathematics - If Accounting is taken for mathematics credit, completion of two full years of mathematics is required and approval of the Mathematics Department Head and the CTE Team Leader.

#7145 Business Law (10-12) Semester 0.5 Credit

You will develop a basic understanding of the U. S. business legal environment. Emphasis is placed on learning one's legal rights and obligations in relation to civil law. You will be introduced to basic legal principles common to business and personal use. Topics will include: contracts, owning and renting property, negotiable instruments, and wills. During this course you will research, discuss, and debate actual legal cases.

#7155 Business Management (10-12) Semester 0.5 Credit

In this course you will be introduced to an overview of management practices and principles. Major topics introduced will include the management functions of planning, organizing, implementing and controlling. You will be required to apply management principles to realistic situations managers encounter as they attempt to achieve organizational objectives. This course is recommended for all students planning to major in Business in college.

#7034 Computer Applications (9-12) Semester 0.5 Credit

During the first nine weeks of this course you will learn correct keyboarding skills. During the second nine weeks you will learn various computer applications and programs such as how to create reports, personal/business letters, tables, and spreadsheets. This course will concentrate on the effective use of Word and Excel software programs. At the end of this course you will be able to key with speed and accuracy as well as product quality documents.

#2154 E-Commerce Entrepreneurship (11-12) Full Year 1.0 Credit

This course develops students' academic and 21st century skills through participation in a project-based challenge that engages and reinforces students' learning by doing. During the first semester students work independently to research the fundamentals of designing and developing a business by producing a business plan, marketing materials, and a three minute sales pitch. During the second semester students form a team and are required to delve deeper into a single business venture. The final requirements are a business plan, a functioning online store, and a comprehensive sales pitch to be presented to a panel of judges at the CT Students Innovation Expo.

#7055 Economics (11-12) Semester 0.5 Credit

Describing the basic characteristics of the American Economic System; developing an understanding of the economic principles that influence business decisions; and promoting

hands-on experiences in the operation of a business enterprise are the basic concepts you will study in this course. During this course you will participate in the Stock Market Game. **NOTE:** This course is also offered for Social Studies credit (#2155).

#7150 Introduction to Business (9-12) Semester 0.5 Credit

This half year course introduces you to the real world of business and enables you to relate key business concepts to your own life as citizens, wage earners, and consumers. In this course you will explore various subject areas such as economics, marketing, advertising, entrepreneurship, and accounting. Students will develop critical thinking and problem solving skills as applied to economic, technological, ethical, and social issues in the business arena. This course is strongly recommended for students who desire to operate their own business or who will be pursuing a career in business.

#7175 Marketing I (10-12) Full Year 1.0 Credit

In this course you will begin to learn terminology and concepts related to the world of business, focusing on marketing. Information covered in this course will include: the functions of marketing, the marketing mix, legal and ethical issues, economics, basic business skills, entrepreneurship, risk management, financing a business, and careers in marketing. At the end of the course you will be able to apply what you have learned in a variety of ways and have an understanding of business and marketing that will help you develop professionally. Concepts learned will also help develop an understanding of the relationship between marketing and our economic system as well as the global market.

#7185 & 7186 Marketing II Honors(11-12) Full Year 1.0 Credit

Students who have taken Marketing I can continue with this course that focuses on the management side of Marketing. The major concepts covered in this course include promotion, price, place, and product. Topics include channels of distribution, pricing methods, inventory, purchasing, branding, product creation, the product life cycle, visual displays, advertising, marketing research, and selling.

<u>Prerequisite</u>: Marketing I

#7210 Marketing Education Cooperative Full Year 1.5 Credit Work Experience

Cooperative work experience will develop a vocational understanding of specific marketing occupations. This course provides you with an opportunity to receive credit for supervised professional training and experience in an actual work environment. Marketing Education II students may elect to be employed in a paid training station that is curriculum related and earn .25 credits for every 100 hours of coordinated work time for a maximum of 600 hours during the high school experience. You can earn a maximum number of 1.5 credits.

Each week a work form must be completed and passed into the Work Experience Coordinator showing the amount of hours worked. The student earns a Pass/Fail grade for this course.

<u>Prerequisite</u>: Students enrolled in Marketing Education II

#7060 Math Essentials I (11-12) Fall Semester 0.5 Credit

You will study consumer mathematics with emphasis on decision making and the use of arithmetic to solve consumer related problems in this course. A few of the projects that are used in this course are simulation exercises and projects involving wages, earnings, and budgeting. NOTE: This course is also offered for Mathematics credit (#4060)

Prerequisite: Mathematics - If Math Essentials is taken for mathematics credit, completion of two full years of mathematics is required. Approval of the Mathematics Department Head and the CTE Team Leader.

#7062 Math Essentials II (11-12) Spring Semester 0.5 Credit

This is a continuation of Math Essentials I. The focus is on making intelligent, informed consumer decisions. The financial aspects of making major purchases, buying on credit, taxation, and insurance needs are investigated. **NOTE:** This course is also offered for mathematics credit (#4062)

<u>Prerequisite</u>: Math Essentials I - If Math Essentials is taken for mathematics credit, completion of two full years of mathematics is required and approval of the Mathematics Department Head and Applied Education Team Leader.

#7190 Sports and Entertainment Marketing (9-12) Semester 0.5 Credit

In this course you will take a step-by-step journey through the world of sports and entertainment marketing. You will focus on the basic functions of marketing and how those functions are applied to the sports and entertainment industries in the global marketplace. These functions include pricing, promotion, distribution, product and services management, marketing information management, and selling. You will develop critical thinking and decision-making skills through the application of marketing principles as well as research career opportunities in the Sports and Entertainment industries.

CAREER AND TECHNICAL EDUCATION (CTE) FAMILY AND CONSUMER SCIENCES

Grade Level	Course
10-12	Interior Design
9-11*	Culinary Arts I – Food and Nutrition
10-12	Culinary Arts II – Foods of the World
10-12	Child Development

^{*}priority will be given to Sophomores and Juniors

Courses in the Family and Consumer Sciences Education field are designed to provide the foundation for lifetime learning in the fields of Culinary Arts, Child Development and Interior Design. Students are encouraged to choose semester courses that will suit their individual needs.

#8065 Child Development (10-12) Semester 0.5 Credit

In this course you will develop an understanding of the physical, cognitive and social-emotional growth of children from conception through the preschool years. Topics of study include theories of development, societal changes in the family, and education of the young child. You will have the opportunity to participate in the "Real Care" baby project, a parenting simulation during the second half of the course.

#8035 Culinary Arts I – Food and Nutrition (9-11) Semester 0.5 Credit

In this course you will develop foundation skills necessary to prepare nutritious meals at home. Topics of study will include nutrition, food preparation, consumer decisions, and current global issues concerning food production.

#8040 Culinary Arts II – Foods of the World (10-12) Semester 0.5 Credit

In this course you will build on Culinary Arts I foundation skills as you learn to prepare more elaborate meals with an international theme. Topics will include culinary history, culture and cuisine, food science and technology.

<u>Prerequisite</u>: Culinary Arts I

#8125 Interior Design (10-12)

Semester

0.5 Credit

In this course, you will develop an understanding of interior design practices. Topics of study include: design theory, architecture, and contemporary issues that affect designing interior environments. Skills in space planning will be developed through the use of CAD software. You will also learn how to use color, fabrics, furnishings, and lighting to make a space functional and appealing.

CAREER AND TECHNICAL EDUCATION (CTE) TECHNOLOGY EDUCATION

Grade Level	Course
9	Skills 21
9-12	Electronics Introduction to Technology Education Computer Aided Drafting I (CAD) Architecture and Design Robotics Engineering BOE-BOT Video Production Integrated Technology
10-12	Computer Aided Drafting II Advanced Video Production

The Technology Education program is an essential part of a student's education at Brookfield High School. It provides students with opportunities to apply information learned in other subject areas, develop problem solving, decision making and creative thinking skills, and gain knowledge about the ever increasing technological world in which they live. Whether a student is interested in seeking a career in a technological field or not, the technology education program can provide information and skills that can be applied to many aspects of life.

#3182 Advanced Video Production (10-12) Semester 0.5 Credit In this course you will continue to develop your skills and knowledge as you learn additional techniques used to enhance your stories. Various types of assignments will be given with an emphasis on music and sound, special effects, graphics and lighting.

#6035 Architecture and Design (9-12) Semester 0.5 Credit Good residential design will be an emphasis of this course. You will learn common residential styles as well as types and purposes of architectural drawings. During the course you will use a 3D CAD software package to design a one story, two story and off the grid house to given sets of specifications. Building codes and common building materials and practices used in residential construction will be discussed, as you build a scale

framing model as a team. Honors Level: The Honors Level is taught within Architecture and Design. If you choose this course level, you will have additional classwork, quiz and test questions, and a report. Your two story design will also include additional drawing which are not required at the academic level.

2153 BOE-Bot (9-12)

Semester 0.5 Credit

Developing an understanding of how robotics and other digital electronic devices actually work will be the emphasis in this course. During a series of labs, you will build, program, and test various electronic circuits found in common devices. All of the labs are sequential and cover circuits using various components such as resistors, light emitting diodes, switches, servomotors, 7 segment LED's and infrared transmitters and receivers. These labs will build the knowledge and skill which will lead to you building and programming a small robot incorporating various types of sensors.

#9932 Skills 21

Quarter 0.25 Credit

Students in this class will discuss what it means to be a Digital Citizen and the privileges and responsibilities this entails. We will learn to use technology to effectively and appropriately communicate with teachers and peers, organize our work and time, and create digital presentations that share our problem solving abilities with the world. The school-issued iPads will be the technology platform for this class, but the skills learned will apply to all digital technologies students will interact with in their daily lives.

#6020 Electronics (9-12)

Semester 0.5 Credit

Key concepts of electricity/electronics will be studied as you learn about electron theory, power generation, and Ohm's and Kirchoff's laws. You will breadboard a series of DC circuits as you learn about common electrical components, and their function. You will build a simple DC motor and use a multi-meter while learning to conduct basic circuit analysis for series, parallel, and combination circuits.

#6042 Computer Aided Drafting I (9-12) Semester 0.5 Credit

From sketching to CADD you will develop your skills and knowledge in the field of mechanical drafting. Through a series of lessons you will learn the international standards of drafting while develop proficiency using industry standard CADD software. The course will develop your skills visualizing the relationship between 2D drawings and 3D models, as you complete mutliview, section and auxiliary drawings. After completing the assigned drawings, you will have an opportunity to design a product of your own, which can be printed out on the labs 3D printer.

#6045 Computer Aided Drafting II (10-12) Semester 0.5 Credit

In this course you will increase your CADD skill level with more challenging and complex drawings. A review of drafting standards and 3D commands will be followed by an immersion into 3D design and modeling. You will be required to develop designs from individual parts to full product assemblies. Advanced commands will be explored as you progress through your independent projects. The 3D printer may be utilized for prototype and final product design.

Prerequisite: Computer Aided Drafting I

#6028 Integrated Technology (9-12) Semester 0.5 Credit

This course shows the relationship between business and technology. Structures, transportation, and mechanical and electrical systems will be studied as you apply basic math and science skills to problem solving activities. In the culminating activity you will be required to both design and build a solution to a given problem in a business like atmosphere. In teams you will form a company; define the problem, brainstorm solutions, design and create drawings from which the solution can be built, and finally, build the working model; all while staying within a given budget.

#6026 Introduction to Technology Education (9-12) Semester 0.5 Credit

Using tools and machines to make items we need and want is the oldest of human endeavors. You will gain an understanding of how products are made as you complete a series of hands-on activities which familiarize you with various tools, materials, machines and processes used in the manufacture of products. This is followed by a discussion of problem solving strategies and will culminate with you utilizing your acquired knowledge of materials and processing techniques in a team Design/Build challenge in the field of transportation.

