BROOKFIELD
HIGH SCHOOL

PROGRAM OF STUDIES

2026-2027

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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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COURSE LISTINGS BY DEPARTMENT

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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.

CORE VALUES AND BELIEFS

We are a learning community committed to fostering intellect, respect, and integrity.

ACADEMIC, SOCIAL, AND CIVIC EXPECTATIONS

Brookfield High School students demonstrate their ability to solve authentic problems by:

- Conducting proper **research** in order to gather, evaluate, and synthesize information from a variety of sources
- **Thinking critically** in the course of developing opinions, making decisions, or arriving at solutions
- **Communicating** their research, opinions, decisions, or solutions in a variety of formats to a variety of audiences

Brookfield High School students demonstrate their commitment to our learning community by:

- **Collaborating** effectively to achieve a goal
- Exhibiting **respectful behavior**

Brookfield High School students demonstrate their commitment to engaged citizenship by:

- Positively contributing to the community through **active involvement**

INTRODUCTION

This section provides students and their parents/guardians with general information and suggestions regarding the Program of Studies at Brookfield High School. Each counselor and teacher is available to parents/guardians 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/guardians 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 they 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 credits
Grade 10: minimum of 7 credits
Grade 11: minimum of 6.5 credits
Grade 12: minimum of 5.5 credits

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

SCHEDULE CHANGES - UP TO THE 5TH SESSION OF A GIVEN CLASS

Once students have received their schedule (August), we have these procedures in place to address schedule change requests up to the 5th session of a given class:

- Elective choices will NOT be changed if a student selected and received a particular course.
- Students requesting a level change *up* from their selected course, (for example, moving from Academic Biology to Honors Biology), will be considered on a case by case basis as requested
- Students requesting a level change *down,* (for example, moving from Honors Biology to Academic Biology) will be asked to attend their originally selected course for at least 3 class sessions, to ensure they are making an informed decision. Once a student has attended said course for at least 3 class sessions, a level change will be assessed on a case by case basis.

SCHEDULE CHANGES - AFTER THE 5TH SESSION OF A GIVEN CLASS

We have these procedures in place to address schedule change requests after the 5th session of a given class:

- Elective choices will NOT be changed if a student selected and received a particular course.
- **Once a student has attended a full year course for beyond 3 class sessions, they must complete a Level Change Form to request a level change (up or down). This form must be signed by the student, parent/guardian, current class teacher, department head and counselor.** If approved, the following will occur:
    - *If the student is changing levels of the same course, the course/level the student is dropping will be listed as "WTR" (Withdraw Transferred) on their transcript*
    - *Upon being enrolled in the new course, the student's grade in that course will be determined by assignments/assessments and midterm and/or final exam grades from that course only.*
    - *If the student is dropping a course and picking up a new course or study hall, the course the student is dropping will be listed as "WP" or "WF"*

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(Withdrawal/Pass or Withdrawal/Fail) depending on whether the grade in the course prior to dropping was passing or failing, respectively.

- *A student may not request a level change after quarter one for full-year courses. School administration may consider extenuating circumstances on an individual basis for a potential exception.*

MINIMUM GRADUATION REQUIREMENTS

Humanities (9.0 credits)	
English	4.0
Social Studies *Required courses: United States History and Civics/American Government*	3.5
Visual and Performing Arts	1.0
Additional English, Social Studies, or Visual and Performing Arts Electives	0.5
Science, Technology, Engineering, and Mathematics (9.0 credits)	
Math	3.0
Science *Required credits: One Earth Science, one Life Science and one Physical Science*	3.0
Additional Math, Science, or Technology Electives	3.0
Career and Life Skills (3.5 credits)	
Physical Education	1.0
Health	1.0
Personal Finance	0.5
Additional Business, Family and Consumer Science, Physical Education, and Academic Support courses.	1.0
Additional Credit (from any category)	1.0
World Languages	2.0
Community Service (50 hours)	0.5
MINIMUM TOTAL CREDITS	**25.0**

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ELECTIVE CATEGORIES

Over the course of a student's high school program, there are many opportunities to take electives offered in several departments. This grid lists elective courses and the categories they fulfill.

COMMUNITY SERVICE REQUIREMENT

All students must complete a minimum of 50 hours of community service to meet this graduation requirement. Community service hours will be reviewed at the end of each semester to determine a student's progress toward completing this requirement. Completed and signed forms documenting a student's service hours must be submitted by May 1st of the student's graduating year to count toward this requirement. Upon applying to college in the fall of senior year, the number of completed hours represented on the transcript will be reflective of the hours submitted prior to the conclusion of junior year. Students who transfer to BHS will be responsible for earning 3.125 hours per quarter in which they are enrolled in Brookfield High School. Students completing 50 or more hours will be awarded a maximum of 0.5 credits on their final transcript.

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 **(12 Credits)**
Grade 11 to 12 **(17 Credits)**

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

COURSE CLASSIFICATIONS

Advanced Placement is the highest level of instruction in the course for college placement and/or college credit.

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

Academic instruction is targeted to students who will pursue higher education or career opportunities.

HOMEWORK POLICY (6454)

Homework is a vital component of education. 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.

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Homework should involve follow-up with feedback that 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.

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." Unofficial class rank and decile scores are available to Seniors in October 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. Transcripts of students who transfer to Brookfield High School will be reviewed by School Counselors and administrators to determine how transfer credits will be awarded and if a rank in class can be assigned.

LATIN HONOR SYSTEM

The Latin honor system is used to recognize the academic achievement of graduating students. At the completion of a student's 7th semester at Brookfield High School, the 12th grade student with the highest grade point average will be named valedictorian, the student with the 2nd highest grade point average will be named salutatorian, the top 5% of students (as determined by class rank) will be named summa cum laude, the top 6-10% of students (as determined by class rank) will be named magna cum laude, and the top 11-15% of students (as determined by class rank) will be named cum laude.

POINT VALUE OF GRADING SYSTEM

Letter Grade	Numerical Equivalent	Academic	Honors	AP
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
B	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
C	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
P Pass (only for Pass/No Pass courses)
PWD Dropped Course with "P"
WTR Withdrawn - Transferred
NP No Penalty (Pass/No Pass Courses)

A student's transfer grades from other schools shall be evaluated by the principal or designee. 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. Students cannot use the Pass/No Pass option for courses in which credit will be applied toward graduation requirements. For example, it cannot be used for PE/Health, the first credit of Fine Arts, the first 1.5 credits for Career and Life Skills electives, etc.
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 before 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 before 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, school counselor and parent/guardian 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.

HONORS COURSE SELECTION GUIDELINES

Honors courses are 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 Honors course should be aware that success 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 Honors classes:

- Students currently in Academic classes, looking to request Honors classes, should meet the criteria mentioned above and earn at least 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 at least a "B" average for the

first semester.

- Students currently in Honors courses earning less than a "B" average for the first semester, may be better suited for a different level course.

COLLEGE CREDIT OPPORTUNITIES

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. 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 (which can be waived if a student qualifies) in order to receive university credit. University of Connecticut credits are transferable to many colleges and universities.

CONNECTICUT STATE UNIVERSITY AND COMMUNITY COLLEGE SYSTEM

Brookfield High School works in collaboration with Western Connecticut State University (WCSU), Southern Connecticut State University (SCSU) and the Connecticut State Community College system to afford academically motivated students with the opportunity to access college courses while still in high school. These courses are directly aligned (content, skills, and assessments) to their on campus offerings. Typically, students must complete the course with a grade of "C" or better and pay a fee (which can be waived if a student qualifies) to be awarded credit on a college transcript that can be transferable to other colleges and universities.

ADVANCED PLACEMENT COURSES

These challenging courses are designed for students to access advanced postsecondary content and have the opportunity to earn college credit after the completion of the Advanced Placement (AP) exam in May. All AP teachers attend summer training and must provide a routinely updated course syllabus to the College Board for their official approval. There is a fee associated with each AP exam which can be waived if a student qualifies. Each college/university has their own policies regarding the awarding of credit, course placement, minimum required score, amount of credit awarded and how credits are applied.

COLLEGE CREDIT COURSE GUIDELINES

Advanced Placement and most ECE courses can be given additional weight in computing grade point averages because levels of performance and time demands on students are considerably increased. These 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 demand is stringent.

If a student enrolled in an AP course does not take the AP exam, he/she will receive Honors weighting for that course.

Students enrolled in an ECE course must take the midterm/final exam provided by the college/university. 12th grade students are not able to be exempted from these exams.

A student who selects an Advanced Placement or ECE course should be aware that success in the course correlates to a recommendation for that level from his/her 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 AP and ECE classes:

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

COLLEGE CREDIT COURSE OFFERINGS 2026-2027

Department	AP	UConn - ECE	WCSU
English	AP Literature & Composition AP Language & Composition	English IV Honors	
Fine and Performing Arts	AP Studio Art AP Music Theory	Music Appreciation II	
Math	AP Calculus AB AP Calculus BC AP Statistics AP Computer Science		Honors Calculus Statistics II
Science	AP Physics 1 AP Physics 2 AP Biology AP Chemistry AP Environmental Science	AP Biology	
Social Studies	AP European History AP US History AP US Gov't & Politics AP Human Geography AP Psychology AP World History: Modern	AP European History AP US History Introduction to Human Rights	
World Languages	AP Spanish	AP Spanish	
Electives	AP Seminar AP Research		

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, there is a prescribed process that involves discussions with the School Counselor, current teacher, Department Heads, Team Leaders, and parents or guardians.

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.

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 the school system's Compliance Officer. The Board shall, at the opening of school each year, notify all students, parents/guardians 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 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.

ONLINE LEARNING OPPORTUNITIES

Brookfield High School students have the ability to utilize an online learning platform to earn a maximum of 2 credits if they meet the following criteria:

- They cannot fit the course into their schedule prior to their expected graduation date
- The proposed online course aligns with a course currently offered at Brookfield High School
- The proposed online course meets the requirements of Connecticut General Statutes 10-221a
- The proposed online course is approved by the administration prior to registering for the course
- The student maintains the requirements for minimum yearly scheduled credits of coursework at Brookfield High School during the school day.

If the student earns a passing course grade consistent with Brookfield High School's grading scale, the grade will be reflected as "Pass" on the transcript and has no impact on the student's GPA. Brookfield High School will not cover the cost of online courses. If a student is interested in exploring these options, they should begin by speaking with their School Counselor.

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/guardians,

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 curriculum covering the following themes:

- Transition to high school
- Learning styles/study skills
- College and career exploration/post high school planning
- Transcript review and goal setting
- Resume development
- College application process
- Financing college
- Transition to post high school path

PLANNING FOR COLLEGE AND CAREER

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, Scoir, to complete college searches, invite students to college representative visits, and 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 credits
    b. Mathematics 4 credits
    c. Science 4 credits
    d. Social Studies 3.5 credits
    e. World Language 3 credits
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 **-see #2 above.**

It is imperative that each student take the most rigorous academic program that they are capable of successfully completing.

Some 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 Test (ACT). 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. The most up to date college catalogs can be found online. College websites give information on deadlines: early decision, early action, and regular decision. See the college catalogues 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 - the rigor of a student's curriculum
- Response to essay prompt
- SAT and/or ACT
- 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

TECHNICAL AND AGRICULTURAL HIGH SCHOOL OPTIONS

If a student is interested in specific technical or agricultural fields he/she can apply to Henry Abbott Regional Technical School or the Shepaug Agriscience Program.

AP CAPSTONE

Students can earn an AP Capstone Diploma if they earn a 3 or higher in AP Seminar and AP Research as well as a 3 or higher on 4 different AP exams. Alternatively, if a student earns scores of 3 or higher in AP Seminar and AP Research only, they will receive the AP Seminar and Research Certificate. Instead of teaching specific subject knowledge, AP Seminar and AP Research use an interdisciplinary approach to develop the critical thinking, research, collaboration, time management, and presentation skills students need for college-level work. The College Board developed the AP Capstone Diploma program at the request of higher education professionals, who saw a need for a systematic way for high school students to begin mastering these skills before college.

#1059 AP Seminar (10-12)🔷 1.0 Credit

Students in this course will learn research methods and master writing and presentation skills. The students themselves, with input from the instructor, will select topics of personal interest to explore (topics may be cross-curricular). Students will conduct research and consider an issue from multiple perspectives; evaluate the strength of an argument; and make logical, fact-based decisions. Students will develop skills associated with writing effective thesis papers, collaborating with peers, and delivering effective multimodal presentations. Students will also identify and contextualize an issue, seek out answers that reflect multiple perspectives, use technology to access and manage information, evaluate the validity of an argument and credibility of sources and evidence, and formulate a complex and well-reasoned argument that uses support from multiple sources.

Note: This course can be counted as a Humanities elective

#1048 AP Research (11-12)🔷 1.0 Credit

AP Research is the sequential course to AP Seminar and the final course for AP Capstone. In the course, students will work with the instructor to formulate a research question based on a real-world topic and issue. Students will then design, plan, and conduct a year-long, research-based investigation in which they learn and apply methods and practices to address the question. The course culminates in two major assessments. First is an academic paper of 4,000-5,000 words. Second is a presentation with an oral defense during which the student will answer 3- 4 questions from a panel of evaluators.

Prerequisite: Successful completion of AP Seminar

Note: Successful completion of AP Research satisfies the required 1.0 credit for a Senior Demonstration Project

Note: This course can be counted as a Humanities elective

ART (VISUAL AND PERFORMING ARTS)

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

NOTES: Art courses are hands-on and will likely result in different mediums (i.e. ink, glaze, paint, etc.) getting on one's hands, clothes, etc. Reading and writing assignments are also embedded in these courses.

#6540 Art I (9-12) ⭐ 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) ⭐ 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) ⭕ 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 creativity, develop 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.

Prerequisite: Art I and Art II

#6525 Ceramics (9-12) ⭐ 0.5 Credit

Ceramics is designed to instruct students in both hand-built (slab, coil, pinch...) 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) ⭐ 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.

Prerequisite: 80 or higher average in Ceramics I or instructor approval

#6505 Design (9-12) ⭐ 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) ⭐ 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.

 # 6543 Studio Art - AP 🔷 1.0 Credit

AP Studio Art is a year-long, portfolio-based class that 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 in May of the school year. Students may choose to concentrate in one of the following areas: 2-D Design, 3-D Design (Ceramics), or Drawing. The goals of the course are: to 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 Ceramics I & II, or departmental approval.

⭐= Academic ⭕=Honors ⬛=ECE 🔷= AP

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BUSINESS AND MARKETING

Grade Level	Course
9-12	Computer Information Applications Introduction to Business Introduction to Marketing Social Media Marketing Sports and Entertainment Marketing
10-12	Accounting I Business Law Business Management International Business Marketing II - Honors
11-12	Business Economics E-Commerce Entrepreneurship Personal Finance

#7065 Accounting I (10-12) ⭐ 1.0 Credit

This course represents the basic principles of accounting and provides you with the knowledge of the financial operations of businesses. Topics covered will include recording business transactions, posting transactions, preparing financial statements, payroll, and closing a business cycle for both a service business and a retail business. A year-end business simulation creates a realistic approach to accounting procedures and methods of a small business. This course is strongly recommended for students considering further study in any business field.

NOTE: *This course qualifies for credit in either STEM or Business. If taken for STEM credit, an additional 3 credits of Math is required.*

#7055 Business Economics (11-12) ⭐ 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 DOES NOT qualify for Social Studies credit.*

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

In this course you will be introduced to an overview of management practices and principles. Major topics include the management functions of planning, organizing, implementing and controlling. You will 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 Information Applications (9-12) ⭐ 0.5 Credit

This course is designed to teach you how to use the computer as a business and personal tool through the use of application software such as Microsoft Office and G Suite. You will demonstrate intermediate skills in areas of word processing, electronic presentation, internet research, web technologies, cloud-based computing and computer ethics. This is a dynamic hands-on course that stresses project based learning and authentic work products. You will create and produce a web-based E-Portfolio that allows you to showcase your learning experiences to prospective colleges and employers.

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

Want to start a business? Students will learn what it takes to become an entrepreneur. Students explore technology production, economics, finance, and organizational management in order to implement a business plan and work in our business enterprise. Students will develop authentic hands on experience that is reinforced with classroom instruction.

#7191 International Business (10-12) ⭐ 0.5 Credit

International Business has grown significantly over the past 30 decades with the changes in technology, globalization of marketplaces, competition, freer trade and change in domestic markets. Students who pursue an International Business degree can work in the areas of Human Resources, Management, Finance and Banking, Communications, Law, Public Policies, Logistics.(Many of the careers in the domestic US have counterparts globally). This course will provide students significant exposure to emerging economies and cross-cultural opportunities while also giving them in-depth knowledge of globalization, management, business, finance, technology and languages so they can master a global approach to learning.

#7150 Introduction to Business (9-12) ⭐ 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.

#7185 Introduction to Marketing (9-12) ⭐ 0.5 Credit

This half year course will examine the risks and challenges that marketers face to establish a competitive edge in the sale of products and services to meet the needs and wants of consumers. Topics covered include foundational marketing principles such as promotion, branding, target market, and marketing mix. Upon completion of this course students will understand the role of marketing strategies to successfully create an authentic marketing plan.

#7183 Marketing II-Honors (10-12) ⭕ 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.

Prerequisite: Introduction to Marketing

#7210 Marketing Education Cooperative Work Experience ⭐ 1.5 Credit

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 (1.5 credit hours) during the high school experience. Each week a work form must be completed and passed into the College and Career Counselor showing the amount of hours worked. The student earns a Pass/Fail grade for this course.

Prerequisite: Students enrolled in Marketing II

#7154 Personal Finance (11-12) ⭐ 0.5 Credit

Show me the money! This course provides you with essential personal financial planning and management techniques. You will develop valuable life skills, prepare for life beyond high school, and gain the confidence you need for personal and financial success. Emphasis

will be on understanding personal, social, and economic factors that influence choices in achieving economic satisfaction. Life skills include: gaining knowledge in finance such as maintaining a savings and checking account, establishing credit, securing employment, financing a car, acquiring housing, evaluating and understanding insurance, taxes and investment strategies, and protecting yourself against identity theft.

#6545 Social Media Marketing (9-12) ⭐ 0.5 Credit

Social Media has reshaped the way consumers and marketers have interacted. This course will focus on the relationship between traditional marketing and the influence of social media platforms and technologies to support their marketing efforts. Students will focus on specific marketing content areas building a knowledge base about buyer behavior, marketing research, pricing, promotion and products. Using this experience to create authentic work products for brands used everyday in their personal lives. Students will be exposed to how their dollars influence marketers' decision processing.

Prerequisite: Introduction to Marketing

#7190 Sports and Entertainment Marketing (9-12) ⭐ 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.