#2152 Robotics Engineering (10-12) Semester 0.5 Credit

Robots are a great way to learn about engineering principles. After an overview of an engineer's role in society you and a partner will build a robot following a set of instructions using the VEX robotics platform. Applications of math and science will be covered as you gain an understanding of mechanical power transmission, drivetrain design, mechanics, fluid power systems, lifting mechanisms, and more. All of this will give you the background knowledge and skill needed to design a robot of your own. You and your team will ultimately design a robot to compete in, and hopefully win, "The Game".

#3180 Video Production (9-12) Semester 0.5 Credit

Anyone can record a video with the press of a button but ease of use does not always equal quality work. In this course you'll learn how to make a better video as you learn basic

camera skills and techniques. You'll view programs with a more informed perspective as you discover how this medium can be used to entertain, educate, persuade, and even deceive you. The phases of production will be covered as you storyboard, record, and produce multiple videos.

ENGLISH

Grade Level	Course
9	English I Honors English I Academic
10	English II Honors English II Academic
11	English III – Advanced Placement Language and Composition English III Honors English III Academic
12	English IV – Advanced Placement Literature and Composition English IV Honors English IV Academic
9-12	*Creative Writing *Journalism I *Journalism II *Public Speaking *SAT Prep

^{*} These courses count towards the Humanities elective credits and <u>DO NOT</u> fulfill the English graduation requirement

#3131 Creative Writing

Semester

0.5 Credit

This creative writing workshop provides students with an opportunity to learn and practice the craft of developing original sketches, short stories, poems, and plays. Students discuss and write within a variety of styles that they are exposed to. Whenever possible, student interests guide the selection of materials and required pieces. Students are also encouraged to submit their work to contests and publications.

#3021 English I - Academic

Full Year

1.0 Credit

English I Academic is a year-long thematically organized course designed to explore the art of storytelling, the role of tragedy, the hero's journey, and the importance of dreams. Students will maintain an independent reading schedule of classical and contemporary literature and non-fiction. They engage in written, oral, and visual presentations and are expected to complete processed writing assignments in addition to informal assignments.

The use of technology is regularly integrated into learning experiences. This course develops academic independence and responsibility.

#3025 English I - Honors Full Year 1.0 Credit

English I Honors is a year-long thematically organized course designed to explore the art of storytelling, the role of tragedy, the hero's journey, and the importance of dreams. Students will maintain a rigorous reading schedule of classical and contemporary literature and non-fiction. They engage in written, oral, and visual presentations and are expected to complete a minimum of ten pages of processed writing in addition to informal assignments. The use of technology is regularly integrated into learning experiences. This course requires students to demonstrate a high level of engagement and curiosity while balancing simultaneous classroom reading and writing assignments with independent assignments.

#3031 English II - Academic Full Year 1.0 Credit

English II Academic is a year-long thematically organized course designed to explore ideas around integrity, ambition, the philosophical journey, and the response to change. Students continue to deepen their facility at responding to text orally, visually, and in writing. Instruction is focused on reading for meaning, developing extended, substantiated responses to text, and on integrating research into academic writing.

#3036 English II - Honors Full Year 1.0 Credit

English II Honors is a year-long thematically organized course designed to explore ideas around integrity, ambition, the philosophical journey, and the response to change. Students who qualify for this level are recommended by the ninth grade teacher because they can read advanced literature and are ready for intensified academic and research-based writing instruction. This course requires students to complete at least 15 pages of polished writing in addition to regular informal written assignments and prepares students for the option of taking Advanced Placement Language and Composition during junior year.

#3050 English III - Academic Full Year 1.0 Credit

English III Academic is a year-long course designed to focus on the development of American thought as reflected in contemporary and classical American literature. Students will use narrative, expository, and persuasive modes to explore multiple responses to literature. Instruction will emphasize the skills students need to use to prepare, publish, and present work appropriate to audience, purpose, and task. Students will complete multiple research-based writing assessments.

#3222 English III - Advanced Placement Full Year 1.0 Credit In Language and Composition

The Advanced Placement in English Language and Composition course is for highly motivated 11th grade students who demonstrate college-level reading, writing, listening and speaking skills. The curriculum focuses primarily on American literature with a concentration on the craft of non-fiction prose. Students will become skilled readers of text written in a variety of periods, disciplines, and rhetorical contexts, and will also become skilled writers who compose for a variety of purposes. Through their reading and writing students will develop an awareness of writer's purpose and audience expectations as well as the way conventions and the resources of language contribute to effectiveness in writing. All students are expected to take the Advanced Placement examination in English Language and Composition in May. Students who qualify for this level are recommended by their tenth grade English teacher.

#3045 English III - Honors Full Year 1.0 Credit

English III Honors is a year-long course that challenges students with an intensive and expanded study of the American character through literature. Students are expected to approach the course with a commitment to maintain consistent engagement with a rigorous curriculum. Instruction will focus on creating complex and insightful responses to text and on integrating scholarly research into extended pieces of academic writing. This course requires students to complete at least 20 pages of polished writing and prepares them for the option of taking Advanced Placement Literature and Composition during senior year. Students who qualify for this level are recommended by their tenth grade English teacher.

#3220 English IV - Advanced Placement Full Year 1.0 Credit In Literature and Composition

The Advanced Placement in Literature and Composition is a seminar-based course designed around student-led inquiry that emphasizes both the deliberate and thorough reading of complex, rich literature and instruction to develop a student's ability to respond to these texts using academic writing to interpret, analyze and argue the artistic and social/historical/cultural value of works from the literary canon. The course heavily depends upon the oral and written exchange of ideas that occurs between students. Class members will lead seminar discussions, complete informal and formal writing assignments, share and critique rough and final written drafts of papers with others during writing workshop, and complete at least 30 pages of polished writing. Students will carefully consider how critical perspectives function to make literature meaningful and are required to integrate a wide-range of vocabulary and a strong command of grammar, mechanics, and style in the written interpretation of ideas. All students enrolled in the course are required

to take the AP Literature and Composition exam in May. Successful completion of the course with a grade of "C" or better enables students to earn four credits for UCONN's English 1011: Seminar in Writing through Literature.

#3221 English IV - College Prep Full Year 1.0 Credit

English IV College Prep is an Academic level, year-long course designed to prepare students for college and workforce training. In this thematically organized course, students will comprehend and evaluate complex literary fiction and non-fiction texts. Emphasis will be placed on self-directed learning where students use teachers, peers, and print and digital reference materials as resources for academic inquiry. Students will work towards polishing their written and oral expression skills to prepare them for a successful future in college and the professional world.

#3195 English IV - Honors Full Year 1.0 Credit

English IV Honors is a year-long course designed to prepare students for college and workforce training. In this thematically organized course, students will comprehend and evaluate complex literary fiction and non-fiction texts. Students will assume responsibility for self-directed learning in which they use teachers, peers, and print and digital reference materials as resources for academic inquiry. Students will advance their written and oral expression skills to prepare them for a successful future in college and the professional world.

#3146 Journalism I Semester 0.5 Credit

Journalism I students will learn the fundamentals of lead writing, news story development, news story organization, interviewing, gathering information, attributing sources, rewriting, editing, writing within a deadline as well as analyzing and evaluating qualities of good writing. Articles written in class may be submitted for publication in the student newspaper, *The Pawprint*.

#3147 Journalism II Semester 0.5 Credit

Journalism II students may continue their study of journalism by learning how to write more complex articles in a variety of journalistic genres. They will also have the opportunity to explore leadership opportunities for the print and online versions of *The Pawprint*.

<u>Prerequisite</u>: Journalism I

#3150 Public Speaking Semester 0.5 Credit

Students will master the skills of listening, analyzing, researching, organizing, and delivering a message. As students develop linguistic skills, they will sharpen thinking and

gain confidence by learning to speak with authority and clarity. Students will respond to texts in class discussion and prepare oral presentations.

#2151 SAT Preparation: Verbal (10-11) Semester 0.5 Credit

The SAT verbal class is structured to address aspects of the Critical Reading and Writing sections of the SAT. The topics covered include recognizing common grammar errors, using vocabulary in context and utilizing critical reading techniques. Students also practice and study high frequency SAT words from an established list and additional vocabulary enhancement may be promoted through learning Latin and Greek prefixes, suffixes and roots. In preparation for the essay, the students are taught to write competently according to the College Board's rubric.

FINE AND PERFORMING ARTS ART

Grade Level	Course
9-12	Art I Art II Design Ceramics I Ceramics II
10-12	Art III Digital Photography Advanced Placement Art History
11-12	AP Studio Art Yearbook

Art courses are designed to give students the opportunity to explore and develop their interests in the visual arts. All art courses include reading and writing in the content area, aesthetics, art history, analysis, assessment and project work. Students will be assessed on their ability to produce and critique artwork as well as their overall effort. We suggest that any student who plans a career in art take as many courses in art as possible. Some courses do require prerequisites. Any student intending to prepare a college portfolio should contact the Team Leader in September.

6543 AP Studio Art Full Year 1.0 Credit

AP Studio Art is a year long, portfolio-based class which is designed for highly motivated students seriously interested in the practical experience of creating art. Students submit an extensive portfolio with a focus on quality, concentration and breadth, directly to the College Board during May of the school year. Students may choose to concentrate in one of the following areas: 2-D Design, 3-D Design or Drawing. The goals of the course are: encourage creative and systematic investigation of formal concepts, emphasize art making and critical decision making, hone technical skills and encourage independent thinkers. *Prerequisite: Art I, II & III, or departmental approval.*

#6540 Art I (9-12) Semester 0.5 Credit

Students will explore the Principles and Elements of Art as well as learn basic drawing skills and art vocabulary. The focus of this class is working from direct observation using a variety of black/white and color media. As a result of taking this class, students will have learned the basic skills and appropriate language to produce and critique works of art.

#6542 Art II (9-12) Semester 0.5 Credit

This is an intermediate/advanced level course open to students who have successfully completed Art I. As a result of taking this class students will hone their observational and technical skills and develop the skills necessary to explore new media.

Prerequisite: Art I

#6544 Art III (10-12) Semester 0.5 Credit

This is an advanced class open to students who have successfully completed Art I & Art II. Students will create more open-ended projects, develop their creativity, develop their observational and technical skills, and further enhance their artistic voice. As an advanced course, there are weekly sketchbook homework assignments necessary for successful completion of the course. Students interested in creating a portfolio for college admissions may do so in this class. Students may enroll in this class multiple times during their high school careers.

<u>Prerequisite</u>: Art I and Art II

#6532 Art History (10-12) – Advanced Placement Full Year 1.0 Credit

Advanced Placement Art History is the equivalent of an introductory college course for highly motivated students who possess a high level of reading, writing, and verbal skills. This course covers both European and non-European art and architecture and emphasizes understanding art in its historic context. Issues such as politics, religion, patronage, gender, function and ethnicity as well as formal stylistic observations contribute to the course content. All students are expected to take the AP Art History Exam in early May After the exam, students will create an independent art project. Class work will include quizzes, tests, discussions, lectures, critiques.

NOTE: AP Art History Course is also offered for 1.0 Social Studies credit.

#6525 Ceramics (9-12) Semester 0.5 Credit

Ceramics is designed to instruct students in both hand-built (slab, coil, punch...) and wheel thrown pottery. Students will learn the fundamentals of refining, glazing and other finishes. It is taught through lectures, demonstrations and individualized instruction.

#6526 Ceramics II (9-12) Semester 0.5 Credit

This course is designed for students looking to advance their skills and knowledge in ceramics. Students will create both hand-built and wheel thrown pieces. This course offers a more in-depth look at the world of clay.