Prerequisite: Introduction to Marketing

ENGLISH (HUMANITIES)

Grade Level	Course
9	English I English I - Honors
10	English II English II - Honors
11	English III English III - Honors English Language and Composition - Advanced Placement
12	English IV English IV - Honors/ECE English Literature and Composition - Advanced Placement
9-12	*Creative Writing I *Creative Writing II *Journalism I *Journalism II *Literacy Workshop

* Count toward elective credits and DO NOT fulfill the English graduation requirement

#3131 Creative Writing I ⭐ 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 are exposed to a variety of styles which are used as the basis for discussion and models to inspire original pieces of work. Whenever possible, student interests guide the selection of materials and required pieces. Students are also encouraged to submit their work to contests and publications.

#8830 Creative Writing II ⭐ 0.5 Credit

Creative Writing II is an opportunity for students who completed Creative Writing I to pursue more advanced fiction and nonfiction projects. The course simulates a college seminar where students learn in a workshop environment, are comfortable sharing work with peers, and are prepared to provide and receive critical feedback. Students can expect to develop an individual portfolio of work by the conclusion of the semester.

Prerequisite: Creative Writing I

⭐= Academic ⭕=Honors ⬛=ECE 🔷= AP

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#3021 English I ⭐ 1.0 Credit

English I Academic is a year-long thematically organized course in which students will be encouraged to investigate, challenge, and question the texts they encounter as they contemplate the questions "Who am I?" Students will explore the ways in which authors represent an individual's quest to "find" one's "self" amid cultural, familial, societal, and environmental factors. By examining the experiences of the characters in texts, students gain a greater awareness of their own identities and the factors that have contributed to them. Students will read selections of classical and contemporary literature and nonfiction, engage in written, oral, and visual presentations, and complete processed and informal writing assignments. The use of technology is regularly integrated into learning experiences. This course develops academic independence and responsibility.

#3025 English I - Honors ⭕ 1.0 Credit

English I Honors is a year-long thematically organized course in which students will be encouraged to investigate, challenge, and question the texts they encounter as they contemplate the questions "Who am I?" Students will explore the ways in which authors represent an individual's quest to "find" one's "self" amid cultural, familial, societal, and environmental factors. By examining the experiences of the characters in texts, students gain a greater awareness of their own identities and the factors that have contributed to them. Students will maintain a rigorous reading schedule of classical and contemporary literature and nonfiction, engage in written, oral, and visual presentations, and 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, curiosity, and independence.

#3031 English II ⭐ 1.0 Credit

English II Academic is a year-long thematically organized course designed to explore multicultural perspectives on the topics of beauty, justice and equity, conflict, and individual transformation and reflection. 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 ⭕ 1.0 Credit

English II Honors is a year-long thematically organized course designed to explore multicultural perspectives on the topics of beauty, justice and equity, conflict, and individual transformation and reflection. 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 AP Language and Composition during junior year. Students are recommended for this level by their 9th grade English teacher.

#3050 English III ⭐ 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.

#3045 English III - Honors ⭕ 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 prepares students for the option of taking AP Literature and Composition during senior year. Students are recommended for this level by their tenth grade English teacher.

#3221 English IV ⭐ 1.0 Credit

English IV Academic 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 nonfiction 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/ECE ⭕ with ⬛ option 1.0 Credit

English IV Honors/ECE is a year-long course designed to prepare students for college writing and workforce training. The curriculum aligns with the UCONN First-Year Writing program and emphasizes using an inquiry approach to learning while reading and writing. Significant portions of the course are also devoted to research, studio pedagogy, multimodal composition, media literacy, and reflective writing. Students are not required to, but have the option, to register to earn for UCONN credit.

NOTE: *Successful completion of the course with a grade of "C" or better enables students to earn four credits for UCONN's English 1007: Seminar and Studio in Academic Writing and Multimodal Composition.*

⭐= Academic ⭕=Honors ⬛=ECE 🔷= AP

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#3222 English Language and Composition- AP 🔷 1.0 Credit

The AP 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 nonfiction 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 how a writer's purpose, audience, and language conventions contribute to effective communication. All students are expected to take the AP examination in English Language and Composition in May. Students are recommended for this level by their tenth grade English teacher.

#3220 English Literature and Composition-AP 🔷 1.0 Credit

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, and share and critique rough and final written drafts of papers with others during writing workshops. 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.

#3146 Journalism I ⭐ 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 ⭐ 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 Pawprint.*

Prerequisite*: Journalism I*

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#9953 Literacy Workshop ⭐ 0.25/0.5 Credit

Literacy Workshop students work with a reading specialist in a small group setting to apply literacy-based strategies to academic tasks in content area classes. Interventions are tailored to individual student needs, and work is monitored to track progress and growth. The class meets for a half-block and runs opposite a study hall. Marking period grades are awarded on a Pass/Fail basis, and students may elect a semester or full-year option.

FAMILY AND CONSUMER SCIENCES

Grade Level	Course
10-12	Child Development
9-12	Culinary Arts I – Food and Nutrition
10-12	Culinary Arts II – Global Foods
10-12	Interior Design

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

In this course, you will study the process of human growth and development from birth through the preschool years. Topics of study will include theories of development, children and families, child care and guidance, and early childhood education. Participation in the "Real Care" baby project, a parenting simulation, is at the discretion of the teacher

#8035 Culinary Arts I – Food and Nutrition (9-12) ⭐ 0.5 Credit

In this course you will develop foundational skills necessary to prepare nutritious meals at home. Topics of study include nutrition and wellness, food safety and sanitation, current trends in foods, recipe basics, and food planning and preparation.

#8040 Culinary Arts II – Global Foods (10-12) ⭐ 0.5 Credit

This course builds on skills you learned in Culinary I. The focus of this class is the study of social, cultural, and geographical influences on global cuisine.

Prerequisite: Culinary Arts I

#8125 Interior Design (10-12) ⭐ 0.5 Credit

This course will focus on design concepts that apply to interior spaces. Topics include architectural trends, space planning, furniture styles, color, and textiles. In addition, students will learn about careers in the housing and interior design industries.

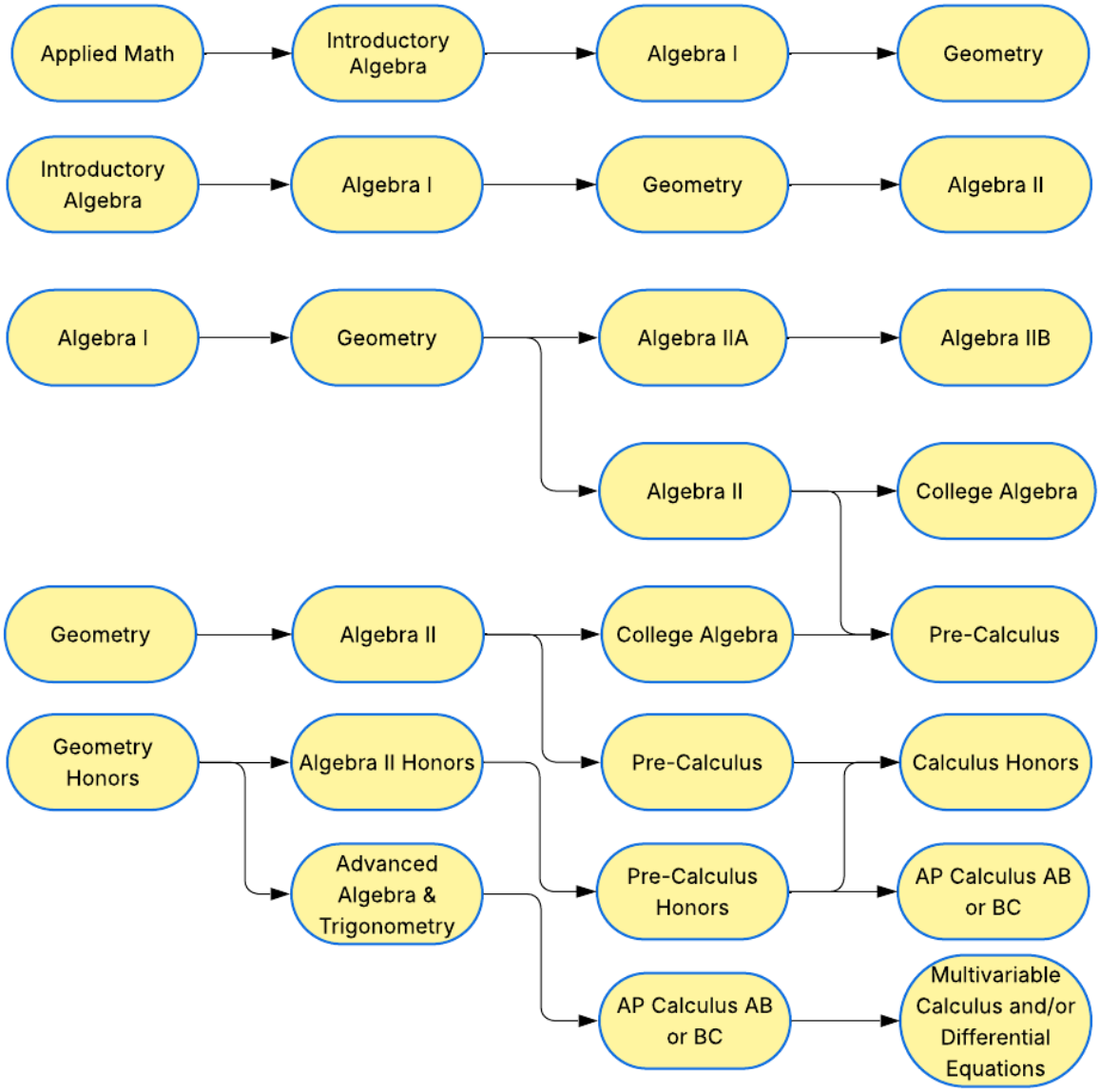
HEALTH

Grade Level	Course
9	9th grade Health Education
11	11th grade Health Education

#9571 9th grade Health Education⭐ Fall/Spring 0.5 Credit
This is a semester-long class that is aligned with the state Health core standards as well as state skill based standards. Students will cover a variety of important topics in this course. 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: Mental and Emotional Health, Anger Management, Stress Management, Meditation, Goal Setting, Depression, Suicide, Healthy Eating, The Food Industry, Obesity in America, Food Labels, Vitamins and Minerals, Autoimmune Diseases, Marijuana, Alcohol, and Tobacco, Steroids, Vaping, Opioids and other recreational drugs. Topics in Human Growth and Development include Abstinence, Media and Sexuality, Contraception. All of these topics will help students develop skills needed to live a healthy, productive lifestyle. As part of the curriculum, students and parents/guardians are expected to attend a mandatory evening drug and alcohol abuse forum held each Fall.