#6505 Design (9-12) Semester 0.5 Credit

This course is an excellent choice for students interested in pursuing a career in design, including such fields as interior design, graphic design, publication design, industrial design, fashion design, and/or entertainment design. It is based on the principles and elements of art as applied to both two and three-dimensional projects. There is a strong emphasis on computer graphics. As a result of taking this course students will have a working knowledge of both Photoshop and IN-Design software. Additionally, the basic language of design, which can be applied in a variety of fields, will be taught throughout the course.

#6523 Digital Photography (10-12) Semester 0.5 Credit

This is an introductory level course. Students will learn basic concepts in photographic composition and technique. They will work with digital cameras and digital editing software in order to manipulate and enhance images. Students will gain skills useful for their personal image editing as well as the ability to create contemporary works of art. Photographic homework is required for successful completion of this course. A limited number of cameras are available on loan through the Library Learning Commons.

#3215 Yearbook (11-12) Full Year 1.0 Credit #3216 Yearbook (11) Spring Semester 0.5 Credit

Yearbook students participate in all phases of yearbook production: planning, business, photography, artwork, layout, writing, editing and proofreading. The culminating project is the completed Scintilla yearbook. Yearbook students are expected to spend time after school working on layout, photography and ad sales.

Yearbook is a year long course for seniors. Juniors are encouraged to take this class during second semester in preparation for a position as Editor-in-Chief or Senior Section editor. <u>Prerequisite</u>: Teacher recommendation

FINE AND PERFORMING ARTS MUSIC

Grade Level	Course
9-12	Chorus I & Chorus II Band Beginning Guitar Music Appreciation I Music Theory I & II Music Theory Advanced Placement *Jazz Band *Marching Band
10-12	Special Chorus Music Appreciation II Digital Music Technology Musical Theatre *Small Group Chorus

^{*} These courses only meet after regular school hours

All music courses are elective courses. Students who are interested in performing groups can choose to be in general chorus, marching band, color guard or concert band. Special chorus and jazz ensemble are select groups that require an audition for membership.

#9096 Band (9-12) Full Year 1.0 Credit

Open to all students who perform on traditional Band instruments, and who have an interest in Instrumental Music. This performance-oriented course focuses on standard Band literature and techniques designed to have the student advance and succeed. Focus will include aspects of Concert Band, Chamber, and Small ensemble music. Students will be required to attend all performances as directed by course schedule. This will include fall and spring concerts, parades, and other performances that may occur during the school year. Opportunities to advance to nationally recognized events will be available. This may include Regional, State and/or All State ensembles. All students in Band will be eligible to receive honors credit by meeting criteria developed by the music department.

#9092 Beginning Guitar (9-12) Semester 0.5 Credit

Open to all students regardless of musical skill or experience. This course focuses on basic beginning folk guitar techniques and playing. Emphasis will be on basic chord fingerings, fret board reading, basic traditional music reading (not tablature), and strumming techniques. This course is designed for **beginners only** and Acoustic Guitar only.

#9090 Digital Music Technology (10-12) Semester 0.5 Credit

This course provides a hands-on approach to the fundamentals of working with digital audio applications, such as GarageBand and iMovie. An overview of basic digital recording and sampling will be covered, as well as techniques for recording, sampling, editing, and storing sound. Audio and video projects will be developed throughout the course, including soundtrack development, sound design, and voice-over for video.

Prerequisite: One music course

#9055 General Chorus I (9-12) Fall Semester 0.5 Credit #9065 General Chorus II (9-12) Spring Semester 0.5 Credit

Chorus is open to any student in grades 9-12 who likes music and who likes to sing. The chorus performs at the December Holiday Concert and the Spring Choral Concert. This course may be taken each year.

#9097 Jazz Band (9-12) 2, 3 & 4th Quarters 0.75 Credit

<u>This course will meet after school</u>. The Jazz ensemble is a select group that meets after school, two evenings per week beginning in the late fall. The focus is on traditional and contemporary Big Band music. All students are encouraged to audition. Guitarists, Bass players and Keyboard players are included. Members are responsible for all rehearsals and will be graded on a Pass/Fail. It is suggested that members are enrolled in Band. However, students may apply to the program if they are not enrolled in Band.

<u>Prerequisite</u>: By audition and/or consultation with the instructor

traditional and contemporary styles of standard band literature.

#9098 Marching Band (9-12) Semester 0.25 Credit *This course will meet after school*. Open to all students who perform on traditional band instruments and who have a serious interest in excelling to a high degree of excellence. Students must be fairly proficient on their instrument. This performance oriented course will focus on Marching Band performance techniques, technology uses as well as

#9045 Music Appreciation I (9-12) Semester 0.5 Credit Emphasis is placed on developing listening skills with a focus on musical genres from Blues to Rock.

#9047 Music Appreciation II (10-12) Semester 0.5 Credit

Emphasis is placed on developing listening skills and an appreciation for many types of music. This involves the study of music history and listening to the works of famous musicians and composers.

Prerequisite: Music Appreciation I

#9116 Music Theory I (9-12) Fall Semester 0.5 Credit

This course will be an introduction to music theory. Topics include music reading, notation, music fundamentals, keyboard fundamentals, and ear training.

#9117 Music Theory II (9-12) Spring Semester 0.5 Credit

This course will introduce more advanced concepts in Music Theory. Topics include: composition, transposition, arranging, part writing, ear training, and form in music. <u>Prerequisite</u>: Music Theory I and teacher recommendation

#9117 Music Theory AP (10-12) Full Year 1.0 Credit

The Advanced Placement in Music Theory program enables highly motivated students to perform at the college level while still in high school. This college-level course adheres to the suggested College Board Curriculum. In the AP course in Music Theory, students will be required to read, notate, compose, sing, and analyze music. The AP Music Theory Exam is a written exam. Students are required to take the College Board Exam in May. Students will have to keep a manuscript book and do assignments the summer before taking this course. As a result of Advanced Placement in Music Theory the student will:

- hear and notate pitches, intervals, scales and keys, chords, metric organization, and rhythmic patterns.
- apply and interpret Roman numeral and figured bass chord progressions.
- analyze repertoire, including melody, harmony, rhythm, texture, and form.
- create and apply functional triadic harmony in traditional four-voice texture (with vocabulary including non-harmonic tones, seventh chords, and secondary dominants). <u>Prerequisite</u>: Music Theory and/or teacher recommendation

#3101 Musical Theatre (10-12) Semester 0.5 Credit

The Musical Theatre course is designed to expose student to a wide range of skills, techniques, and knowledge of all aspects of music theatre. Students will develop their acting, movement, and performance techniques as a result of completing this course.

#9070 Small Group Chorus (10-12) Full Year 0.5 Credit

<u>This course will meet after school</u>. Small Group Chorus is a select group of singers, chosen from the Special Chorus, which performs serious music in a more intimate setting than the Special Chorus. Participation is by audition and members must maintain the highest standards of musical performance. Members will be involved in approximately 25 performances each year and be graded on a Pass/Fail basis.

#9075 Special Chorus (10-12) Fall Semester 0.5 Credit

The Special Chorus is a select group that performs difficult choral literature. The group performs an average of 15 times each year in school concerts and for community groups. This course may be taken each year.

Prerequisite: By audition

#9088 Special Chorus (10-12) Spring Semester 0.5 Credit

The Special Chorus is a select group, which performs difficult choral literature. The group performs an average of 15 times each year in school concerts and for community groups. This course may be taken each year.

Prerequisite: By audition

PHYSICAL EDUCATION

Grade Level	Course
9	PE 9
10	PE 10 Competitive PE Physical Education by Design Outdoor Education
11	PE 11 Personal Fitness Fit for Life Lifelong Activities, Team Sports and Leadership

Brookfield High School Physical Education program goals:

- Students will demonstrate the skills and knowledge necessary to participate in a variety of physical activities.
- Students will make decisions to promote physical fitness and to establish and maintain a healthy lifestyle to encourage individual wellness throughout his or her life.
- Students will recognize and understand the life-long benefits of physical activity on one's mind and body.
- Students will develop interpersonal skills, exhibit positive character traits, and responsible behavior.

Physical Education Sequence

9th grade		
PE 9	Spring Semester	0.5 Credit
10th grade		
PE 10	Fall Semester	0.5 Credit
PE elective	Spring Semester	0.5 Credit
11th grade		
PE elective	Fall Semester	0.5 Credit

^{*} Students cannot enroll in more than two credits in Physical Education at Brookfield High School throughout their high school experience.

#9599 Competitive PE (10)

Spring Semester 0.5 Credit

Students will learn and participate in a variety of sports and activities at a high level. This would entail learning the history, rules, strategies and advanced skill sets involved in each unit, while utilizing teamwork, sportsmanship and game related conditioning.

#9613 Fit For Life (11)

Fall Semester 0.5 Credit

This semester long .5 credit course is aligned with State Standards 9: Motor Skill Development, 12: Physical Fitness and 14: Benefits of Physical Activity. The course builds on much of the learning from P.E. Design and focuses on Life-Long Sports and Activities, Aerobic Fitness, Wellness and Stress Reduction. While outside, classes will explore Golf, Tennis, Frisbee and Hiking. Indoor Aerobic Fitness will include Dance Movements, Zumba and Badminton, as well Wellness and Stress Reduction through Yoga and Pilates. Students will keep Reflection Journals related to their own Fitness and Wellness Goals.

#9589 Independent Fitness Program(12) Spring Semester 0.5 Credit

This course is designed specifically for and limited to students who have scheduling conflicts preventing the attainment of normal Physical Education credit. Entrance must be approved by the PE teacher, School Counselor and the Principal. This class will meet three times after school during the semester. Students will develop a personal fitness plan that incorporates cardiovascular endurance goals (running, walking, hiking, biking), as well as proactive healthy lifestyle and injury prevention components. Results will be tracked in an online database using GPS fitness devices to be determined.

#9614 Lifelong Activities, Team Sports and Leadership(11) Fall 0.5 Credit

This semester long .5 credit course is aligned with State Standards 10: Applying Concepts and Strategies, 11: Engaging in Physical Activity and 13: Responsible Behavior. The course builds on much of the learning from Competitive P.E. by focusing on Life-Long Sports and Activities like Golf, Tennis, Frisbee and Badminton, as well as Leadership through Team Sports including Volleyball, Team Handball, Soccer, Floor Hockey and Basketball. Students will create a game to teach to the class, and design practices, dynamic warm-ups and facilitate games.

#9580 Outdoor Education (10) Spring Semester 0.5 Credit

Students will be actively involved in establishing an environment of acceptance and trust that is conducive to building social, cognitive and physical skills. These skills will be enhanced as the course introduces team building and cooperative group challenges, snow activities, orienteering, hiking, backpacking and camping skills.

#9550 Personal Fitness (11)

exercise, nutrition, and other healthy lifestyle aspects.

Fall Semester 0.5 Credit This semester long .5 credit course is aligned with State Standard 12: Physical Fitness and 14: Benefits of Physical Activity. The course focuses on Aerobic Exercise, Resistance Training and Personal Goal setting. While outside, the class will entail using the track for jogging and power-walking, designing circuits and other ways of raising heart-rates to burn calories efficiently. Indoors, this class uses the Weight Room to learn weight-lifting techniques, fitness and core training, as well as the gym for calisthenics and Crossfit

Physical Education 9 #9573 **Spring Semester** 0.5 Credit **Physical Education 10 Fall Semester** #9580 0.5 Credit

Training. Students will use technology to design Personal Fitness Plans using involving

Physical Education by Design(10) #9550 **Spring Semester** 0.5 Credit

As a class, students will choose the course content by selecting sports and lifetime physical activities from the curriculum to be included during the semester. Students will be offered more individual choice of competitive intensity level while being very physically active in this safe learning environment.