#9600 11th Grade Health Education ⭐ Fall/Spring 0.5 credit
This is a semester-long class that is aligned with the state Health core standards as well as state skill based standards. Students in grade eleven will also cover important health topics in four units of study including injury prevention, nutrition, substance abuse prevention, and human growth and development. The topics covered within these units will have a focus on First Aid and Safety, CPR, Internet Safety, School Violence, Wellness, Environmental Health, Time Management, Nutrition, Eating Disorders, Heart Disease, Type 2 Diabetes, Infections and Parasites, Fitness Topics, Drinking and Driving, Vaping, Opioids, Refusal skills, Addiction, and Recreational drugs. Additionally, Dating and Relationships, STDs, Sexual Assault and Rape are discussed. Many of the above topics are covered and discussed with an emphasis on applying learned skills and knowledge during college years and beyond.

MATHEMATICS (STEM)



- *Students looking for additional course options in math beyond the typical sequence can accelerate their math sequence by taking two mathematics courses in the same year (such as taking Geometry and Algebra II concurrently in order to take Calculus Honors in their Senior year with approval from the STEM Department Head).*
- *Not all Mathematics courses are available each year*
- *Graphing calculators like the Texas Instruments TI-83 Plus and TI-84 are required for all math classes.*

⭐= Academic ⭕=Honors 🔳=ECE 🔷= AP

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#7065 Accounting I (10-12) ⭐ 1.0 Credit

Accounting is the process of gathering and preparing financial information about a business or other organizations 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.

NOTE: *This course qualifies for credit in either Business or Mathematics sequences. If Accounting is taken for mathematics credit, completion of three full years of mathematics is required with approval from the STEM Department Head.*

#4297 Advanced Algebra & Trigonometry-Honors (9-11) ⭕ 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: Algebra I, Honors Geometry, and teacher recommendation OR permission of the STEM department head.

#4075 Algebra I (9-12) ⭐ 1.0 Credit

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, homework, and classwork. 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) ⭐ 1.0 Credit

How do patterns and functions help us describe data and physical phenomena and solve a variety of problems? 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 classwork. 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 a prerequisite for College Algebra, the mathematics course most commonly required for postsecondary degrees.

Prerequisite: Algebra I

#4205 Algebra II-Honors (9-11) ⭕ 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. Assessment will be based on tests, quizzes, projects, homework, and classwork. 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: Algebra 1

#4200 Algebra IIA (11-12) ⭐ 1.0 Credit

Algebra IIA is the first course in a two year sequence that provides a comprehensive curriculum that will help students strengthen their conceptual understanding and enable them to be better prepared for introductory college mathematics courses. 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 classwork. 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: Algebra I

#4201 Algebra IIB (11-12) ⭐ 1.0 Credit

Algebra IIB is the second course in a two year sequence that provides a comprehensive curriculum that will help students strengthen their conceptual understanding and enable them to be better prepared for introductory college mathematics courses. Topics include properties and applications of polynomial, rational, exponential, logarithmic, and trigonometric functions. Assessment will be based on tests, quizzes, projects, homework, and classwork. 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: Algebra IIA

#4072 Algebra Essentials (9) ⭐ Fall and Spring 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 in place of an elective.

#4230 Calculus (12) - Honors (WCSU option)⭕ 1.0 Credit

Honors Calculus provides students with a review of key algebra and functions as well as a study of the theories and applications of limits and differentiation, along with an introduction to the theory and practice of integration. The graphical, tabular, statistical and calculus capabilities of a graphing calculator and other technology will be utilized.

Prerequisite: Pre-Calculus

NOTE: *Students who successfully complete this course may qualify to earn college credit from Western Connecticut State University for MAT 181 .*

#4240 Calculus AB - AP (11-12) 🔷 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 topics of differential and integral calculus of one variable with applications. Topics include limits, continuity, derivatives and integrals of algebraic and transcendental functions, and applications of integration. 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: Pre-Calculus (preferably Honors)

#4231 Calculus BC-AP (11-12) 🔷 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: Pre-Calculus (Preferably Honors)

#4073 College Algebra ⭐ 1.0 Credit

This course offers the development of numerical, algebraic, and graphical problem-solving techniques to be used in calculus. Techniques are developed to solve equations involving polynomial, radical and rational functions. Polynomial, inverse, rational, exponential, and logarithmic functions are studied, and their applications are explored both algebraically and graphically. Whenever possible, learning of mathematical concepts is embedded in contextualized situations relevant to STEM topics. The use of a graphing calculator is required. Students who take this class are eligible to earn credit for MATH 1600 through Connecticut State Community College.

Prerequisite: Algebra II or approval of the STEM Department head.

⭐= Academic ⭕=Honors 🔳=ECE 🔷= AP

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#4206 Computer Science-AP (11-12) 🔷 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 a one semester college course.

Prerequisite: Algebra 2 or permission of STEM Department Head

NOTE: *This course qualifies for credit in CTE or Mathematics sequences. If Computer Science is taken for mathematics credit, completion of Pre-Calculus is required.*

#4262 Elementary Discrete Mathematics(11-12) ⭕ with ⬛ option 0.5 Credit

The course begins with voting methods, finance, and probability then moves to networks and number theory. Real world data is incorporated into examples and exercises throughout the book. The use of graphing calculators and computers is constantly integrated into the curriculum. This course is intended for students seeking to further their mathematical knowledge beyond Algebra II but who are not yet prepared for pre-calculus.

Prerequisite: Algebra II

NOTE: *Completion of the course with a grade of "C" or better enables students to earn 3 credits for UCONN's MATH 1030Q: Elementary Discrete Mathematics.*

#4260 Elementary Mathematical Modeling (11-12) ⭐ 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 consistently integrated into the curriculum.

Prerequisite: Algebra II

#4121 Geometry(9-12) ⭐ 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 classwork. 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: Algebra I

#4120 Geometry-Honors (9-12) ⭕ 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 classwork. 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: Algebra I

#4189 Intro to Differential Equations (12) 🔷 Spring 0.5 Credit

This course is an introduction to the study of differential equations. Topics include the solution of first and second order differential equations, homogeneous and non-homogeneous differential equations, physical applications, initial value problems, systems of linear differential equations, series solutions, numerical methods. If time permits, LaPlace Transforms, Fourier Series, and partial differential equations may be examined. Evaluation of student performance is based on tests, homework, and quizzes.

Prerequisite: AP Calculus BC(Usually taken second semester after Multivariable Calculus but may be taken concurrently with Calculus BC by second semester seniors)

#4207 Introduction to Programming ⭐ 0.5 Credit

This course is intended to introduce students to the fundamentals of coding, computer algorithms, and syntax, through the use of Python, which is openly available and has many contemporary applications including web development. Students will engage in both theoretical exercises and coding for applications. Previous programming experience is not required.

Prerequisite: Algebra I

#9723 Introductory Algebra⭐ 1.0 Credit

This course is designed to strengthen algebra skills aligned with middle school mathematics standards. Students will work on solving two-step and multi-step equations, algebraic manipulations, numeracy skills, and solving real-world modeling problems. Students who successfully complete the course should follow with taking Algebra 1 the following year.

Prerequisite: selection by staff

⭐= Academic ⭕=Honors ⬛=ECE 🔷= AP

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#4291 Linear Algebra-Honors (11-12) ⭕ Spring 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.

Prerequisite: Honors Algebra 2 or Permission of STEM Department Head

#9919 Mathematics Workshop 0.25/0.5 Credit

Students in Mathematics Workshop work in a small group setting with a mathematics interventionist to improve fundamental numeracy and algebra skills, both in support of and in the context of current mathematics coursework. Time can include appropriate testing to tailor work to individual student needs. The workshop meets for a half-block and runs opposite a study hall or academic support. Marking period grades are awarded on a Pass/Fail basis, and students may elect a semester or full-year option.

#4245 Multivariable Calculus 🔷 Fall 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 (preferably BC)

#4220 Pre-Calculus (11-12) ⭐ 1.0 Credit

Pre-Calculus builds on the mechanics and concepts of Algebra II and Geometry, 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.

Prerequisite: Algebra II

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

Pre-Calculus Honors expands upon the Pre-Calculus curriculum with greater depth, breadth, and complexity. 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 classwork.

Prerequisite: Algebra II

#4292 Statistics I (11-12) ⭐ 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 classwork.

Prerequisite: Algebra II or permission of STEM Department head

#4294 Statistics II (11-12) (WCSU option) ⭐ 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.

Prerequisite: Statistics I

NOTE: *Students who successfully complete this course may qualify to earn college credit from Western Connecticut State University for MAT 120.*

#4296 Statistics-AP (11-12) 🔷 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.