#9594 **Physical Education (11)** Fall Semester 0.5 Credit 11th grade PE course offered in place of electives.

HEALTH

Grade Level	Course
9	Health 9 - One marking period - Either Q1 or Q2
11	Health 11 - One marking period - Either Q3 or Q4

Brookfield High School Health program goals:

- Learn the interrelationship of behavior and health, and recognize and practice health enhancing behaviors that will establish a foundation for living a healthy and productive life;
- Learn core information and analyze, synthesize and evaluation health issues, information and resources in order to become a healthy, responsible citizens;
- Convey information, beliefs, opinions and feelings in ways that strengthen interpersonal relationships and that promote peaceful resolution of conflicts; and
- Develop skills as decision making, goal setting, refusal skills and other positive coping strategies in order to implement and sustain lifelong health.

#9571 9th Grade Health Education 1 & 2nd Quarter 0.25 Credit Students will cover a variety of important topics in health. The four main units taught in all health classes are Injury Prevention, Nutrition, Substance Abuse, and Human Growth and Development. The topics covered within these units include: Goal Setting, Depression, Suicide, Healthy Eating, Food Labels, Eating Disorders, Marijuana, Alcohol, and Tobacco. Topics in the Human Growth and Development include Abstinence, Media and Sexuality, Male and Female Anatomy, and Birth Control. All of these topics will help students develop skills needed to live a healthy, productive lifestyle.

#9600 11th Grade Health Education 3rd & 4th Quarter 0.25 Credit Students in grades eleven focuses on Nutrition, First Aid and Safety, and Substance Abuse Prevention. Additionally, Wellness, Dating and Relationships, and STD's are discussed.

MATHEMATICS

Grade 8	Grade 9	Grade 10	Grade 11	Grade 12
State Curriculum	Algebra I Algebra I & Algebra Essentials (half-year)	Geometry	Algebra II ———— Integrated Algebra II	Pre-Calculus Statistics Math Modeling/Discrete Algebra II
Algebra I	Geometry	Algebra II	Pre-Calculus Math Modeling/Discrete	Honors Calculus AP Statistics Statistics Pre-Calculus
Honors Algebra I	Honors Geometry	Honors Algebra II Advanced Algebra & Trigonometry	Honors Pre-Calculus AP Statistics AP Calculus	AP Calculus AP Statistics Honors Calculus Multivariable Calculus Linear Algebra

^{*}Students interested in computer science are encouraged to take AP Computer Science as a math elective having successfully completed Algebra 2. SAT is an additional math elective offered in the second semester each school year.

The goal of the Brookfield High School Mathematics Department is to prepare all math students for success in college or a career and fully develop their mathematical abilities. Our courses are made up of a balanced combination of procedure concept, and application. Problem Solving, critical thinking, analyzing, reasoning, modeling, and communication are essential skills which are developed through the study of mathematics at the secondary level. Cooperative learning and group projects, as well as individual work will be used to assess our students' ability and progress. Graphing calculators like the Texas Instruments TI-83 Plus and TI-84 are required for all math classes. In addition, a variety of technology is incorporated into the curriculum to aid in the understanding of mathematical concepts.

#4065 Accounting I (10-12) - Academic Full Year 1.0 Credit Accounting is the process of gathering and preparing of financial information about a business or other organization in a form that provides accurate and useful records and enables decisions to be made. Students will learn accounting terminology, concepts, principles, practices, and procedures in this introductory course. The student will demonstrate the ability to use learned material in realistic situations. NOTE: This course qualifies for credit in either Business or Mathematics (third year only) sequences.

#4297 Advanced Algebra & Trigonometry(9-11) - Honors Full year 1.0 Credit This course represents a compressed, fast-paced course that covers essential elements of Algebra and Trigonometry in preparation for AP Calculus BC. The interpretation, analysis, and understanding of functions using multiple representations provide the overarching themes that form the fabric of the curriculum. The course expects incoming students to have mastery of material from Honors Algebra I and Honors Geometry. Prerequisite: Honors Algebra I and Honors Geometry

How do patterns and functions help us describe data and physical phenomena and solve a variety of problems? In Algebra I this question and more will be answered as students continue to learn Algebra, the language of mathematics, to describe patterns, work with formulas, discuss unknowns in problems, and graph ideas. There will be a strong emphasis on solving problems involving linear functions. Assessment will be based on tests, quizzes, projects homowork, and class work. Open anded inquiry problems requiring higher order.

Full Year

1.0 Credit

Algebra I (9-12) - Academic

#4071

projects, homework, and class work. Open-ended inquiry problems requiring higher-order thinking will be utilized to assist in evaluating student progress and in preparation for Connecticut Core based assessments.

#4195 Algebra II (10-12) Academic Full Year 1.0 Credit

How do patterns and functions help us describe data and physical phenomena and solve a variety of problems? This question and more continue to be answered in Algebra II. The rigorous curriculum involves a function based approach where students learn to compare and contrast a variety of mathematical functions. These include linear, quadratic, polynomial, radical, rational, exponential, and logarithmic functions. Assessment will be based on tests, quizzes, projects, homework, and class work. Open-ended inquiry problems requiring higher-order thinking will be utilized to assist in evaluating student progress and in preparation for Connecticut Core based assessments. Algebra II is an important "threshold course" for a variety of reasons including: Workforce projections suggest a growing shortage of U.S. citizens having the kind of technological skills that build on Algebra II. Employment and education data show that Algebra II is a determiner for high-paying jobs. Algebra II is a prerequisite for College Algebra, the mathematics course most commonly required for postsecondary degrees. Virtually all college students who have not taken Algebra II will need to take remedial mathematics.

NOTE: Students who qualify with a B or better in Algebra 2 may be eligible to receive college credit through Naugatuck Valley Community College upon successful completion of the Accuplacer Test.

<u>Prerequisite</u>: Algebra I

#4205 Algebra II (9-11) - Honors Full Year 1.0 Credit

How do patterns and functions help us describe data and physical phenomena and solve a variety of problems? In Algebra II Honors the traditional algebra curriculum has been both enriched and expanded. This includes a unit on trigonometry involving the right triangle, trigonometric functions, and the solution of triangles. Assessment will be based on tests, quizzes, projects, homework, and class work. Open-ended inquiry problems requiring higher-order thinking will be utilized to assist in evaluating student progress and in preparation for Connecticut Core based assessments.

<u>Prerequisite</u>: Geometry

#4072 Algebra Essentials (9) - Academic Fall Semester 0.5 Credit

Algebra Essentials is a course designed for freshman students currently enrolled in Algebra I. It provides additional course instruction, content practice, and reinforcement of basic mathematical skills including math facts, manipulating integers and fractions, and solving algebraic equations. The course is intended to supplement the work students receive in Algebra I. Algebra Essentials runs concurrently with Algebra I throughout the Fall Semester in place of an elective.

#4230 Calculus (12) - Honors

Full Year 1.0 Credit

Honors Calculus is designed to give students the best possible preparation for college. They study the theory of limits, functions, relations, vector algebra, series, matrices, determinants, discrete math and techniques of equation solving and curve sketching. They will also be introduced to differential and integral calculus. The graphical, tabular, statistical and calculus capabilities of a graphing calculator and other technology instruments will be utilized. Students who successfully complete this course may qualify to earn college credit from Western Connecticut State University.

<u>Prerequisite</u>: Pre-Calculus

#4240 Calculus AB (11-12) - Advanced Placement Full Year 1.0 Credit

AP Calculus AB is a full-year course that is equivalent to a one-semester college-level Calculus I course. This course covers the traditional topics of differential and integral calculus of one variable with applications. Topics include limits, continuity, derivatives and integrals of algebraic and transcendental functions, advanced techniques of integration and infinite series. Applications are advanced. Concepts and mechanics are reinforced numerically, graphically, visually, and orally. Students must have access to a graphing calculator, but some parts of the course require students to work without the use of a calculator. Students will take the AP Calculus AB examination in May.

Prerequisite: Honors Pre-Calculus

#4231 Calculus BC (11-12) - Advanced Placement Full Year 1.0 Credit

AP Calculus BC is a full-year course that is equivalent to two one-semester college-level courses in Calculus I and II. Everything from AP Calculus AB is covered, with the addition of techniques of integration, sequences and series, parametric equations, and the calculus of polar equations. Concepts and mechanics are reinforced numerically, graphically, visually, and orally. Students must have access to a graphing calculator, but some parts of the course require students to work without the use of a calculator. Students will take the AP Calculus BC examination in May.

Prerequisite: Honors Pre-Calculus

#4206 Computer Science(11-12) - Advanced Placement Full Year 1.0 Credit

This course is designed to prepare students to take the Advanced Placement Computer Science Exam in Java. The emphasis of this course will be on structured programming, programming methodology, procedural abstraction, the study of algorithms and data structures. Topics covered will include arrays, sorting, files, searching and graphics. The course is equivalent to one semester college course.

<u>Prerequisite</u>: Algebra 2

#4262 Elementary Discrete Mathematics(11-12) Fall Semester 0.5 Credit Elementary Discrete Mathematics is designed for students who desire UCONN credit. The course begins with voting methods, finance, and probability. It is followed by networks and number theory. Real world data is incorporated into examples and exercises throughout the book. Technology through the use of graphing calculators and computers is constantly integrated into the curriculum. Students enrolling in Elementary Discrete Mathematics are eligible to apply for UCONN credit through the Early College Experience program. To receive UCONN credit, students will need a "C" average. This course is intended for students seeking to further their mathematical knowledge beyond Algebra II but who are not yet prepared for pre-calculus. The course is not intended for AP level students. This course is weighted as an academic course in calculating G.P.A.

Prerequisite: Algebra II

#4260 Elementary Mathematical Modeling(11-12) Spring Semester 0.5 Credit

The course builds off of the topics from Algebra II and deepens student depth of knowledge in preparation for Precalculus. Topics include linear, quadratic, exponential, and logarithmic functions. It is followed by solving polynomial equations and trigonometric models. Real-world data is incorporated into examples and exercises throughout the course. Technology through the use of graphing calculators and computers is constantly integrated into the curriculum.

<u>Prerequisite</u>: Algebra II

#4121 Geometry (9-12) - Academic Full Year 1.0 Credit

How do geometric relationships and measurements help us to solve problems and make sense of our world? In geometry, students explore geometric principles using deductive reasoning and proof. A variety of investigations will be incorporated into the program so that students can discover geometric properties. They will work with tools such as compasses, protractors, and the Geometer's Sketchpad software. Assessment will be based on tests, quizzes, projects, homework, and class work. Open-ended inquiry problems requiring higher-order thinking will be utilized to assist in evaluating student progress and in preparation for Connecticut Core based assessments.

<u>Prereguisite</u>: Algebra I

#4120 Geometry (9-12) - Honors Full Year 1.0 Credit

How do geometric relationships and measurements help us to solve problems and make sense of our world? In Geometry Honors the traditional geometry curriculum has been both enriched and expanded. In this course, students explore the principles of geometry using deductive reasoning. Topics include geometric art, constructions, congruency, circles, transformations, tessellations, area, the Pythagorean Theorem, volume, similarity,

trigonometry, deductive reasoning, geometric proofs, and more. Students will work with geometric tools such as compasses, protractors, and the Geometer's Sketchpad software in order to discover geometric properties. Assessment will be based on tests, quizzes, projects, homework, and class work. Open-ended inquiry problems requiring higher-order thinking will be utilized to assist in evaluating student progress and in preparation for Connecticut Core based assessments.