Prerequisite: Algebra II (preferably Honors)

NOTE: *Successful completion of the course with a grade of "C" or better enables students to earn three credits for UCONN's STAT 1100Q: Elementary Concepts of Statistics.*

MULTILINGUAL LEARNERS

#9957 Literacy Support for Multilingual Learners ⭐ 1.0 Credit

This course uses academic skills and content that prepare students for success in the mainstream classroom, the LAS links exam, and post-secondary education. The reading program used in this course includes excerpts and adaptations from textbooks, academic journals, and other academic sources. Another critical component of this course is to build students' English proficiency across all four modalities: Speaking, Listening, Reading and Writing. Course content covers essential academic vocabulary and includes listening to lectures, note-taking, participating in discussions, preparing oral and written reports, and writing essays.

Note: Grading for this course is on a Pass/Fail scale

MUSIC (VISUAL AND PERFORMING ARTS)

Grade Level	Course
9-12	Beginning Guitar Chorus Chorus - Honors *InstruMENTAL *Jazz Band Music Appreciation I Music Theory I & II Music Theory - Advanced Placement[#] Percussion Workshop Symphonic Band Symphonic Band - Honors
10-12	*Chamber Singers Digital Music Technology Music Appreciation II

***** *These courses only meet after regular school hours*

[#]*This course is only offered every other year (2027-2028, 2029-2030)*

#9092 Beginning Guitar (9-12) ⭐ 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, fretboard reading, basic traditional music reading (not tablature), and strumming techniques. This course is designed for **beginners** using Acoustic Guitar only.

#9071 Chamber Singers ⭐ 0.5 Credit

This course will meet once a week during ILT and after school. Chamber Singers is a select group of singers, chosen from Honors Chorus, which performs serious music in a more intimate setting than Honors Chorus. Participation is by audition and members must maintain the highest standards of musical performance. Members will be involved in approximately 15 performances each year and be graded on a Pass/Fail basis. Credit earned in this course does not count toward fulfilling graduation requirements.

#9055 Chorus (9-12)⭐ Fall Semester 0.5 Credit
#9065 Chorus (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.

#9075 Chorus - Honors (9-12) ⭕ Fall Semester 0.5 Credit
#9088 Chorus - Honors (9-12) ⭕ Spring Semester 0.5 Credit
Honors Chorus is a select group that performs difficult choral literature. The group performs an average of 10 times each year in school concerts and for community groups. This course may be taken each year.

Prerequisite: By audition

#9090 Digital Music Technology (10-12) ⭐ 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.

#9098 InstruMENTAL (9-12) ⭐ 0.25 Credit
This course will meet after school. Open to all students who perform on any instrument and who have an interest in a new and exciting group performance format. Students must be fairly proficient on their instrument. This performance oriented course will include instruction in marching performance techniques, technology uses as well as traditional and contemporary styles of standard music compositions. Credit earned in this course does not count toward fulfilling graduation requirements.

#9097 Jazz Band (9-12) ⭐ 2, 3 & 4th Quarters 0.75 Credit
This course will meet after school. 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. Credit earned in this course does not count toward fulfilling graduation requirements.

Prerequisite: By audition and/or consultation with the instructor

#9086 Percussion Workshop (9-12) ⭐ 0.5 Credit
Open to all students regardless of musical skill or experience. This course focuses on basic beginning percussion techniques and playing. Emphasis will be on rudiments, snare drum, mallet percussion, accessory percussion, basic traditional music reading, and drum set techniques. This course may include public performances, depending on membership.

#9045 Music Appreciation I (9-12) ⭐ 0.5 Credit

Emphasis is placed on developing listening skills with a focus on musical genres from Blues to Rock, covering music from the early 20th Century until today.

#9047 Music Appreciation II (10-12) ⭕ with ⬛ option 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: 80 or above average in Music Appreciation I and instructor approval
NOTE: *Successful completion of the course with a grade of "C" or better enables students to earn three credits for UCONN's Music 1001: Music Appreciation*

#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.

#9115 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.

Prerequisite: Music Theory I and teacher recommendation

#9117 Music Theory - AP (10-12) 🔷 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).

Prerequisite: Music Theory and/or teacher recommendation

#9096 Symphonic Band (9-12) ⭐ 1.0 Credit
#9087 Symphonic Band-Honors (9-12) ⭕ 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.

PHYSICAL EDUCATION

Grade Level	Course
9	PE 9
10	Adventure Education Fit for Life Sports and Leadership Unified Physical Education
11-12	Personal Fitness Unified Physical Education

Physical Education Sequence

9th grade (required)		
PE 9	Fall or Spring semester	0.5 Credit
10th grade (required)		
10th grade elective	Fall or Spring semester	0.5 Credit
11th/12th grade (elective)		
PE for the Future	Fall or Spring semester	0.5 Credit
Lifetime and Leisure	Fall	0.5 Credit
Personal Fitness	Spring	0.5 Credit

#9593 Adventure Education (10) ⭐ Fall/Spring 0.5 Credit

This semester-long course is aligned to the state standards for Physical Education. 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.

#9613 Fit For Life (10) ⭐ Fall/Spring 0.5 Credit

This semester-long course is aligned to the state standards for Physical Education. The course focuses on life-long sports and activities, aerobic fitness, wellness and stress management. While outside, classes will explore golf, tennis, frisbee and hiking. Indoor aerobic fitness will include dance movements, Zumba and badminton, as well as stress management through yoga and Pilates. Students will also create and lead yoga and mindfulness lessons.

#9609 Personal Fitness (11/12)⭐ Spring 0.5 Credit

This semester-long 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 Training. Students will use technology to design Personal Fitness Plans involving exercise, nutrition, and other healthy lifestyle aspects.

#9573 Physical Education 9 ⭐ Fall/Spring 0.5 Credit

This semester-long course is aligned to the state standards for Physical Education. Fitness concepts like heart-rate, muscular strength and endurance, personal fitness planning are a focus, as well as communication and problem solving skills. These themes are presented, practiced and assessed through a variety of movement activities including cooperative games, team sports like volleyball and soccer, and lifelong activities like badminton and tennis. Assessments include group presentations and fitness testing.

#9602 Sports and Leadership (10) ⭐ Fall/Spring 0.5 Credit

This semester-long course is aligned to the state standards for Physical Education. The course focuses on Lifelong Sports like Golf, Tennis, Frisbee and Badminton, and builds and assesses Leadership Skills 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, be tournament directors and game officials.

#9619 Unified Physical Education ⭐ Fall 0.5 Credit
#9620 Unified Physical Education ⭐ Spring 0.5 Credit

This semester-long course is aligned with state standards for Physical Education. The focus of this class is for students to create an inclusive environment for all students to learn and practice physical skills, sports and activities as well as cooperation and collaboration through positive communication.

SCIENCE (STEM)

Grade Level	Course
9	Earth & Energy Essentials ***[ES]*** Earth & Energy Essentials - Honors ***[ES]***
10	Biology ***[LS]*** Biology- Honors ***[LS]*** Studies in Environmental Science ***[ES]***
11-12	Anatomy & Physiology I & II ***[LS]*** Biology-Advanced Placement ***[LS]*** Chemistry ***[PS]*** Chemistry-Advanced Placement ***[PS]*** Chemistry- Honors ***[PS]*** DNA Science & Biotechnology ***[LS]*** EMT Training ***[LS]*** Environmental Science-Advanced Placement ***[ES]*** Forensic Science I ***[ES, LS, or PS]*** Forensic Science II ***[ES, LS, or PS]*** Materials and Design Science ***[PS]*** Physics ***[PS]*** Physics 1-Advanced Placement ***[PS]*** Physics Honors ***[PS]*** Scientific Research - Honors Studies in Environmental Science ***[LS]*** Veterinary Technology ***[LS]*** Zoology I ***[LS]*** Zoology II ***[LS]***

[ES] = Earth Science, [LS] = Life Science, and [PS] = Physical Science

The goal of the science program at Brookfield High School is to engage students in developing a scientific lens from which to view and interact with the world. The curriculum is dynamic with opportunities for students to learn science through practices that represent how science is experienced in the real world. Instruction is shifting from students learning *about* science to students learning by *figuring out* the science of phenomena. These shifts are essential for all students to develop next generation critical thinking skills, to be researchers of information and to be effective communicators. Students interested in maximizing program options should consider doubling science courses starting in 10th grade.

#1125 Anatomy & Physiology I ⭐ 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. Coursework 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 ⭐ 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 ⭐ 1.0 Credit

Biology is the study of life and the unifying theme of this course will be the common features of all living things and how organisms interact with the environment. . You will be challenged to think about how life on Earth evolved and how different species interact with each other in ecosystems. We will study how energy flows through ecosystems via the metabolic processes of living things; how genetics and DNA are used to predict the way traits are passed from one generation to the next to ensure survival of a species; how the environment plays a role in the development of new species and the extinction of others,how the physical structures of living things are organized from cells to tissues organs and organ systems; and how humans are impacting life on our planet.

#1115 Biology-AP 🔷 with ⬛ option 1.0 Credit

Advanced Placement Biology is a college level Biology course designed to prepare you for the AP Biology exam. You will study biochemistry, cell theory, cell communication and

reproduction, evolutionary theory, genetics, DNA technology, and ecology. You will be expected to take the Advanced Placement Biology exam in May. Students enrolled in University of Connecticut ECE must take a cumulative final exam created by the director of that program. Successful completion of ECE Biology qualifies a student for credit in Bio1107 & 1108 at the University of Connecticut. The ECE curriculum includes more content than the current AP Biology curriculum. Animal form and function, phylogeny and botany units will be covered in our course to fulfill the ECE requirements. Students should expect to spend at least an hour daily outside of class time for reading, lab preparation and study. The ability to read highly technical scientific text independently is important.