<u>Prerequisite</u>: Algebra I

#4190 Integrated Algebra II (11-12) Academic Full Year 1.0 Credit

Integrated Algebra II provides a comprehensive curriculum that will help students from Geometry strengthen their conceptual understanding and enable them to be better prepared for Algebra II. Topics include properties of functions, linear functions and equations, quadratic functions and equations, and exponential functions and equations. Assessment will be based on tests, quizzes, projects, homework, and class work. Open-ended inquiry problems requiring higher-order thinking will be utilized to assist in evaluating student progress and in preparation for Connecticut Core based assessments. *Prerequisite: Geometry*

#4291 Linear Algebra (11-12) - Honors Spring Semester 0.5 Credit

This half-year course serves as an elective, deepening student understanding of the CCS topic of matrices, vectors, and their applications. The generalization of algebraic concepts extends previous algebra work. Topics include row operations and determinants, vector operations, applications to linear systems, eigenvalues and eigenvectors, and spaces and subspaces. Applications to science and engineering demonstrate the significance of the material to other fields.

<u>Prerequisite</u>: Algebra 2

#4060 Math Essentials I (11-12) Fall Semester 0.5 Credit

Students are introduced to consumer mathematics with emphasis on decision making and the use of arithmetic to solve consumer related problems. Included are commercial applications of percent, and reading and construction of graphs. Exercises and projects are designed to promote awareness of personal values, as in the expenditure of time and money.

NOTE: This course may be offered for business or math credit.

Prerequisite: Teacher recommendation

#4062 Math Essentials II (11-12) Spring Semester 0.5 Credit

Students are involved in life simulation exercises and projects involving wages and earnings, budgeting, insurance and taxation. The focus is on making intelligent, informed

consumer decisions. The financial aspects of making major purchases, buying on credit and mortgaging are investigated.

NOTE: This course may be offered for business or math credit.

Prerequisite: Math Essentials I

#4245 Multivariable Calculus (12) - Honors Fall Semester 0.5 Credit

This half-year course serves as a follow up to the topics discussed in AP Calculus, covering the full range of topics discussed in a typical third semester university-level calculus course. Multivariable differentiation, integration, and vector calculus are investigated using analytical, numerical, and graphical representations. Applications from the sciences and engineering deepen the content understanding.

Prerequisite: AP Calculus

#4220 Pre-Calculus (11-12) - Academic Full Year 1.0 Credit

Pre-Calculus builds on the mechanics and concepts of Algebra II, further preparing students for the rigorous study of Calculus and other areas of college level mathematics. Topics include the right triangle trigonometry, the unit circle and analytic trigonometry, applications of trigonometric functions, polar coordinates and complex numbers, vectors and matrices, and conic sections. Open-ended inquiry problems requiring higher-order thinking will be utilized to assist in evaluating student progress and in preparation for Connecticut Core based assessments.

<u>Prerequisite</u>: Algebra II

#4222 Pre-Calculus (9-12) - Honors Full Year 1.0 Credit

This course is designed for the student with exceptional aptitude in mathematics and has completed Honors Algebra II with at least a "B" average. The curriculum varies in depth and difficulty. There will be a heavy concentration on trigonometric topics. Additional topics will include logarithmic functions, polar and parametric expressions, as well as an introductory study of limits and derivatives. Assessment will be based on tests, quizzes, projects, homework, and class work.

<u>Prerequisite</u>: Algebra II

#2150 SAT Math (10-11) - Academic Semester 0.5 Credit

This course is designed to better prepare students for the SAT exam. It will begin with a diagnostic test. Students will practice skill building in the areas of Numbers Theory, Operations, Algebra I, Geometry, Data Analysis and Advanced Algebra. Emphasis will be placed on problem solving, reasoning, and conceptual understanding. Test-taking strategies will be integrated throughout the course. The course is recommended to be taken by sophomores and juniors and is offered in the second semester.

#4292 Statistics I (11-12) - Academic Semester 0.5 Credit

How can collecting, organizing and displaying data help us analyze information and make reasonable predictions and informed decisions? This will be answered in Statistics as students acquire the background to prepare for careers in business, mathematics, social sciences and science. The course includes basic statistical methods in collection analysis, interpretation and presentation of data. Assessment will be based on tests, quizzes, projects, homework, and class work.

#4294 Statistics II (11-12) - Academic Semester 0.5 Credit

How can collecting, organizing and displaying data help us analyze information and make reasonable predictions and informed decisions? This question will continue to be answered as students construct and draw inferences from real-world situations, understand and apply measures of central tendency, use variability and correlation, understand sampling and its role in statistical claims, and design a statistical experiment to study a problem. Student will be expected to do a long-term statistics project which will include defining a problem, developing a hypothesis, designing the study, collecting, analyzing and interpreting the data and writing about their results. Assessment will be based on tests, quizzes, projects, homework, and class work.

Prerequisite: Statistics I

#4296 Statistics (11-12) - Advanced Placement Full Year 1.0 Credit

The purpose of the course is to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students are exposed to four broad conceptual themes: (1) exploring data; (2) planning a study; (3) anticipating patterns; and (4) statistical inference. Students are expected to take the AP examination. This course should be taken in the junior or senior year. Students enrolling in AP Statistics are eligible to apply for UCONN credit through the Early College Experience program. To receive UCONN credit, students will need a "C" average.

<u>Prerequisite</u>: Algebra II

SCIENCE

Grade Level	Course	
9	Earth & Energy Essentials Earth & Energy Essentials - Honors Foundations in Health and Technology	
10	Biology Biology- Honors Foundations in Health and Technology Studies in Environmental Science	
11	Chemistry Chemistry- Honors *Advanced Placement Physics 1	
11-12	*Advanced Placement Biology *Advanced Placement Chemistry *Advanced Placement Environmental Science *Advanced Placement Physics 1 *Advanced Placement Physics 2 Physics- Honors Anatomy & Physiology I & II Studies in Environmental Science Exploring Bioethics DNA Science & Biotechnology Veterinary Technology Zoology I and II Foundation of Health Science & Technology	

^{*} Students can take more than one Advanced Placement Science course simultaneously
The goal of the science program at Brookfield High School is to engage all students in the development and application of critical reasoning and problem solving skills. All students are encouraged to be aware and involved in the natural world. As independent thinkers, students are prepared to participate as active members of the ever-expanding global community, which is driven by advancements in science and technology.

Students preparing for college should plan on enrolling in a program beginning in the ninth grade with Earth and Energy Science Essentials (E3) followed by biology in the tenth grade. These courses are necessary to prepare students for the Connecticut Academic Performance Test (CAPT). After successful completion of the first two years of science, students have the opportunity to continue their science experience with challenging advanced placement courses and/or science electives to pursue special interests.

#1115 Advanced Placement Biology is a college level Biology course. You will study biochemistry, cell theory, evolutionary theory, genetics, DNA technology, zoology, botany and ecological interactions. You will be expected to take the Advanced Placement Biology exam in May. Students in this course have the option to enroll in UConn's BIO 1107 and BIO 1108 as part of the UConn ECE program. Those students who earn a grade of C or better are eligible to receive 4 college credits. Students enrolled in University of Connecticut ECE must take a cumulative final exam created by the director of that program. You should expect to spend at least an hour daily outside of class time for reading, lab preparation and

<u>Recommended coursework:</u> Anatomy & Physiology and/or Zoology <u>Prerequisite:</u> Honors Biology, Algebra II Honors Chemistry (Honors Chemistry or AP Chemistry may be taken concurrently with AP Biology), and teacher recommendation.

study. The ability to read highly technical scientific text independently is important.

#1085 Advanced Placement Chemistry Full Year 1.0 Credit

Advanced Placement Chemistry is a course designed to prepare you for the AP Chemistry exam. This is a rigorous course and it covers the equivalent of one full year of college level General Chemistry, comparable to a first year course at a college or university. The content of this course deeply explores atomic structure, structure-function relationships of compounds, intermolecular forces, properties of solutions, chemical kinetics, acid - base equilibria, electrochemistry, and thermodynamics. You will learn to access a variety of chemistry resources, utilize higher order thinking and reinforce your application skills. This class will strengthen your ability to problem solve and incorporate mathematical skills in the solution of chemistry problems from text sources and within laboratory settings.

#1043 Advanced Placement Environmental Science Full Year 1.0 Credit The goal of the AP Environmental Science course is to provide you with the scientific

principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and humanmade, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving and/or preventing them. Environmental science is interdisciplinary; it embraces a wide variety of topics from different areas of study. *Prerequisite: Honors Biology*

#1120 Advanced Placement Physics 1 Full Year 1.0 Credit

Advanced Placement Physics I is a one-year, introductory college-level physics sequence that provides students with enduring, conceptual understandings of foundational physics principles. In this course students will focus on a greater depth of conceptual understanding through the use of student-centered, inquiry-based instructional practices.

Students will develop their critical thinking and reasoning skills which are necessary to engage in the science practices used throughout their study of algebra-based AP Physics and subsequent coursework in science disciplines. Students seeking AP credit are required to take the AP 1 Physics College Board exam.

AP Physics 1 Topics include (but are not limited to) the following:

- Newtonian mechanics
- Waves
- Atomic and nuclear physics
- Static Electricity

<u>Prerequisite</u>: Completed Honors Algebra II, enrolled in Honors Pre-calculus and teacher recommendation from Math and Science teachers

#1118 Advanced Placement Physics 2 Full Year 1.0 Credit

Advanced Placement Physics II is a one-year, introductory college-level physics sequence that provides students with enduring, conceptual understandings of foundational physics principles. AP Physics II follows the successful completion of AP Physics I.

In this course students will focus on a greater depth of conceptual understanding through the use of student-centered, inquiry-based instructional practices. Students will develop their critical thinking and reasoning skills which are necessary to engage in the science practices used throughout their study of algebra-based AP Physics and subsequent coursework in science disciplines. Students seeking AP credit are required to take the AP II Physics College Board exam.

AP Physics II Topics include (but are not limited to) the following:

- Electricity
- Magnetism
- Atomic and nuclear physics
- Fluids
- Thermal

<u>Prerequisite</u>: Completion of AP Physics I, teacher recommendation from Math and Science teachers,

#1125 Anatomy & Physiology I Semester 0.5 Credit

This class is designed to introduce you to the structure and function of the human body. The course begins with a thorough introduction to anatomical terminology that is used extensively in the biomedical community. As you become familiar with the terminology, the comprehensive study of body tissues is examined. This base knowledge serves as a springboard into understanding organ systems and how they work together for the vitality of the most advanced organism - the human body. Course work includes memorization of medical vocabulary, labeling and/or sketching of diagrams, microscopy, and student

focused real world activities. Organ systems are introduced with a focus on structure and function as well as maintaining the health of the body and disorders associated with body systems. Topics include Cells, Tissues, the Integumentary System, and the Skeletal System. *Prerequisite: Biology*

#1135 Anatomy & Physiology II

Semester 0.5 Credit

This course continues the exploration of the human body - relating structures and their functions. You will continue to examine organ systems through the same means as Anatomy and Physiology I. This course focuses on the more complex organ systems of the human body and requires the base knowledge and terminology learned in Anatomy and Physiology I. Such complex systems include (but are not limited to) the muscular system, the nervous system, and the special senses associated with the human body. This course offers you opportunities to dissect various mammalian muscles, a sheep's brain, and a cow's eye. The culminating dissection to cap off the year will be a full animal dissection to compare structures found in the human body. Alternative activities are offered if you are not comfortable with the dissections. Organ system maintenance and disorders are also reinforced through a variety of activities.

Prerequisite: Anatomy and Physiology I

#1042 Biology

Full Year 1.0 Credit

Emphasis is placed on the role of biology in the world today, science and the technology that stems from it, profoundly affect all aspects of our lives and the lives of other organisms. You will be challenged to think about how living things interact with each other. Throughout this course, you will gain an understanding of the following topics: cell structure and function, organic chemistry, genetics, evolution, and population ecology. The study of biological processes in ecosystems, organisms and cells will provide you with the ability to make rational and informed decisions about the uses of new biological technologies. Preparation for the Biology portion of the CAPT test is included in the course work.