Recommended coursework: Anatomy & Physiology and/or Zoology
Prerequisite: Honors Biology, Algebra II or permission of STEM Department Head
Corequisite: Honors Chemistry
NOTE: *Successful completion of the course with a grade of "C" or better along with a minimum score on cumulative exams developed at UConn, enables students to earn four credits for UCONN's BIOL 1107:Principles of Biology I and four credits for UCONN's BIOL 1108: Principles of Biology II.*

#1051 Biology-Honors ⭕ 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.

Prerequisite: Algebra 1

#1065 Chemistry ⭐ 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.

Prerequisite: Algebra I and Biology

#1085 Chemistry-AP 🔷 1.0 Credit

Advanced Placement Chemistry is a course designed as a second-year Chemistry course that will prepare students 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.

Prerequisite: Honors Chemistry or permission of the STEM Department Head

#1075 Chemistry-Honors ⭕ 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 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.

Corequisite: Algebra II (preferably honors) or permission from STEM Department Head

#1155 DNA Science & Biotechnology ⭐ 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 gel electrophoresis, genetic engineering of bacteria and manipulation of DNA for testing and identification of specific genes.

Prerequisite: Biology

#1022 Earth & Energy Essentials (E3) ⭐ 1.0 Credit

Earth & Energy Science Essentials (E3) is a 9th grade course that is grounded in science fundamentals and aligned to the Next Generation Science Standards (NGSS). Since the "Big Bang", energy and matter have been at the heart of our existence. This course will increase understanding of these two topics as students are guided through exploration of Earth's place in the universe, the interconnected systems within the planet and human impact. Through core scientific and engineering practices that include asking questions, developing models, and constructing explanations, students will 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.

#1023 Earth & Energy Science Essentials (E3)-Honors ⭕ 1.0 Credit

Honors Earth & Energy Science Essentials (E3) is a 9th grade course that is grounded in science fundamentals and aligned to the Next Generation Science Standards (NGSS). Since the "Big Bang", energy and matter have been at the heart of our existence. This course will increase understanding of these two topics as students explore Earth's place in the universe, the interconnected systems within the planet and human impact. Through core scientific and engineering practices that include asking questions, developing models, and constructing explanations, 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.

#1168 EMT Training ⭕ with ⬛ option 1.0 Credit

An Emergency Medical Technician (EMT) is a person trained to render immediate, prehospital care to the sick and injured. This course prepares students to take the State of Connecticut Certified EMT cognitive and psychomotor exams. The material covered in this course is divided into different modules including: Preparatory, Airway Management, Patient Assessment, Medical Emergencies, Trauma Emergencies, and Special Populations. This course includes professional CPR certification as well as National Incident Management System NIMS 100, 200, and 700. Students must complete the course with a 70% or higher to be eligible to test with the State of Connecticut.

Prerequisite: Biology

NOTE: *Students may elect the ECE option which requires some additional enrichment work. Successful completion of the course with a grade of "C" or better enables students to earn four credits for UCONN's AH 4092: EMT Training.*

#1043 Environmental Science-AP 🔷 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 human made, 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

#1163 Forensic Science I ⭐ 0.5 Credit

Students will engage in a mutli-disciplinary curriculum to learn how various scientific theories and practices come together to assist legal investigations. Students will learn and simulate laboratory techniques and scientific models spanning a range of applications. Contemporary topics and conversations will be incorporated so students understand the dynamic nature of the field as it continues to evolve. Students will ultimately be expected to apply their knowledge and skills in simulated events. Topics covered in this course include: Intro to Forensic Science & The Law, Types of Evidence, The Crime Scene, Fingerprints, Hair & Fibers, and Blood & Spatter Analysis.

Prerequisite: Biology

Corequisite: Chemistry or permission of STEM department head

#1161 Forensic Science II ⭐ 0.5 Credit

This is a continuation of Forensic Science I. Students will engage in a mutli-disciplinary curriculum to continue learning how various scientific theories and practices come together to assist legal investigations. Students will learn and simulate laboratory techniques and scientific models spanning a range of applications. Topics in this course include: Toxicology, Death (Anthropology & Entomology), Document & Handwriting Analysis, Toolmarks & Impressions, and Soil & Glass Analysis.

Prerequisite: Forensic Science I

Corequisite: Chemistry or permission of STEM department head

#2153 Materials and Design Science ⭐ 0.5 Credit

Material and Design (MAD) Science is a multidisciplinary course that addresses the physical properties of materials and their applications in engineering and manufacturing. Students will develop a working knowledge of the capabilities of modern and traditional materials and apply that knowledge in solving real-world problems in the context of engineering decisions and compromises made in authentic scenarios. Students will engage with the nature of materials, the reasoning behind their applications, new solutions to solve real world problems, experimentation and data collection, peer collaboration, and creation and testing of prototypes.

Corequisite: Chemistry or permission of STEM department head

#1095 Physics ⭐ 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.

Teaching Methods: Labs, Projects, Lecture and Student driven learning
Assessment: Labs, Quizzes, Tests, In-class Activities
Prerequisite: Algebra II

#1120 Physics 1-AP 🔷 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. Topics will include Newtonian Mechanics, energy, momentum, circular motion, gravitation, simple harmonic motion, and rotational motion. Students seeking AP credit are required to take the AP 1 Physics College Board exam.

Corequisite: Precalculus (preferably Honors)

#1105 Physics-Honors ⭕ 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.

Prerequisite: Algebra II

#1058 Scientific Research ⭕ 1.0 Credit

In an effort to better educate students in the process of formal scientific research and provide them with the communication, writing, and critical thinking skills to engage in professional scientific practice, students will be tasked with devising independent research projects under the supervision of a teacher mentor. Students will learn the methodology for conducting a literature review, creating and presenting proposals, assembling and engaging in laboratory activities, communicating results, and networking with experts in the academic field.

#1055 Studies in Environmental Science ⭐ 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 nonliving 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.

Prerequisite: Biology

#1160 Veterinary Technology ⭐ 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 ⭐ 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 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.

Prerequisite: Biology

#1175 Zoology II: Planet Earth ⭐ 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 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: Zoology I

SOCIAL STUDIES (HUMANITIES)

Grade	Course
9	Human Geography Human Geography Honors
10	Global Themes Global Themes Honors World History: Modern - Advanced Placement
11	United States History United States History - Advanced Placement United States History - Honors
9 - 12	Human Geography - Advanced Placement
10 - 12	*African American/Black and Puerto Rican/Latino Studies *Contemporary Social Issues in Sport - ECE Option *European History- Advanced Placement *Human Geography - Advanced Placement *Introduction to Human Rights - ECE Option *Psychology *Sociology I *Sociology II *World History: Modern - Advanced Placement
11 - 12	American Government American Government – Honors *Psychology - Advanced Placement United States Government and Politics - Advanced Placement

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

#8816 African American/Black & Puerto Rican/Latino Studies(10-12) ⭐ 1.0 Credit

This course is an opportunity for students to explore accomplishments, struggles, intersections, perspectives, and collaborations of African American/Black and Puerto Rican/Latino people in the U.S. Students will examine how historical movements, legislation, and wars affected the citizenship rights of these groups and how they, both separately and together, worked to build U.S. cultural and economic wealth and create more

just societies in local, national, and international contexts. Coursework will provide students with tools to identify historic and contemporary tensions around race and difference; map economic and racial disparities over time; strengthen their own identity development; and address bias in their communities. This course is a full-year course and may not be semesterized.

Prerequisite: Global Themes and US History (may be taken in conjunction with US History in 11th grade)

#2065 American Government (11-12) ⭐ 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: Human Geography

#2066 American Government – Honors (11-12) ⭕ 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 toward the four-year requirement for Social Studies.

Prerequisite: Human Geography

#2145 Contemporary Social Issues in Sport (10-12)⭐ 0.5 Credit

This one semester dual enrollment course provides students the opportunity to explore socio-cultural, economic, political, and other related issues in sports. The course curriculum explores sports as a social institution and includes analysis of the impact of sports in American culture, and the impact of American culture on sports. The class explores modern issues within sports at the youth, intercollegiate, professional, and international levels and provides students a lens through which to evaluate how sports at these levels is experienced differently by diverse individuals, communities, organizations, and society.

NOTE: *Successful completion of the course, additional enrichment work and a grade of "C" or better enables students to earn three credits for UCONN's EDLR 2001: Contemporary Social Issues in Sport.*

#2048 European History-AP(10-12) 🔷 with ⬛option 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. All students are expected to take the AP European History examination in May.

NOTE: *Successful completion of the course with a grade of "C" or better enables students to earn three credits for UCONN's HIST 1400: Modern Western Traditions.*

#2024 Global Themes (10) ⭐ 1.0 Credit

Global Themes is a course that introduces students to the concept that globalization is not a recent phenomenon but has existed throughout the history of the world and influences all aspects of society. Course content includes historical examples from modern world history, exploring various themes that relate to global interactions of people, ideas, goods and institutions. The course is not intended to be a traditional survey of modern world history, but instead draws upon various social sciences (civics, history, economics and geography) to evaluate the contemporary implications of historical developments. The course is organized into units that include a contemporary connection where students explore the relevance of the material in today's world.

#2019 Global Themes – Honors (10) ⭕ 1.0 Credit

The Honors-level course is rigorous and intellectually demanding, designed for students who are ready to advance their skills as independent learners and researchers. This entails a significant amount of reading both primary source and high-level secondary source material, as well as sharing the knowledge they've gained with classmates. Students will study topics in more depth and complexity, and be required to do more writing and more critical analysis than in Global Themes. Students must be prepared to assume independent accountability for their performance, and be willing to work closely with and interact frequently with their peers. Students who consider taking this course should be strong independent readers who enjoy learning about historical topics and are willing to make a sustained commitment to success.

#0031 Human Geography (9) ⭐ 1.0 Credit

Human Geography introduces students to the relationship between human behavior and the physical world. This interactive course will use a range of print, video, and map resources to support student learning in the areas of developing a geographic perspective, analyzing the nature of changing populations and migration, evaluating the implications for practices related to agriculture and food supply, examining issues related to sustainability, and understanding the conditions related to the standard of living across the world.

#2191 Human Geography-AP (9)🔷 1.0 Credit

Advanced Placement Human Geography is a college level course designed to represent a systematic study of the Earth and its inhabitants. APHG covers the following seven units: 1. The Geographic Perspective; 2. Population; 3. Cultural Patterns and Processes; 4. Political Organization of Space; 5. Agricultural and Rural Land Use; 6. Industrialization and Economic Development; and 7. Cities and Urban Land Use. This course should help students understand how cultural, economic and political systems relate to the distribution of human activities, the nature of places, and people's interaction with their environment. A commitment to independent reading and research is essential for experiencing success in this course. All students are expected to take the AP Human Geography examination in May.

#0032 Human Geography - Honors (9) ⭕ 1.0 Credit

Honors Human Geography emphasizes in-depth learning in the areas of developing a geographic perspective, analyzing the nature of changing populations and migration, evaluating the implications for practices related to agriculture and food supply, examining issues related to sustainability, and understanding the conditions related to the standard of living across the world. Students will be expected to read and research independently, and some curriculum content will include elements from the AP Human Geography course.

#2037 Introduction to Human Rights (10-12)⭐ or ⭕ if ⬛ option 0.5 Credit

This one semester course provides an opportunity to engage in an exploration of central human rights institutions, selected human rights themes and political controversies, and key political challenges of contemporary human rights advocacy. Students will consider the rights and responsibilities central to being a productive global citizen. The curriculum uses the Universal Declaration of Human Rights as a focal point while discussing, analyzing, and debating topics such as government surveillance, illegal detention and deportation, human trafficking, modern slavery, acts of genocide, the rights of minority groups (including women, children, indigenous people, and individuals with disabilities) and human rights of all global citizens.

NOTE: *Students may elect the ECE option which requires some additional enrichment*

work. Successful completion of the course with a grade of "C" or better enables students to earn three credits for UCONN's HRTS 1007: Introduction to Human Rights.

#2172 Psychology (10-12) ⭐ 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.

#2178 Psychology-AP (11-12)🔷 1.0 Credit

In this college level course, 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 concludes with an introduction to abnormal psychology. All students are expected to take the AP Psychology Exam in May.

Prerequisite: Biology

#2190 Sociology I (10-12)⭐ 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.

#2189 Sociology II(10-12) ⭐ 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 United States Government & Politics-AP (11-12)🔷 1.0 Credit

Students will apply an analytical perspective on government and politics in the United States while also learning the fundamental concepts used by political scientists. This course includes the study of 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. Students are expected to take the AP United States Government & Politics examination.

Prerequisite: Human Geography

#2060 United States History (11) ⭐ 1.0 Credit

Students in 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. Thematic units will focus on Social Justice, Economic Justice, Foreign Justice, and the American Presidency.

Prerequisite: Human Geography

#2052 United States History-AP (11) 🔷 with ⬛ option 1.0 Credit

Students will develop their abilities to think conceptually about United States 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]. 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: Human Geography

NOTE: *Successful completion of this course with a grade of "C" enables students to earn three credits for UCONN's HIST 1501: United States History to 1877 and three credits for HIST 1502: United States History Since 1877*

#2061 United States History-Honors (11) ⭕ 1.0 Credit

Students in 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. Thematic units will focus on Social Justice, Economic Justice, Foreign Justice, and the American Presidency. Students are expected to read and comprehend an increased number of primary source documents and to work independently and collaboratively on applying this knowledge to sophisticated unit projects.

Prerequisite: Human Geography

#2051 World History: Modern -AP (10-12) 🔷 1.0 Credit

Advanced Placement World History: Modern is designed for students who have demonstrated superior academic success in previous high school history classes. Students will study the cultural, economic, political, and social developments that have shaped the world from c. 1200 CE to the present. This college level course introduces students to a number of higher level analytical skills. All students are expected to take the AP World History Examination in May.

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 ⭐ 0.25, 0.50, 0.75, or 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. Coursework also supports study skills, vocational exploration, and post-secondary transition. Student interest, aptitude and academic need determine the nature of the work covered and the amount of time working with a teacher. Credit is awarded based on seat time in the course.

Prerequisite: selection by Special Services staff

#3020 Applied English ⭐ 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 based upon individual student needs.

Prerequisite: selection by Special Services staff

#9943 Applied Math ⭐ 1.0 Credit

Selected students in need of additional assistance will develop numeracy skills through guided instruction in a small group environment. Student interest, aptitude and academic need determine the nature of the work covered and the amount of time working with a teacher.

Prerequisite: selection by Special Services staff

#9845 Applied Science ⭐ 1.0 Credit

Specialized Science course designed for students who are identified as in need of more direct instruction to improve comprehension and application of concepts and skills found through the 9-12 Science courses.

Prerequisite: selection by Special Services staff

#9888 Applied Social Studies ⭐ 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 curricular

materials that are aligned with the 9-12 required Social Studies courses and based upon individual student needs.

Prerequisite: selection by Special Services staff

#9595 Literacy Support ⭐ 0.25/0.5 Credit

Literacy Support students work with a reading specialist in a small group setting to apply literacy-based strategies to academic tasks that fulfill the successful achievement of reading goals. Interventions are tailored to individual student needs, and work is monitored to track progress and growth. The class meets for a half-block for a full year and runs opposite academic support. Marking period grades are awarded on a Pass/Fail basis.

Prerequisite: selection by Special Services staff

TECHNOLOGY (STEM)

Grade Level	Course
9-12	Architecture and Design I Architecture and Design II Coding for Robotics Computer Aided Drafting I Electronics Integrated Technology Robotics Engineering STEM A - 3D Modeling and Printing STEM B - Materials Processing, Tools, and Techniques Video Production I
10-12	Computer Aided Drafting II Video Production II Video Production III

#6035 Architecture and Design I (9-12) ⭐ 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, 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. This course level includes additional classwork, quiz and test questions, and a report. Your two story design will also include additional drawings which are not required at the academic level.

#6032 Architecture and Design II (9-12) ⭐ 0.5 Credit

In this class you will continue to develop your skills and knowledge using the CAD software. You will also continue to develop your creativity as you design a residential structure for a client. Upon receiving the individual needs, desires, and budget of your client you, as the architect, will begin with a building lot and go from plot plan to detail drawings as you design a residence which meets or exceeds the client's expectations. You

will also create a scale 3D model of the design. Students may opt to take the Chief Architect Certification test after completing this course.

Prerequisite: Architecture and Design I

 # 2159 Coding for Robotics (9-12) ⭐ 0.5 Credit

Developing an understanding of how robotics and other digital electronic devices 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. Labs are sequential and cover circuits using various components such as resistors , light emitting diodes, switches, servo-motors, 7 segment LED's and infrared transmitters and receivers. These labs will build the knowledge and skill which will lead to building and programming a small robot incorporating various types of sensors.

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

From sketching to CADD you will develop skills and knowledge in the field of mechanical drafting. Through a series of lessons you will learn the international standards of drafting while developing proficiency using industry standard CAD software. The course will develop your skills visualizing the relationship between 2D drawings and 3D models, as you complete mutli-view and section 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 lab's 3D printer.

#6045 Computer Aided Drafting II (10-12) ⭐ 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

#6020 Electronics (9-12) ⭐ 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 functions. You will build a simple DC motor and use a multimeter while learning to conduct basic circuit analysis for series, parallel, and combination circuits.

#6028 Integrated Technology (9-12) ⭐ 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.

#2158 Robotics Engineering (9-12) ⭐ 1.0 Credit

Robots are a great way to learn about engineering principles. After an overview of an engineer's role in society, a partner and you 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".

#1044 STEM A-3D Modeling and Printing (9-12) ⭐ 0.5 Credit

Students will learn essential skills in 3D CAD modeling and printing as well as laser engraving and cutting which can be used in multiple STEM courses to support project based learning as well as traditional classroom work. The class will culminate with the students using their knowledge and skill to complete a team problem solving project which requires them to use 3D printed and/or laser cut functional parts, as well as write a technology report in which they gather and evaluate data from the class work.

***NOTE**: Does not need to be taken in sequence with STEM Technology B.*

#1045 STEM B-Materials Processing/Tools/Techniques (9-12) ⭐ 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.

***NOTE**: Does not need to be taken in sequence with STEM Technology A.*

#3180 Video Production I (9-12) ⭐ 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.

#3182 Video Production II (10-12) ⭐ 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.

Prerequisite: Video Production I

#3179 Video Production III (10-12) ⭐ 1.0 Credit

This advanced video production course is designed to give upperclassmen the opportunity to build on the foundational "why, what, and how" of Video Production I and the audience-focused "who" of Video Production II by immersing them in the real-world "when" of media creation. Operating as the official *Bobcats Media* group, students will engage in yearlong, deadline-driven production of video and media content for the school and broader community, including opportunities for live broadcasting. Through authentic, ongoing projects, students will refine their technical abilities, creative decision-making, and professional production workflows. Intended as a repeatable, full-year course—similar to performance-based programs such as band or chorus—this class provides continued growth, leadership experience, and deeper specialization within the school's media program. Additionally, the course aims to explore opportunities for students to earn college credit through partnerships with institutions such as Western Connecticut State University.