#1051 Biology-Honors

Full Year 1.0 Credit

This is a rigorous course that focuses on living things from a cellular and molecular standpoint. Concepts include biochemistry, cell theory, genetics, evolutionary theory; and various chemical processes. You will explore the relationship between scientific processes, observation, data analysis and reasoning. Your full participation in laboratory activities, research projects, group/class discussions and individual work is essential. This class serves as excellent preparation for Advanced Placement Biology.

<u>Prerequisite</u>: Honors Topics in Science, Algebra 1, and Teacher recommendation

#1065 Chemistry Full Year 1.0 Credit

In Academic Chemistry you will receive a general overview of a variety of topics, such as states of matter, atomic structure, the periodic table, bonding, the mole, chemical formulas, chemical reactions, stoichiometry, gas laws and acids and bases. While learning about these topics, you will seek understanding on both macroscopic and microscopic levels. You will also do many laboratory activities to explore these topics in a hands-on and meaningful way.

<u>Prerequisite</u>: Algebra I and Biology

#1075 Chemistry-Honors Full Year 1.0 Credit

Honors Chemistry approaches the same concepts in general chemistry with emphasis on more independent work and delving deeper into the mathematical and theoretical basis of chemistry. You will use skills such as deductive and inductive reasoning to identify common household chemicals from unknown solutions. You will also in explore different types of chemical reactions in laboratory investigations. This course will help prepare students for the rigors of Advanced Placement Chemistry in high school as well as Chemistry courses in college.

<u>Prerequisite</u>: Algebra I and Algebra II (regular or honors) and Biology with Teacher recommendation from Math and Science.

#1155 DNA Science & Biotechnology Semester 0.5 Credit

This course begins with a review of basic biology concepts including cell biology and the structure and function of the DNA molecule. You will explore concepts such as DNA testing, genetic engineering, cloning, stem cell technology, immunology and gene therapy. You will address moral issues and ethical standards, and current events in genetic technology. You will perform laboratory experiments using equipment seen in modern research facilities; including gelelectrophoresis, genetic engineering of bacteria and manipulation of DNA for testing and identification of specific genes.

Prerequisite: Biology

1057 Exploring Bioethics Semester 0.5 Credit

This forum style course is designed for any student interested in the impact of the advancements occurring within the 'bio-technology age' in the 21st century. The ethics and legality of controversial issues such as improved human performance, cloning, stem cell use and bio-pharmaceuticals will be explored in a case study format using many forms of media (journals, magazines, newspapers and movies). You will learn to differentiate opinions based on emotions from those supported by evidence and logical argument using a decision making framework. Emphasis will be placed on analyzing dilemmas and evaluating information from various viewpoints as you prepare to engage in the real world

as a decision-maker, which is required intrapersonal skill in our global society. You will be encouraged to form well-reasoned positions with a respect and empathy for other approaches.

Prerequisites: Biology

#1023 Earth & Energy Essentials (E3) Full Year 1.0 Credit

How can science and technology affect the quality of our lives in the 21st century? Earth & Energy Science Essentials (E3) is a 9th grade course that is grounded in science fundamentals and aligned to the CT science standards. Since the "Big Bang", energy and matter have been at the heart of our existence. This course will increase understanding of these two topics in order to propel our society into the future. E3 provides students learning opportunities to explore their connections with planet Earth, the role of energy around us and the impacts of humans on local and global environments. Through scientific and basic engineering practices, such as collaborative problem solving and innovative design, students will be guided to investigate how Earth and Energy science are put to use in the world around them. Students will use technology daily to research, collaborate, and communicate their learning in a variety of formats. In addition, students will develop information literacy skills and foundational knowledge required to succeed in future science disciplines.

#3025 Earth & Energy Science Essentials (E3)-Honors 1.0 Credit Full Year Earth & Energy Science Essentials (E3) is a 9th grade course that is grounded in science fundamentals and aligned to the CT science standards. Since the "Big Bang", energy and matter have been at the heart of our existence. This course will increase understanding of these two topics in order to propel our society into the future. Honors Earth and Energy Science Essentials (E3) requires students to evaluate their connections with planet Earth, the role of energy around us and the impacts of humans on local and global environments. Through scientific and engineering practices, such as collaborative problem solving and innovative design, students will investigate how Earth and Energy science are put to use in the world around them. Students are required to exercise critical thinking in order to propose sustainable solutions. Students will use technology daily to research, collaborate, and communicate their learning in a variety of formats. In addition, students will develop information literacy skills and foundational knowledge required to succeed in future science disciplines. Honors E3 requires increased independence and accountability. With these student attributes, Honors students will progress through the curriculum at a faster pace than academic and explore science concepts deeper while incorporating math applications to further understand scientific principles. Homework is frequent.

This course is an introduction to healthcare careers. The course is designed as an overview of healthcare occupations and the skills required for success in the health service industry. Students research the many different career paths possible in healthcare. Students create individual electronic portfolios of their work in order to share research, and network with peers or potential employers. The class also collaborates to create a presentation for competition in the Connecticut Student Innovation Expo. It is expected that all enrolled students attend the Expo. As a participant in this blended learning course, you will be responsible for working independently, through the website, on many assignments. Your teacher will serve as a guide/facilitator.

#1105 Physics-Honors Full Year 1.0 Credit

In this course you will explore motion, light, sound, electricity and magnetism and relate these concepts to real-world applications. Concepts such as force, acceleration, work, momentum and energy will be investigated through demonstrations, hands-on laboratory investigations and analysis of mathematical representations. In academic physics, core emphasis is placed on investigating real life scenarios while some emphasis is placed on computing mathematical relationships utilizing basic algebra.

<u>Prerequisite</u>: Algebra II

#1055 Studies in Environmental Science Semester 0.5 Credit

Global climate, water crises, depletion of natural resources are all current issues that are communicated in the news every day. All living things can exist only in relationship to each other and in balance with the non-living part of our environment. Students will participate in group discussion, research and laboratory work to help them understand how ecosystems function. Matter and energy resources, ecosystems and changes in populations and communities will be viewed in terms of what can be done to protect, preserve, and wisely use the natural resources available to all life on this planet.

<u>Prerequisite</u>: Biology

#1160 Veterinary Technology Semester 0.5 Credit

Outcomes: This course is intended to introduce the student to veterinary medicine and opportunities related to veterinary science. The principles of companion animal health and the prevention of disease are stressed. Topics include comparative anatomy, common illnesses, vaccination protocols, basic nutrition, behavior and animal reproduction.

Students will research topics in animal health, become familiar with common medical terminology and be able to analyze case studies.

Prerequisite: Biology

#1165 Zoology I: Blue Planet Semester

All living things are closely related to their environment. Any change in one part of an environment, like an increase or decrease of a species of animal or plant, causes a ripple effect of change in through other parts of the environment. In Zoology I, you will focus on the animals that exist within the marine habitats of our Blue Planet, from the mysterious deep abyss of the oceans to the shallow tidal seas. You will investigate and research the unique behaviors, anatomical structures and functions that promote survival for these animals. You will explore the survival strategies of animals from particular habitats, the sensitive balance that is necessary for their survival, and threats and/or conservation efforts that impact their existence.

0.5 Credit

Prerequisite: Biology

#1175 Zoology II: Planet Earth Semester 0.5 Credit

All living things are closely related to their environment. Any change in one part of an environment, like an increase or decrease of a species of animal or plant, causes a ripple effect of change in through other parts of the environment. In Zoology II, you will focus on the animals that exist within the various land habitats of our Planet Earth, from the harshest desert environments of Asia to the winter warriors of the frigid Arctic regions. You will investigate and research the unique behaviors, anatomical structures and functions that promote survival for these animals. You will explore the survival strategies of animals from particular habitats, the sensitive balance that is necessary for their survival, and threats and/or conservation efforts that impact their existence. Prerequisite: Biology. (Zoology I is not a prerequisite for this course; however, Zoology is strongly recommended since it reinforces the fundamentals of animal science which are further explored in Zoology II)

SOCIAL STUDIES

Grade	Course			
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9	World History - Academic World History - Honors
10	Modern World History – Academic Modern World History – Honors Western Traditions before 1500 – Honors Modern Western Traditions – Honors World History – Advanced Placement European History – Advanced Placement
11	20th Century U.S. History – Academic United States History – Honors United States History – Advanced Placement
11 - 12	American Government – Academic American Government – Honors United States Government and Politics – Advanced Placement *Comparative Government and Politics – Advanced Placement *Contemporary Issues – Academic *Economics – Academic *European History – Advanced Placement (10-12) *Human Geography – Advanced Placement *Modern Western Traditions – Honors (10-12) *Psychology – Academic *Psychology – Honors *Psychology – Advanced Placement *Sociology I – Academic *Sociology II – Academic *Western Traditions before 1500 – Honors (10-12) *World History – Advanced Placement (10-12)

^{*} These courses can count towards the Social Studies graduation requirement or Humanities elective credits.

All high school students are required to successfully complete four credits toward graduation in social studies. Students must pass World History in grade 9; Modern World History, Western Traditions before 1500 and Modern Western Traditions, World History

AP or European History AP, in grade 10; 20th Century United States or United States History [Honors or AP] in grade 11; American Government (Civics) or United States Government and Politics AP in grades 11 or 12; and a social studies elective in grades 11 or 12. Rare exceptions may be made to the above sequence of courses with the prior approval of the Social Studies Department Head.

#2060 20th Century US History – Academic Full Year 1.0 Credit
Students in 20th Century United States history will investigate questions in United States
history beginning in 1898 to the present, with a particular emphasis on the
appropriateness of government action as it pertains to economic, social, and political
history. The first semester will cover material from the Spanish American War through
World War II. The second semester will cover material from the Cold War to the present.

Prerequisite: Modern World History

#2065 American Government – Academic Semester 0.5 Credit

American Government is an in-depth study of the government of the United States of America with emphasis on individual rights and liberties. Students will study the Bill of Rights, the Constitution, the federal court system, Landmark Supreme Court cases, political parties, voter and voter behavior, the electoral process, mass media and public opinion, interest groups, federalism, organization of state and local government, and comparative economic and political systems.

Prerequisite: Modern World History

#2066 American Government - Honors Semester 0.5 Credit

Students will undertake a comprehensive study of the various institutions, groups, beliefs, and ideas of the American national government. To accomplish this, students develop analytic skills for interpreting, explaining, and evaluating political events. Specific topics will include the Constitution; political beliefs and behaviors; political parties, interest groups, and mass media; public policy; civil rights and civil liberties; and the executive, legislative, judicial, and bureaucratic institutions of the national government. Throughout the course, students will also make connections to and comparisons with state and local governments. This course fulfills the state requirement for civics and can be used to toward four-year requirement for Social Studies.

#2155 Applied Economics - Academic

Semester

0.5 Credit

Students will learn both macro and micro economics with an emphasis on micro economics. Topics include: describing the standard characteristics of the American Economic System; demonstrating how fundamental economic concepts such as markets, economic incentives, and opportunity costs work; developing an understanding of the economic principles that influence business decisions; and promoting hands-on experiences in the operation of a business enterprise. **NOTE**: Course also offered for Business credit (#7055)

<u>Prerequisite</u>: Modern World History

#2140 Art History - Advanced Placement

Full Year 1.0 Credit

Advanced Placement Art History is the equivalent of an introductory college course for highly motivated students who possess a high level of reading, writing, and verbal skills. This course covers both European and non-European art and architecture and emphasizes understanding art in its historic context. Issues such as politics, religion, patronage, gender, function and ethnicity as well as formal stylistic observations contribute to the course content. All students are expected to take the AP Art History Examination in May.

NOTE: Course also offered for Art credit (#6532)

#2160 Asian Studies - Academic

Semester

0.5 Credit

Students will have the opportunity to recognize and develop an understanding of the complexities of Chinese and Japanese cultures. Students will study the history, cultural traditions, economic and political systems, and the current events of the world's largest continent. Students will draw on a variety of print and non-print resources to gain a new perspective on the increasingly important US-Asian relationship.

<u>Prerequisite</u>: Modern World History

#2069 Comparative Government & Politics – AP Full Year 1.0 Credit

Students in Comparative Government and Politics will gain an analytical perspective on government and politics in six countries around the world while also introducing students

to fundamental concepts used by political scientists to study the processes and outcomes of politics in a variety of country settings. This course includes the study of general concepts used to interpret comparative government and politics, the analysis of specific examples, the illustration of the rich diversity of political life, available institutional alternatives, the explanation of differences in process and policy outcomes, and the communication of the importance of global, political and economic changes. Students will gain familiarity with the various institutions, groups, beliefs, and ideas that constitute comparative government and politics through study and comparison. All students are expected to take the AP Comparative Government Examination in May.

<u>Prerequisite</u>: Modern World History

#2145 Contemporary Issues - Academic Semester 0.5 Credit

The course is designed to provide the student with insights into many of the contemporary problems and issues of the modern world with emphasis on issues most directly affecting the United States. *Prerequisite: Modern World History*

#2156 Economics - Advanced Placement Full Year 1.0 Credit

Students will develop a thorough understanding of the principles of economics that apply to Microeconomics and Macroeconomics. This course places emphasis on the study of national income and price-level determination, develops students' familiarity with economic performance measures, the financial sector, stabilization policies, economic growth and international economies. In addition, students will develop familiarity with the the operation of product and factor markets, market failure, and the role of the government in promoting greater efficiency and equity in the economy. All students are expected to take the both the AP Microeconomics *and* the Macroeconomics Examinations in May. *Prerequisite: Modern World History*

#2048 European History – Advanced Placement Full Year 1.0 Credit

Students will develop their abilities to think conceptually about European History from approximately 1450 to the present and apply historical thinking skills [chronological reasoning, comparison and contextualization, crafting historical arguments from historical evidence and historical interpretation and synthesis]. Successful completion of the course with a grade of C or better enables students to earn credit for UCONN's <u>HIST</u>

1400: Modern Western Traditions. All students are expected to take the AP European History Examination in May.

<u>Prerequisite</u>: World History

#2191 Human Geography - Advanced Placement Full Year 1.0 Credit

AP Human Geography is a yearlong course that focuses on the distribution, processes, and effects of human populations on the Earth. Units of study include population, migration, culture, political geography, economic development, industry, agriculture and urban geography. Emphasis is placed on geographic models and their applications. Case studies from around the globe are compared to the situation in both the United States and locally. All students are expected to take the AP Human Geography Examination in May.

<u>Prerequisite</u>: Modern World History

#2072 Modern Western Traditions – Honors Spring Semester 0.5 Credit Students will study the history of political institutions, economic systems, social structures, and cultures in the modern Western world since 1500. Successful completion of the course with a grade of C or better enables students to earn credits for UCONN's HIST 1400: Modern Western Traditions.

Prerequisite: World History

#2030 Modern World History - Academic Full Year 1.0 Credit

Students will study the intellectual, political, economic, social, geographic, etc., factors which resulted in the formation, growth, and development of nations from 18th century through the post World War II era. Students will also explore causes of internal discontent which led to revolution and/or civil war and external conflict with neighboring states which, in the 20th century, found resolution in two world wars.

<u>Prerequisite</u>: World History

#2035 Modern World History - Honors Full Year 1.0 Credit

Students will study of the intellectual, political, economic, social, geographic, etc. factors which resulted in the formation, growth, and development of nations. Students will also

explore causes of internal discontent which led to revolution and/or civil war and external conflict with neighboring states which, in the 20th century, found resolution in two world wars. The course begins with the Age of the Enlightenment and ends with post World War II issues.

Prerequisite: World History

#2172 Psychology - Academic

Semester 0.5 Credit

Students will be introduced to the study of human behavior and mental processes. Each student will develop skills to gain an understanding of a vast range of concepts and methods used in the study of psychology which will center on the following areas: learning and memory, the working of the mind and body, human development, personality, psychological disorders and treatment methods, and social interaction. The goal of this course is to strengthen each student's ability to examine and interpret reasons why people act, think, and feel as they do using different psychological perspectives.

<u>Prerequisite</u>: Modern World History

#2178 Psychology - Advanced Placement

Full Year 1.0 Credit

Students will have the opportunity to familiarize themselves with psychological *research methods*, and the facts, principles and phenomena associated with each of the major subfields of psychology. Students will also assess some of the differing approaches adopted by psychologists, including the biological, behavioral, cognitive, humanistic, psychodynamic, socio-cultural and evolutionary perspectives. Students will learn about ethics and methods that psychologists use and they will certainly come to appreciate how psychologists think. The course begins with a study of foundational psychology, followed by the study of inward behavior, then outward/observable behavior and finally abnormal psychology. This class is sure to be of great value as it may launch you into a career in

psychology or it may simply help you to understand yourself and those around you. All students are expected to take the AP Psychology Exam in May.

<u>Prerequisite</u>: Modern World History <u>and</u> it is strongly recommended that students take Anatomy and Physiology or AP Biology, Statistics and an Honors level Social Studies Course prior to taking AP Psychology.

#2173 Psychology - Honors

Semester

0.5 Credit

Honors Psychology is an introductory psychology course which will expose students to the study of the behavior and mental processes of humans and animals in a rigorous and engaging environment. Students will learn about some of the explorations and discoveries made by psychologists over the centuries. Students will have the opportunity to familiarize themselves with psychological research methods, and the facts, principles and phenomena associated with each of the major subfields of psychology. Students will also assess some of the differing approaches adopted by psychologists, including the biological, behavioral, cognitive, humanistic, psychodynamic, socio-cultural and evolutionary perspectives. The course begins with a study of foundational psychology, followed by the study of inward behavior, then outward/observable behavior and finally abnormal psychology. This class is sure to be of great value as it may launch you to take AP Psychology or Introductory Psychology in college. The class is collegial and discussion-based. The goal for this course is for students to apply the course to everyday life in order to better understand themselves and the world.

<u>Prerequisite</u>: Modern World History

#2190 Sociology I - Academic

Semester

0.5 Credit

Students will explore a number of meaningful sociological concepts, theories and issues that impact people and cultures around the world. This course is designed to introduce students to the study of society with a focus on institutions in America. The cultural context of human behavior and its consequences will be emphasized. Topics include: socialization, social stratification, culture, social problems, and social conflict and change.

The course will promote a distinctly unique perspective on human relationships. Students will be able to analyze situations, propose solutions to social problems, and make reasoned judgments.

Prerequisite: Modern World History

#2189 Sociology II - Academic

Semester

0.5 Credit

Students will explore, contrast, and critique theorists and their perspectives and the relevance of these theories in the 21st Century. The purpose of this course is to further develop the sociological perspective. The course will provide a comprehensive overview of Sociological Theory. In addition, students will explore the research process, methods of inquiry, and research ethics. The culminating project will be designed and implemented by the student and will focus on a contemporary social problem. By the end of the course students should be able to contrast and critique significant theorists and their respective theories, make connections between theory and research methods, and apply social theory to current events, issues and times. All students will keep a notebook and a folder for supplemental readings. Students can expect activities to be completed in class and at home, and to participate in discussions and presentations. Quizzes are based on reading comprehension and application. Tests are reflective papers.

Prerequisite: Sociology I

#2068 U. S. Government & Politics – Advanced Placement Full Year 1.0 Credit
United States Government and Politics will give students an analytical perspective on
government and politics in the United States while also introducing students to
fundamental concepts used by political scientists to study the processes. This course
includes the study of general concepts used to interpret U.S. government and politics, the
analysis of specific examples, and the illustration of the rich diversity of political life,
available institutional alternatives, the explanation of differences in process and policy
outcomes, and the communication of the importance of global political and economic
changes. Students will gain familiarity with the various institutions, groups, beliefs, and
ideas that constitute U.S. government and politics through study and comparison. All
students are expected to take the AP United States Government & Politics Examination.

Prerequisite: Modern World History

#2052 United States History – Advanced Placement Full Year 1.0 Credit
Students will develop their abilities to think conceptually about European History from approximately 1491 to the present and apply historical thinking skills [chronological reasoning, comparison and contextualization, crafting historical arguments from historical evidence and historical interpretation and synthesis]. Successful completion of the course with a grade of C or better enables students to earn credit for UCONN's HIST

1501: United States History to 1877 and HIST 1502: United States History Since

1877. Students will be qualified to take the College Board's subject test in American History. All students are expected to take the AP United States History Examination in May. *Prerequisite: Modern World History*

#2061 United States History - Honors

Full Year

1.0 Credit

Students in Honors United States History will study the development of the United States from 1492 to the present. **Successful completion of the course with a grade of C or better enables students to earn credit for UCONN's <u>HIST 1501: United States History</u> to 1877 and <u>HIST 1502: United States History Since 1877.</u>** Students will be qualified to take the College Board's subject test in American History.

<u>Prerequisite</u>: Modern World History

#2070 Western Traditions before 1500 – Honors Fall Semester 0.5 Credit
Students will analyze the traditions and changes which have shaped Western political
institutions, economic systems, social structures and culture in ancient and medieval times.
Successful completion of the course with a grade of C or better enables students to
earn credit for UCONN's HIST 1300 Western Traditions before 1500.

Prerequisite: World History

#2020 World History - Academic

Full Year

1.0 Credit

Students will investigate the progression of world history from 10,000 years ago to about 1750 CE. Major units of study include Foundations of Civilization, River Valley Civilizations and Empires, Classical Greco-Roman Empires, Monotheistic Religions, the Middle Ages, the Renaissance, the Age of Exploration, and Age of Absolute Monarchy. Students will explore these topics individually, collaboratively, and as a whole class. Emphasis will be placed on gathering and evaluating information, and speaking and writing persuasively.

#2051 World History - Advanced Placement Full Year 1.0 Credit

Advanced Placement World History is designed for students who have demonstrated superior academic success in previous high school history classes. Students will develop a greater understanding of the evolution of global processes and how the world has come to be defined more and more by the interactions among countries, peoples, and groups. This college level course covers human history from pre-historic times [8000 BCE] until the

present and introduces students to a number of higher level analytical skills. All students are expected to take the AP World History Examination in May.

Prerequisite: World History

#2025 World History - Honors

Full Year

1.0 Credit

Honors World History is designed for students who have demonstrated above average academic success in 8th grade social studies and literacy. In addition to strong study skills, students should have above average proficiency in reading comprehension, critical thinking, writing, and verbal communication. Students will investigate the progression of world history from 10,000 years ago to about 1750 CE.

Sequence of Courses for Spanish & French

Grade 9	Grade 10	Grade 11	Grade 12
Level 1	Level 2	Level 3	Level 4
Level 2	Level 3	Level 4	Level 5
Level 2 Honors	Level 3 Honors	Level 4 Honors	AP

Proficiency in a modern world language enables direct communication with people of other cultures. Additionally, it helps students gain insight into themselves and their understanding of their own culture and English. Through study of French or Spanish, students will begin to build a foundation in another language that could influence the rest of their professional careers.

As the student continues study in the world language, placement into courses is based on teacher recommendation. Assessments of the student's ability to speak, write, listen and read the target language are used to make these recommendations. Class work and class performance are other reliable indicators that provide information used to evaluate student readiness to move on to the next course level. Students will be expected to attain increased communicative competence as movement through each level of a language sequence occurs. Questions or concerns should be discussed with the teacher, guidance counselor and/or department chairperson.