Prerequisite: Video Production II

WORLD LANGUAGES

Suggested Course Sequences

Grade 9	Grade 10	Grade 11	Grade 12
Level 1	Level 2	Level 3	Level 4 (Spanish) French Cinema (French)
Level 2	Level 3	Level 4 (Spanish) Level 4 Honors-French Cinema	Level 5 Honors (Spanish) Level 5 Honors - La Culture Francophone
Level 2 Honors	Level 3 Honors	Level 4 Honors (Spanish) Level 4 Honors-French Cinema	Level 5 Honors (Spanish) AP Spanish Language and Culture Level 5 Honors - La Culture Francophone

Overview & Requirements:
Proficiency in a modern world language enables direct communication with people of other cultures and opens the door to opportunity whether it be through career advancement or to foster a passion for travel and unique life experiences. Additionally, it helps students gain insight into themselves and their understanding of their own culture and the English language.

Students are required to successfully complete 2 credits of world language courses throughout their time at BHS. College bound students are strongly encouraged to complete at least three years of study in the same language. Generally, one world language credit earned in grades 9-12 meets college entrance requirements; however, college requirements vary greatly and often have recommended years of world language study that differ from the minimum requirements. It is wise to consult with school counselors, the college and career counselor, and admissions offices for specific requirements.

Course Placement & Language Proficiency
It is important that students be properly placed when proceeding from one level to the next in a world language. Honors level courses differ from Academic level courses in that Honors courses are accelerated and involve an in-depth exploration of various topics solely in the target language. Honors students are required to have at least a proficiency level of Intermediate to ensure appropriate preparation for the Advanced Placement course.

⭐= Academic ⭕=Honors 🔳=ECE 🔷= AP

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The teacher recommendation is an essential part of the process to ensure the right match for all students. All world language classes at BHS are aligned to the ACTFL World Readiness Standards for Learning Languages; therefore, assessments of the student's ability to speak, write, listen and read the target language are used to make recommendations as students continue in their language studies. 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 are 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, school counselor and/or department chairperson.

Seal of Biliteracy

Affixed on the high school diploma and transcript, the Seal of Biliteracy provides immediate recognition of a critical twenty-first century language and communication skill. This award is given by Brookfield Public Schools in recognition of students who have studied and attained proficiency in English and one or more other languages by high school graduation. The Seal of Biliteracy recognizes the value of students' academic efforts, the tangible benefits of being bilingual and biliterate and prepares students to be 21st century global citizens in a multicultural, multilingual world. The Seal of Biliteracy acknowledges that mastery of two or more languages is a valuable asset for both individuals and their communities. Also, the Seal of Biliteracy provides recognition to Multilingual Learners (MLs) for the great value of developing English and maintaining their primary/secondary language(s).

To attain the Seal of Biliteracy, students' use of the language must be demonstrated, rather than their knowledge about the language. Therefore, a student must demonstrate proficiency in English and another language by meeting the criteria described below. Both native and non-native speakers of English must provide comparable evidence of English language proficiency. The language performance should be demonstrated in both social and academic use of the language, in all modes of communication.

To be eligible to receive the Seal of Biliteracy, the two academic requirements below must be met:

1. Students must complete all English language arts requirements for graduation.
2. Students must demonstrate proficiency in a language other than English in grades 10, 11, or 12 at a level comparable to "Intermediate Mid" on the ACTFL Proficiency Guidelines as demonstrated through the AAPPL test. Students will take the AAPPL test, a standardized assessment of the four modes at least once through their language studies at BHS (typically in level 3 or 4).

The Seal of Biliteracy is a distinction and accomplishment that students can leverage when entering the workforce as well as in the college application process. More and more colleges are beginning to recognize and honor the Seal of Biliteracy by also awarding college credits. It is highly recommended to check with admissions offices of schools to determine and take advantage of any credits they may award for having obtained the Seal of Biliteracy.

#5024 French I (9-12) ⭐ 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. Students will learn to communicate in real-life contexts about topics that are meaningful to them. 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. At the end of this level, students are expected to perform at the Novice Mid or above level of ACTFL proficiency guidelines.

#5025 French II (9-12) ⭐ 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. At the end of this level, students are expected to perform at the Novice High or above level of ACTFL proficiency guidelines.

Prerequisite: French I

#5030 French II-Honors (9-12) ⭕ 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. At the end of this level, students are expected to perform at the Intermediate Low or above level of ACTFL proficiency guidelines.

Prerequisite: Teacher recommendation

#5035 French III (10-12) ⭐ 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. At the end of this level, students are expected to perform at the Intermediate Low or above level of ACTFL proficiency guidelines.

Prerequisite: French II

#5040 French III-Honors (10-12) ⭕ 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. At the end of this level, students are expected to perform at the Intermediate Mid or above level of ACTFL proficiency guidelines.

Prerequisite: Teacher recommendation

#5023 French IV-Honors French Cinema (11-12) ⭕ 1.0 Credit

This is an Honors level course during which students engage in an advanced study of French texts and extensive written practice in a variety of forms ranging from compositions, essays, summaries and film reviews. Offering grammar and composition instruction in the French language within the cultural context of French cinema provides an analysis of social, political, and economic components that further benefit a student's study of the language. French is used exclusively in the class. At the end of this level, students are expected to perform at the Intermediate High or above level of ACTFL proficiency guidelines.

Prerequisite: Completion of Level 3 French or Teacher recommendation

⭐= Academic ⭕=Honors 🔳=ECE 🔷= AP

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#5044 French V-Honors La Culture Francophone (11-12) ⭕ 1.0 Credit

French V Honors is a rigorous course taught and learned exclusively in French that requires students to improve their proficiency across the three modes of communication (interpretive, interpersonal, and presentational). The course is an advanced study of French texts and extensive written practice in a variety of forms ranging from compositions, essays, summaries and film reviews in preparation for students' navigation and participation in diverse, Francophone spaces in the students' post-secondary lives. Students communicate using rich, advanced vocabulary and linguistic structures as they perform in all modes of communication, building proficiency toward the advanced level. When communicating, students in the French 5 Honors course demonstrate an understanding of the francophone culture, incorporate interdisciplinary topics, make comparisons between their native language/culture and the target language/culture, and use the target language in real-life settings. At the end of this level, students are expected to perform at the Advanced low or above level of ACTFL proficiency guidelines.

Prerequisite: Completion of Level 4 - Honors French Cinema or Teacher rec

#5215 Spanish I (9-12) ⭐ 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. Students will learn to communicate in real-life contexts about topics that are meaningful to them. 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. At the end of this level, students are expected to perform at the Novice Mid or above level of ACTFL proficiency guidelines.

#5225 Spanish II (9-12) ⭐ 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. At the end of this level, students are expected to perform at the Novice High or above level of ACTFL proficiency guidelines.

Prerequisite: Spanish I

#5220 Spanish II-Honors (9-12) ⭕ 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. At the end of this level, students are expected to perform at the Intermediate Low or above level of ACTFL proficiency guidelines.

Prerequisite: Teacher recommendation

#5235 Spanish III (10-12) ⭐ 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. At the end of this level, students are expected to perform at the Intermediate Low or above level of ACTFL proficiency guidelines.

Prerequisite: Spanish II

#5230 Spanish III-Honors (10-12) ⭕ 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 Honors, 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. At the end of this level, students are expected to perform at the Intermediate Mid or above level of ACTFL proficiency guidelines.

Prerequisite: Teacher recommendation

#5240 Spanish IV (9-12) ⭐ 1.0 Credit

In Spanish IV, students continue to develop their proficiency. They communicate through the creation of connected sentences 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. At the end of this level, students are expected to perform at the Intermediate Mid or above level of ACTFL proficiency guidelines.

Prerequisite: Spanish III

#5245 Spanish IV- Honors (11 -12) ⭕ 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 interpretation of fictional and non-fictional cultural readings, videos and audios , and the learning and review of grammar and development of vocabulary through the interpretation of these sources. Class is conducted in Spanish. Student involvement and greater independence in the learning process is essential. At the end of this level, students are expected to perform at the Intermediate High or above level of ACTFL proficiency guidelines.

Prerequisite: Teacher recommendation

#5242 Spanish V-Honors (11-12) ⭕ 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, film and art of various countries. At the end of this level, students are expected to perform at the Intermediate Mid or above level of ACTFL proficiency guidelines.

Prerequisite: Spanish IV

#5260 Spanish Language and Culture - AP (11-12) 🔷with ⬛ option 1.0 Credit

AP® Spanish Language and Culture is a rigorous course taught and learned exclusively in Spanish that requires students to improve their proficiency across the three modes of communication (Interpretive, Interpersonal and Presentational). The course focuses on the integration of authentic resources including online print, audio, and audiovisual resources; as well as traditional print resources that include literature, essays, magazine and newspaper articles; and also a combination of visual/print resources such as charts, tables, and graphs; all with the goal of providing a diverse learning experience. Students communicate using rich, advanced vocabulary and linguistic structures as they perform in all modes of communication, building proficiency toward the advanced level. When communicating, students in the AP Spanish Language and Culture course demonstrate an

understanding of Hispanic culture, incorporate interdisciplinary topics, make comparisons between their native language/culture and the target language/culture, and use the target language in real-life settings. Students are expected to take the AP exam in accordance with school policy. At the end of this level, students are expected to perform at the Advanced low or above level of ACTFL proficiency guidelines.

Prerequisite: Teacher recommendation

NOTE: *Successful completion of the course with a grade of "C" or better including midterm and final exams enables students to earn three credits for UCONN's SPAN 3178: Intermediate Spanish Composition and three credits for UCONN's SPAN 3179: Spanish Conversation: Cultural Topics*