While world language courses are elective courses in high school, college bound students are strongly encouraged to complete at least three years of a study in one language. Generally, only world language credits earned in grades 9 – 12 meet college entrance requirements. College requirements vary greatly, so it is wise to consult with guidance counselors and refer to admissions offices for specific requirements.

Placement of Students in World Language Classes

It is important that students be properly placed when proceeding from one level to the next in a world language. The teacher recommendation is an essential part of the process to ensure the right match for all students.

Language Proficiency

The primary objective of the World Language Department is that all students will

graduate and be proficient in a second language. That being said, students will continue language studies in the target area that they began at Whisconier throughout their high school experience. Students are encouraged to explore other World Language offerings in addition to the language that they are working to develop proficiency in.

Honors level courses are accelerated courses for students who are highly motivated to learn a second language. Therefore, the course content and proficiency expectations are different from the Academic level course.

#5024 French I (9-12) - Academic Full Year 1.0 Credit

This is a beginning course designed for those with no previous study in French. The course will focus on the development of students' communicative competence in French and their understanding of the culture of French-speaking countries. In level I French students learn to communicate in real-life contexts about topics that are meaningful to them. In order to develop communicative competence students are encouraged to use the French language as much as possible. Rather than isolating grammar in a separate strand, it is integrated into instruction according to the vocabulary and structures needed in the various situations in which students are required to function. Cooperative learning techniques and pair practice allow students the opportunity to use French.

#5025 French II (9-12) - Academic Full Year 1.0 Credit

French II continues the work of French I. Students begin to show a greater level of accuracy when using basic language structures and are exposed to more complex features of the French language. They continue to focus on communicating about their immediate world and daily life activities. They read material on familiar topics and write short, directed compositions. Emphasis continues to be placed on the use of French in the classroom as well as on the use of authentic materials to learn about the culture. Use of English is limited to explanation of grammar and clarification of instructions when necessary.

Prerequisite: French I

#5030 French II (9-12) - Honors Full Year 1.0 Credit

Honors level courses are accelerated courses for students who are highly motivated to learn a second language. Therefore the course content and proficiency expectations are different from the Academic level course. French II continues the work of French I. Students begin to show a greater level of accuracy when using basic language structures and are exposed to more complex features of the French language. They continue to focus on communicating about their immediate world and daily life activities. They read material on familiar topics and write short, directed compositions. Emphasis continues to be placed

on the use of French in the classroom as well as on the use of authentic materials to learn about the culture. Use of English is limited to explanation of grammar and clarification of instructions when necessary.

<u>Prerequisite</u>: Teacher recommendation

#5035 French III (10-12) - Academic Full Year 1.0 Credit

French III continues the work of French II. Students continue to show a greater level of accuracy when using basic language structures and are exposed to more complex features of the French language. They continue to focus on communicating about their immediate world and daily life activities. They read material on familiar topics and write short, directed compositions. Emphasis continues to be placed on the use of French in the classroom as well as on the use of authentic materials to learn about the culture. Use of English is limited to explanation of grammar and clarification of instructions when necessary.

<u>Prerequisite</u>: French II

#5040 French III (10-12) - Honors Full Year 1.0 Credit

Honors level courses are accelerated courses for students who are highly motivated to learn a second language. Therefore the course content and proficiency expectations are different from the Academic level course. In French III, students continue to develop their proficiency. They communicate using more complex structures in French on a variety of topics, moving from concrete to more abstract concepts. They comprehend the main ideas of the authentic materials that they read and hear and are able to identify significant details when the topics are familiar. French is used almost exclusively in the class.

<u>Prerequisite</u>: French II

#5042 French IV (10-12) - Academic Full Year 1.0 Credit

In French IV, students continue to develop their proficiency. They communicate using more complex structures in French on a variety of topics, moving from concrete to more abstract concepts. They comprehend the main ideas of the authentic materials that they read and hear and are able to identify significant details when the topics are familiar. French is used almost exclusively in the class.

<u>Prerequisite</u>: French III

#5045 French IV (10-12) - Honors Full Year 1.0 Credit

Honors level courses are accelerated courses for students who are highly motivated to

learn a second language. Therefore the course content and proficiency expectations are different from the Academic level course. This course aims for increased proficiency in oral and written communication. Emphasis will be placed on the study of literary and cultural readings of various francophone countries with more in-depth discussion, independent work and research. The class is conducted in French.

<u>Prerequisite</u>: Teacher recommendation

#5055 French V (10 -12) - Pre AP Full Year 1.0 Credit

This pre-Advanced Placement course is for students planning on taking AP the following year. Increased proficiency in all communication skills is facilitated through the study of literary selections, cultural readings, grammar review and development. Class is conducted in French. Student involvement and greater independence in the learning process is essential.

Prerequisite: Teacher recommendation

#5060 French VI (11-12) - Advanced Placement Full Year 1.0 Credit

The French Advanced Placement language course covers the equivalent of an intermediate level college course in French composition and conversation. It stresses oral skills, composition and grammar. The course emphasizes the use of French for active communication. Students will be prepared to take the French Advanced Placement language test administered in the spring. In addition students have the option of preparing for the SAT II in French. Students are expected to take the AP exam in accordance with school policy.

<u>Prerequisite</u>: Teacher recommendation

#5215 Spanish I (9-12) - Academic Full Year 1.0 Credit

This is a beginning course designed for those with no previous study in Spanish. The course will focus on the development of students' communicative competence in Spanish and their understanding of the culture of Spanish-speaking countries. In level I Spanish students learn to communicate in real-life contexts about topics that are meaningful to them. In order to develop communicative competence students are encouraged to use the Spanish language as much as possible. Rather than isolating grammar in a separate strand, it is integrated into instruction according to the vocabulary and structures needed in the various situations in which students are required to function. Cooperative learning techniques and pair practice allow students the opportunity to use Spanish.

#5225 Spanish II (9-12) - Academic Full Year 1.0 Credit Spanish II continues the work of Spanish I. Students begin to show a greater level of

accuracy when using basic language structures and are exposed to more complex features of the Spanish language. They continue to focus on communicating about their immediate world and daily life activities. They read material on familiar topics and write short, directed compositions. Emphasis continues to be placed on the use of Spanish in the classroom as well as on the use of authentic materials to learn about the culture. Use of English is limited to explanation of grammar and clarification of instructions when necessary.

Prerequisite: Spanish I

#5220 Spanish II (9-12) - Honors Full Year 1.0 Credit

Honors level courses are accelerated courses for students who are highly motivated to learn a second language. Therefore the course content and proficiency expectations are different from the Academic level course. Spanish II continues the work of Spanish I. Students begin to show a greater level of accuracy when using basic language structures and are exposed to more complex features of the Spanish language. They continue to focus on communicating about their immediate world and daily life activities. They read material on familiar topics and write short, directed compositions. Emphasis continues to be placed on the use of Spanish in the classroom as well as on the use of authentic materials to learn about the culture. Use of English is limited to explanation of grammar and clarification of instructions when necessary.

<u>Prerequisite</u>: Teacher recommendation

#5235 Spanish III (10-12) - Academic Full Year 1.0 Credit

Spanish III continues the work of Spanish II. Students continue to show a greater level of accuracy when using basic language structures and are exposed to more complex features of the Spanish language. They continue to focus on communicating about their immediate world and daily life activities. They read material on familiar topics and write short, directed compositions. Emphasis continues to be placed on the use of Spanish in the classroom as well as on the use of authentic materials to learn about the culture. Use of English is limited to explanation of grammar and clarification of instructions when necessary.

Prerequisite: Spanish II

#5230 Spanish III (10-12) - Honors Full Year 1.0 Credit

Honors level courses are accelerated courses for students who are highly motivated to learn a second language. Therefore the course content and proficiency expectations are different from the Academic level course. In Spanish III, students continue to develop their proficiency. They communicate using more complex structures in Spanish on a variety of topics, moving from concrete to more abstract concepts. They comprehend the main ideas

of the authentic materials that they read and hear and are able to identify significant details when the topics are familiar. Spanish is used almost exclusively in the class. *Prerequisite: Teacher recommendation*

#5240 Spanish IV (9-12) - Academic Full Year 1.0 Credit

In Spanish IV, students continue to develop their proficiency. They communicate using more complex structures in Spanish on a variety of topics, moving from concrete to more abstract concepts. They comprehend the main ideas of the authentic materials that they read and hear and are able to identify significant details when the topics are familiar. Spanish is used almost exclusively in the class.

<u>Prerequisite</u>: Spanish III

#5245 Spanish IV (10-12) - Honors Full Year 1.0 Credit

Honors level courses are accelerated courses for students who are highly motivated to learn a second language. Therefore the course content and proficiency expectations are different from the Academic level course. This course aims for increased proficiency in oral and written communication. Students will expand vocabulary through the study of literary and cultural readings of various Spanish speaking countries. Discussion, independent work and research will focus on development of speaking skills. The indicative and subjunctive verb tenses will be reviewed. The class is conducted in Spanish.

Prerequisite: Spanish III

#5255 Spanish V (11-12) - Academic Full Year 1.0 Credit

Students continue the language sequence through the study of authentic literary and cultural readings of various Spanish-speaking countries. Emphasis is on conversation, role-play, reading authentic materials, i.e. newspapers and magazines, researching the history, food music and art of various countries.

Prerequisite: Spanish IV

#5250 Spanish V (11 -12) - Pre AP Full Year 1.0 Credit

This pre-Advanced Placement course is for students planning on taking AP the following year. Increased proficiency in oral and written communication is facilitated through the study of literary selections, cultural readings, and grammar review and vocabulary development. Class is conducted in Spanish. Student involvement and greater independence in the learning process is essential.

<u>Prerequisite</u>: Teacher recommendation

#5261 Spanish VI (12) Full Year 1.0 Credit

In Spanish VI, students continue the study of authentic literary and cultural readings of

Spanish-speaking countries. Emphasis is placed on conversation, reading authentic materials and researching the history and culture of various countries. At the end of this level, students are expected to perform at the Intermediate Low or Novice High level of ACTFL proficiency guidelines. Spanish is used exclusively in class.

Prerequisite: Spanish IV

#5260 Spanish VI (11-12)-Advanced Placement Full Year 1.0 Credit

The Spanish Advanced Placement language course covers the equivalent of a third-year college course in advanced Spanish composition and conversation. It stresses oral skills, composition and integration of skills. The course emphasizes the use of authentic materials. Students will be prepared to take the Spanish Advanced Placement language test administered in the spring. If they qualify, they may be admitted into the University of Connecticut Early College Experience in Spanish. Successful completion of the course will earn the student 6 UCONN credits which are transferable. Additionally, students will have the option of preparing for the SAT II in Spanish. Students are expected to take the AP exam in accordance with school policy.

<u>Prerequisite</u>: Teacher recommendation

#5263 Career Spanish

Semester 0.5 Credit

0.5 Credit

This upper level course will provide students with an orientation of how Spanish is a vital skill used in many professions. The content of this course will include the vocabulary and cultural understandings necessary to communicate successfully in various career fields. Working professionals will be invited to speak about how Spanish is critical to their work. The units include but are not limited to: Spanish for Health Care Professionals, Spanish for Business Professionals, Spanish for Law Enforcement Professionals, and Spanish for Service Industry Professionals. This course does not fulfill the language requirement expected by many colleges.

<u>Prerequisite</u>: Spanish III Honors/Spanish IV

#5264 Culture & Currents Events Semester

This course will expose students to the film, music, art, food, fashion, sports, leisure activities, and politics that are a part of life in Spanish speaking countries. Student can expect to gain a greater insight and appreciation about the daily life of people who speak Spanish around the world. This course does not fulfill the language requirement expected by many colleges.

<u>Prerequisite</u>: Completion or current enrollment in level three of a language